TOYOTA Tonero 1.5 - 3.5 tonne Engine Powered Forklift





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MATERIAL HANDLING stronger together



Make it happen with the new Tonero

With its innovative design and state-of-the-art Toyota engineering, the Tonero is a major advance in forklift trucks. This brochure shows you how the Tonero sets new standards in 5 key areas for the materials handling industry: safety, productivity, durability, comfort and environmental care.

The new Tonero also allows you to enhance your truck in several areas. By selecting the Tonero+ formula that suits the way your business is run, you can specify additional features to fulfil your specific business needs.

Backed up by the dynamic and professional Toyota European service network, the new Tonero takes ownership benefits to a higher level than ever before.

Whatever your business objectives and however ambitious your projects, the innovative Toyota Tonero can help you "make it happen".

World Class Safety

The Tonero is designed for high-level safety in the workplace. The forklift operator and goods are actively protected by the industry's most advanced safety features and technologies, including Toyota's unique System of Active Stability (SAS).

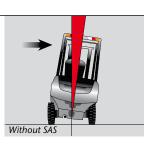
Stability of vehicle and loads

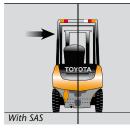
Toyota's SAS is the world's first active system for controlling forklift stability. It helps maintain the stability of the vehicle in all conditions and protects both the operator and load when the vehicle is driving, turning or lifting.

Operator Presence Sensing System

Toyota OPS - Operator Presence Sensing - senses whether an operator is in the correct operating position. If the operator is not in the proper operating position, the truck will not drive, lift or lower the mast – protecting the truck from misuse.







More lateral stability

If the SAS Active Control Rear Stabiliser system senses instability when the vehicle is turning, it immediately reacts by locking the rear axle, helping to reduce the risk of lateral tip-overs.





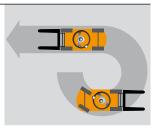




With SAS

Safer manoeuvrina

The Active Steering Synchronizer aligns the position of the steering wheel with the position of the wheels so that the driving knob is always in the same position in relation to the wheels. The aim: a safe and comfortable driving position.





Maximum mast control The SAS Active Mast Function helps

prevent loads from slipping or falling, and the truck from tipping over due to longitudinal instability. It activates two vital functions:

1) Active mast front tilt angle control senses load weight and mast height, and then automatically overrides the operator's manual control to limit forward tilt, decreasing the chance of dropped loads or worse, tip-over accidents. 2) Active Mast Rear Tilt Speed **Control** limits the backward tilting

speed at height, helping to prevent loose loads from dropping onto the driver's cabin.

Easier stacking and loading

SAS Fork Levelling Control ensures quicker positioning on pallets and helps to limit damage to goods. It enables drivers to place the forks in a perfectly horizontal position with the push of a button. This helps to simplify loading and unloading.

Outstanding all-round visibility

Safety is further reinforced by the Tonero's outstanding all-round visibility. The interior, roof and mast are designed to give the operator the clear visibility right up to the tip of the fork, both when driving and when handling loads from the ground and at height.

Upward visibility

Tilted tie-bars on the overhead guard provide clearer upward visibility when handling loads high on racks.

Forward visibility

Repositioning the mast tie-bar provides optimal visibility when driving, loading and unloading.

Fork tip visibility

The low dashboard, relocated display and redesigned mast give the operator clear visibility right to the tip of the fork when working at low levels.





Rear visibility The optional Tonero's swivel seat gives outstanding visibility when reversing.

TO⊓∈rO[#] Safety

If you still feel the need for additional features, the Tonero+ formula offers an advanced travel control safety system:

- Maximum driving speed limitation and controlled acceleration when carrying load at height
- Programmable speed limiter
- Load weight indicator

Load Weight Indicator

To help prevent over-loading which may lead to accidents and vehicle damage, the multi-functional display indicates the weight of the load.



Speed Limiter

A maximum speed can be programmed, ensuring that the driver stays within the pre-set limit.



Speed and Acceleration Control with Load at Height

Tonero technology helps avoid potentially dangerous situations by progressively limiting the drive speed with load at height, and controlling sudden acceleration in order to reduce the risk of load spills.



Designed to Raise Productivity

Easy to operate, yet full of power and precision, the Toyota Tonero can move your pallets faster, more easily and more safely. It is the most productive forklift of its class.

Top Toyota performance

With a choice of Toyota LPG or diesel engines, you can choose your engine to suit your particular application and conditions. Power and handling is second to none, with the Toyota torque converter delivering the most efficient and smoothest transmission of power from engine to wheels.

Simple to drive and operate

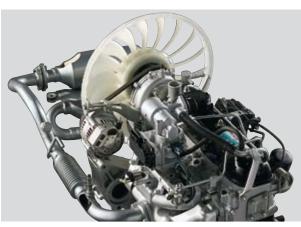
Driver productivity has been increased by studying operational needs. Toyota has designed the pedal layout and driving behaviour to be similar to those of a car. Even occasional drivers will find the Tonero simple and intuitive to drive, leading to higher productivity. The material handling controls have also been optimised by making the mini-levers and multi-functional levers programmable through the multi-function display. Their sensitivity can be tuned to suit each individual operator – the perfect interface between man and machine, combining to achieve maximum productivity.

How the Tonero raises your productivity

- · Choice of engines to suit your application and conditions
- Quick acceleration and outstanding performance
- Smooth, easy, intuitive drive with simple pedal layout
- · Choice of material handling controls



A choice of 2 Toyota diesel engines is available depending on your power requirements.



Toyota LPG engines provide reliable productivity and power.

TONE TO[#] Productivity

If your operation requires frequent reversing and driving on uneven surfaces, the Tonero+ Productivity is a formula that can deliver more productivity with:

- · Swivel seat: turns and locks for easier reversing
- · Rear assist grip that relieves operator back strain when reversing
- Hydraulic cushioned forks for driving on uneven floor

Hydraulic Cushioned Forks

The damper on the mast enables the Tonero to increase productivity on uneven surfaces outside when carrying a load.



Swivel Seat

Comfort increases productivity. The operator can swivel the Tonero seat to the right and lock it, for better visibility in reverse. The seat also swivels to the left, making it easier to get on and off the truck.



Rear Assist Grip

Enhances reverse travel comfort and productivity by reducing operator back strain.







Toyota Durability

The true economic value of an asset is measured by its cost of operation over the whole product life cycle. Toyota forklifts, with their renowned quality, durability and reliability, consistently provide customers with a lower cost of ownership.

Increased vehicle availability, even in the harshest conditions.

No matter how tough the job gets, the Toyota Tonero is built to take it. The heavy duty exterior is all-metal with thick, rugged side panels. Durability has also been increased by the waterproof electrical connections which will protect trucks working in wet environments. Increased air flow through the radiator keeps the truck running cool even in hot conditions.

Profit from Toyota quality in every detail

Toyota's constant approach to quality in design, component selection and manufacture ensures reliability on all levels.

Why the Tonero is so durable

- Proven Toyota quality control
- Thick metal side panels
- High cooling capacity for hot environments or intensive use
- Waterproof connectors



Rugged steel sides



Easy access to service parts



For heavy duty applications in harsh, dusty environments, the Tonero+ Durability formula protects your investment with:

- Plate fin radiator
- High speed fan
- · Hydraulic oil cooler

High Speed Fan

The high-speed rotation fan increases air flow through the radiator, for cool running.



Comfort Counts

The Toyota Tonero range offers the best in driver ergonomics. By considering the operator's needs at every stage of design — from mounting and dismounting to spending long periods seated in the truck — Toyota has created a more comfortable work space which, in turn, leads to improved productivity.



Low step height

Larger floor space

Small steering wheel

To produce the Tonero, Toyota re-examined the whole driverforklift relationship and then designed the vehicle to maximise ergonomics.

You'll notice the difference before you even start the smooth Toyota engine. Firstly, the step has been widened and lowered, and the front assist grip made bigger, to give you easier entry and exit. This is especially welcome if you work in an application that requires you to frequently get on and off the truck.

Once you are onboard, the larger floor space provides a nice feeling of comfort and a more relaxed operating position on the seat. Equipped with a belt for your personal safety, this new ORS (Operator Restraint System) seat with lumbar support provides optimal comfort and safety, whatever your size. The comfort continues in operation. Vibration in the floor plate, seat and armrest has been dramatically cut, helping to reduce strain on the driver and give you the smoothest ride in the market. Noise levels have also been reduced significantly, helping you to concentrate and giving those around you a quieter place to work.

Why the Tonero is more comfortable

- · Easy entry and exit with large step and assist grip
- Expanded floor space and head clearance for more relaxed operating position
- Adjustable ORS seat for comfortable driving position
- Smaller 30 cm diameter steering wheel for quick, easy turns
- Lower vibration and noise level

Small. easy-to-operate electronic

mini-levers integrated into the

armrest ensure fingertip control

of all material handling functions.

TO⊓∈rO[#] Comfort

For intensive use or applications that require more than one operator per time shift, the following Tonero+ Comfort formula could be more than useful:

- Choice of mini-levers or multifunction levers with the forward/ reverse directional control integrated into the armrest
- Telescopic steering column adjusts to drivers' positions

Telescopic Steering Wheel Can be adjusted up or down to the perfect position for any driver. Indispensable if the vehicle has several operators.



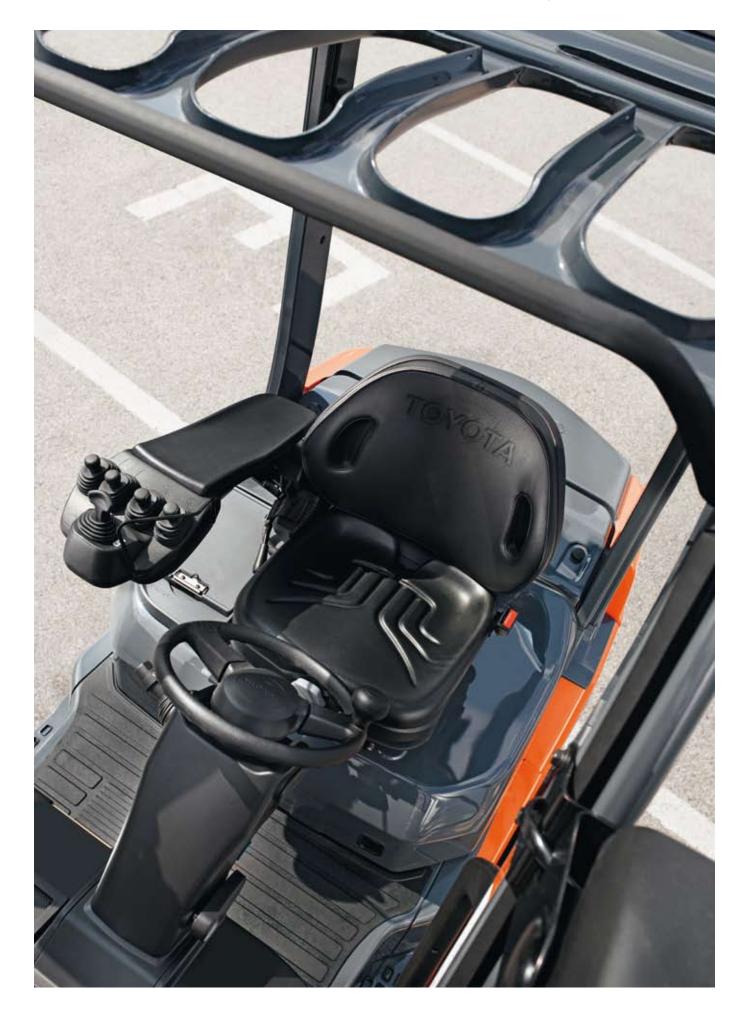
Mini-Levers



Multifunction Levers

Operators can perform more than one function with these easy-to-use levers for comfortable, productive load handling.







Our Commitment to the Environment

Getting the job done with minimum impact on our Environment is a challenge Toyota takes very seriously. The innovative Tonero forklift demonstrates this commitment. It raises the bar for performance and environmental responsibility in the materials handling industry.

Toyota operates under a global charter for environmental responsibility that covers all aspects of a vehicle's life cycle, from waste-free production processes and cleaner operation through to effective end-of-life recycling.

Demanding manufacturing standards

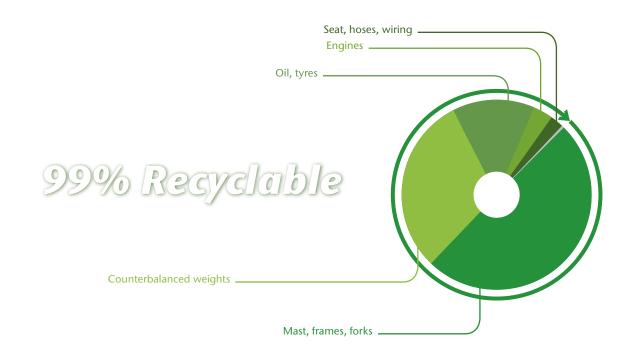
From the start, our forklift trucks are produced in a factory which is certified ISO 14001, ensuring minimum impact on the Environment. And we demand the same certification standards from all our suppliers.

Cleaner in operation

The Tonero clean burning engine delivers the necessary power in the most Environment-friendly way. The Tonero complies with the latest European emission regulations and burns cleaner than legal requirements. The optional catalytic muffler reduces NOx and CO emissions further; while the optional DPF muffler keeps diesel soot down. **99% recyclable**

That's right, Toyota engineers have designed a truck that is 99% recyclable, reducing end of life disposal impact to an absolute minimum. Asbestos, mercury and cadmium have been totally eliminated, while the quantities of lead and hexavalent chromium have been dramatically reduced.

These achievements are Toyota's commitment to you that the Tonero will get the job done, while reducing as much as possible its impact on the Environment. The Tonero is truly a productive partner.



99% of all these components are recyclable.

Materials Handling for Europe

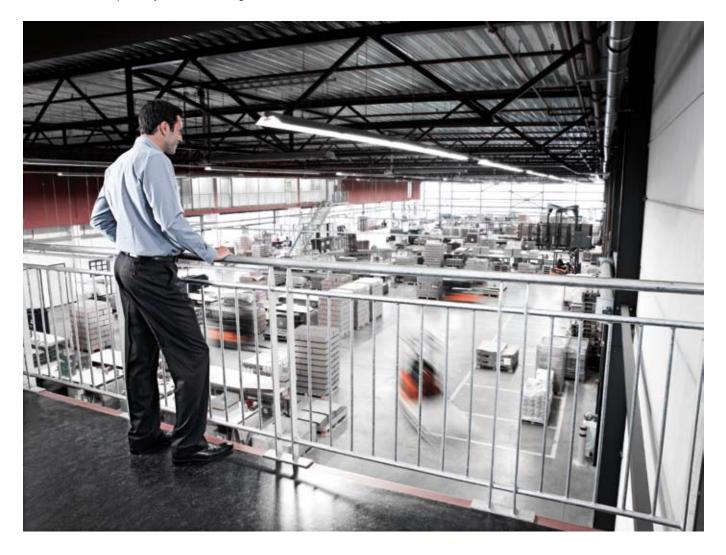
Over the years, Toyota has developed a strong European presence, establishing close geographic links with its customers in order to better respond to their needs. With operations in 31 countries, Toyota Material Handling Europe (TMHE) has its headquarters in Brussels and manufacturing plants in Ancenis (France), Mjölby (Sweden) and Bologna (Italy). TMHE is the European regional operation of the Toyota Material Handling Group (TMHG).

Toyota Material Handling Group

TMHG is the material handling division of Toyota Industries Corporation, with operations around the world and production facilities in Japan, China, the United States and Europe. By investing heavily in new engineering technologies and manufacturing techniques, Toyota aims to bring customers the best material handling products and services on the market. By constantly expanding our sales, distribution and after-sales service network, we ensure a fast, effective response to market needs.

Research & Development

Toyota Material Handling Europe benefits from Toyota's vast experience in the automotive industry, especially in engine development. By taking full advantage of the group's massive R&D facilities and engineering expertise, Toyota has developed a number of world-class technologies. Intelligent use of electronic and computer controlled devices has also made a significant contribution to creating more ergonomic and user-friendly operator environments, contributing to safety in the workplace.





Austria Belgium Cyprus Czech Republic Denmark Estonia Finland France Germany Greece Hungary Iceland Ireland Italy Latvia Lithuania Luxembourg Netherlands Norway Poland Portugal Romania Russia Slovakia Slovenia Spain Sweden Switzerland Turkey Ukraine United Kingdom

Professional Support

Close to you

Wherever your business is located, we are never far away. 350 service outlets in 31 countries provide rapid after-sales and spare parts service, to maximise your Toyota vehicle uptime. And every one of our engineers is trained nationally to provide you with consistent, top-quality technical service.

Toyota fleet customers have the added advantage of direct access to Toyota's comprehensive information system, for up-to-thesecond information on fleet usage and performance.

Empowering your business

Customer satisfaction is our priority. With a comprehensive European network of distributors and service centres, Toyota offers you a wide range of high-quality services – including tailor-made service contracts, lifetime support and 24/7 service availability by agreement – to help keep your business running smoothly.

Choose the features that suit your needs

Safety	Standard	TO∩∈r0 [‡]	Option
Low dashboard and relocated display	х		
ORS seat with sidewings and seatbelt	х		
SAS swing lock cylinder	х		
SAS mast front tilt angle limiter	х		
SAS mast rear tilt speed limiter	х		
SAS fork levelling	х		
SAS steering synchroniser	х		
SAS key lift interlock	х		
OPS system	х		
Maximum drive speed reduction with lifted load		х	
Acceleration reduction with lifted load		х	
Maximum drive speed setting		х	
Load weight Indicator		х	
Flashing beacon			х
Back-up buzzer			х
Panoramic mirror			х
Productivity	Standard	το <mark>∩∈</mark> ro [¢]	Option
Toyota Electronic Fuel Injection System on Toyota Engines	х		
Car pedal layout (accelerator and brake)	х		
Inching pedal	х		
Swivel seat and rear assist grip		х	
Hydraulic cushioned forks for driving on uneven floors		х	
Hi-speed hi-torque version (+20km/h)			х
12V power supply			х
Comfort	Standard	TO⊓∈ro [¢]	Option
Low and wide step	х		

Las and a fide stars			
Low and wide step	x		
Large driver assist grip	x		
Slimline steering column	x		
Large floor area in cab	х		
Small steering wheel diameter	х		
Adjustable steering column angle	х		
Digital displays for easy reading of operational parameters	х		
Lower noise of engine and drive train	х		
Lower vibration of engine and drive train	х		
Foot operated parking brake	х		
Adjustable steering column height (telescopic)		х	
Choice of 2 new types of materials handling controls for		х	
comfort choice of operator (mini-levers, multifunctional levers)		х	
Fabric seat			х
Fully enclosed cabins for comfort in outdoor elements			х
Fully enclosed Deluxe cabins for extra comfort in outdoor elements			х
-			

Durability	Standard	TO <mark>∩∈</mark> rO [¢]	Option
Rugged exterior body	х		
Increased use of waterproof connectors	х		
Electronic Control Units enclosed in a sealed box	х		
Dusty environment specification:		х	
- Plate fin radiator		х	
- High speed fan		х	
- Hydraulic oil cooler		х	
Dual cyclone air cleaner			х
Fully oil charged lift cylinder			х
Anti rust rollers			х

Environment	Standard	Option
EC Emission Compliant - Diesel Non-Road Engine (EC 97/68; stage IIIA 2008/01/01)	х	
Elimination of use of asbestos, cadmium and mercury in truck	х	
Tonero is 99% recyclable	х	
Toyota factory ISO 14001	х	
Diesel Particulate Filter (DPF II)		х
Catalytic muffler for Diesel engines		х
3-way catalytic muffler for LPG engines		х



8FGF18



8FDF25



8FDKF20



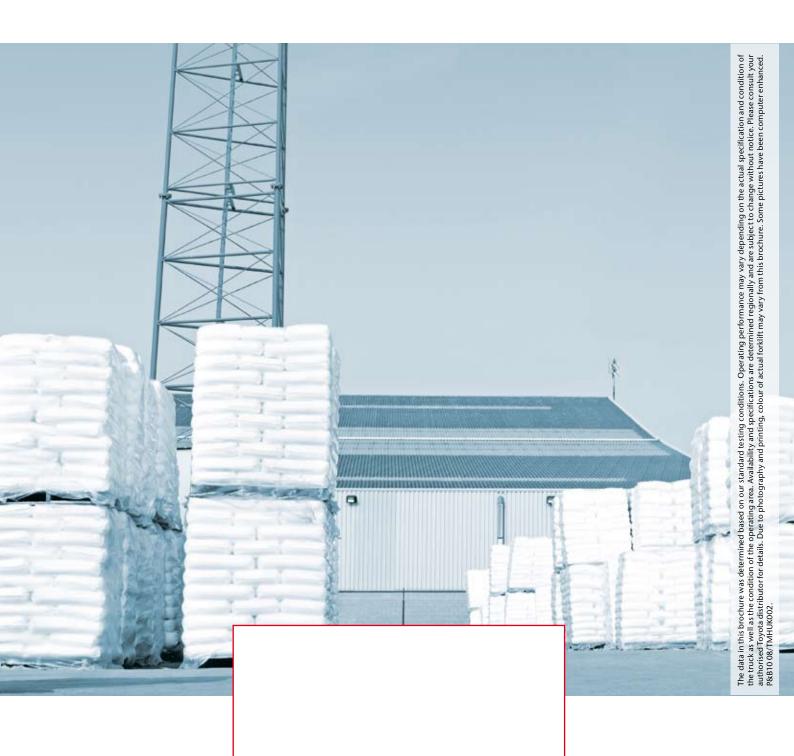
8FDJF35

Specifications

 Model	8FGF15	8FGF18	8FGKF20	8FGF20	8FGF25	8FGF30	8FGJF35
MOUCI	8FDF15	8FDF18	8FDKF20	8FDF20	8FDF25	8FDF30	8FDJF35 8FDJF35
Engine model	4Y	4Y	4Y	4Y	4Y	4Y	4Y
	1DZ-III	1DZ-III	1DZ-III	1DZ-III/ 3Z	1DZ-III/ 3Z	1DZ-III/ 3Z	3Z
Load capacity [kg]	1500	1750	2000	2000	2500	3000	3500
Load center [mm]	500	500	500	500	500	500	500
Standard lift height [mm]	3000	3000	3000	3000	3000	3000	3000
Travel speed Full load [km/h]	18.5	18.5	17	17.5	17.5	18.5	19
	18	18	17	18,5/19	18,5/19	17,5/18	19
Travel speed No load [km/h]	19	19	17.5	18	18	19	19.5
	18.5	18.5	17.5	19/19,5	19/19,5	18/18,5	19.5
Lifting speed Full load [mm/sec]	665	665	600	600	600	510	425
	650	650	580	615/665	615/665	500/550	450
Lifting speed No load [mm/sec]	680	680	640	640	640	550	450
	675	675	600	655/700	655/700	530/570	475
Turning radius [mm]	1990	2010	2040	2200	2280	2430	2490

Engine specifications

Model	Toyota 4Y Gasoline 8FGF15-25	8FGF30-J35	Toyota 1DZ-III Diesel 8FDF15-K20	8FDF20-30	Toyota 3Z Diesel 8FDF20-J35
Piston displacement	2237	2237	2486	2486	3469
Rated horsepower/r.p.m.	38/2570	44/2570	38/2400	41/2500	42/2200
Rated torque/r.p.m.	160/2100	165/2570	157/2200	157/2500	200/1600





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