

# LIFT TRUCKS

 **TOYOTA**

INDUSTRIAL EQUIPMENT 



3,000 - 6,500 lbs

1,361 - 2,948 kg

**8FG(D)U**  
**PNEUMATIC**



INDUSTRIAL EQUIPMENT 

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Once again, Toyota innovation and engineering come together to set a new standard in the lift truck industry. The 8-Series offers major advancements that enhance every aspect of lift truck operation. The result: a safer workplace and more productive lift truck operators.

The 8-Series is our most durable lift truck yet—thanks to a host of heavy-duty improvements. Safety was equally important in the development of the 8-Series, which features our exclusive System of Active Stability™ (SAS). SAS electronically monitors and controls the lift truck's operations to help reduce the risk of tipovers.

Of the many 8-Series enhancements, the most significant is improved ergonomics for the operator. You will immediately notice the extensive amount of available legroom and foot space. And, as drivers settle comfortably in the full suspension seat, the improved visibility is immediately evident. The low profile cowl, the uncluttered dash, the high visibility overhead guard design and wide-view mast improvements all work in conjunction to provide the best visibility available in the market today.

It also is our dedicated commitment toward the environment that makes Toyota lift trucks the first choice in material handling equipment. Innovative engineering has produced an 8-Series lift truck that completely eliminates the use of harmful hazardous materials such as cadmium and mercury that can pollute our planet. And we can all breathe easier knowing smog-forming emissions from the 8-Series are well below the Federal Environmental Protection Agency (EPA) standards. Somebody had to top the 7-Series: Introducing eight. The new number one.







# Durability

## In a lift truck, tougher is always better.

No matter how tough the job gets, the 8-Series is built to take it. Every 8-Series lift truck is built using Toyota's world-renowned production system—which delivers the kind of quality, durability and reliability the industry has come to expect from the leader in lift truck technology. Consider the thick fully-stamped steel side panels that help withstand the harshest environments. The moisture-resistant electrical connectors that are designed to improve durability in high-moisture environments. And a variety of other innovative features that help ensure the 8-Series will survive years of use.

► **Durable, curvilinear bolt-on overhead guard**

provides maximum operator protection with improved entry/exit and load visibility.

► **Overhead guard pillars**

are designed to enhance the frame's rigidity in order to help withstand tough applications.

► **Heavy-duty asbestos-free brakes**

are self-adjusting and provide responsive and consistent braking power.

► **Rear combination lights**

are mounted high on the overhead guard for improved protection. Long-life rear combination LED lights also are available for added reliability.

► **Engine protection system**

automatically reduces the engine's output if the coolant temperature rises to potentially damaging levels. This option prolongs engine life and reduces operating costs.

► **Fully sealed air-intake**

is strategically mounted high on the overhead guard leg to limit low-lying dust and debris from entering the engine. A durable stamped steel vent helps prevent larger objects from entering the air intake system.

► **Moisture-resistant electrical connections**

are less susceptible to water intrusion and corrosion caused from pressure washing and high-moisture, humid environments.







- ▶ **Efficient cooling system**  
provides optimal airflow through the radiator and counterweight thereby reducing the likelihood of overheating and extending the overall life of critical engine components.
- ▶ **Hydraulic accumulator**  
acts as a load shock absorber. This option improves front-end durability by cushioning potentially damaging shock loading on critical mast, carriage and attachment components.
- ▶ **Tilt cylinder protection boots**  
reduce hydraulic leaks by limiting cylinder rod scouring and seal damage caused by dirt accumulation.
- ▶ **Structurally rugged mast channel design**  
provides maximum load capacity retention by limiting mast deflection.
- ▶ **Reinforced load backrest extension**  
with recessed fasteners reduces the potential for product damage.
- ▶ **Wet brake system**  
features optional oil-immersed disc brakes designed for exceptionally long life while reducing heat build-up, dust intrusion and brake noise. This available feature is ideal for high cycle, short-shuttle applications where brakes are used extensively.
- ▶ **Toyota's Intelli-Shift**  
option protects critical drive train components from full-speed directional shift changes by allowing changing only at pre programmed speeds. The system also will provide additional tire life by limiting tire spin.
- ▶ **Stamped steel engine hood**  
provides maximum durability in the most demanding applications. This heavy-gauge steel hood contains no cheap plastic or fiberglass.

- ▶ **Controller Area Network (CAN-bus)**  
communication technology provides quicker, more reliable control of the truck functions with fewer components.

- ▶ **Fully-stamped steel side panels**  
are thick to help withstand the harshest environments.

- ▶ **Plate-iron front fenders**  
for tough applications.



# Safety

## Safety first. Productivity, a very close second.

Still leading the industry in safety technology, no other lift truck brand offers a system comparable to Toyota's System of Active Stability™ (SAS). Lift truck accidents are the second-leading cause of fatalities in the private sector, with highway vehicles being the first. With well over 100,000 SAS-equipped Toyota lift trucks in operation in the North America and Toyota's proven record of lift truck safety, you can feel confident knowing that your operators are utilizing equipment that sets the industry standard in safety.



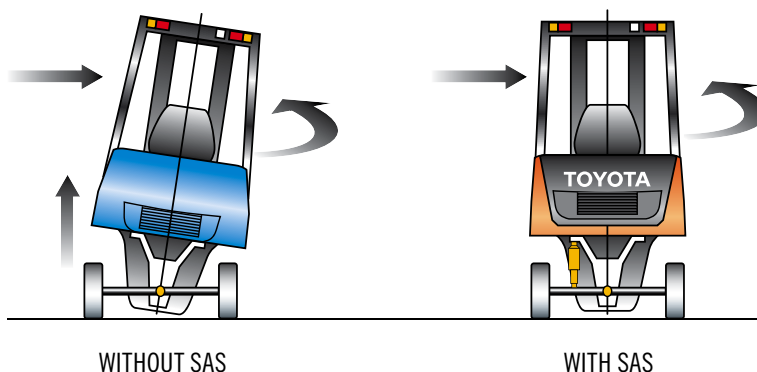
### Toyota's System of Active Stability™ (SAS)

electronically monitors and controls the lift truck's operations to help reduce the risk of tipovers. SAS is composed of two systems: the **active control rear stabilizer** and the **active mast function controller**.

▲ In 1999 Toyota introduced the world's first and only System of Active Stability™. No other lift truck safety system comes close.

## Active Control Rear Stabilizer System

Toyota's SAS uses patented technology to sense various factors that lead to potential lateral instability. When those conditions are detected, the SAS instantly locks a hydraulic cylinder on the rear steer axle, changing the lift truck's stability footprint from triangular in shape to rectangular. The resulting increase in stability reduces the likelihood of a lateral overturn.



▶ When it senses instability, SAS instantly engages the **Swing Lock Cylinder** to stabilize the rear axle, creating the lateral stability needed to help reduce the risk of lateral tipovers.

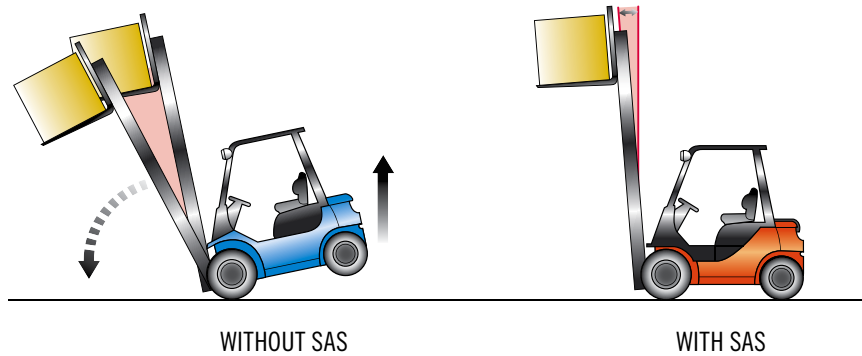




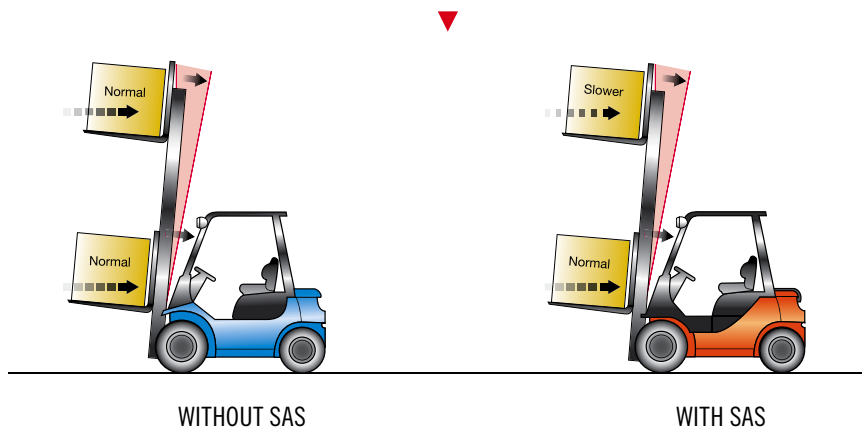
## Active Mast Function Controller System

Similar in operation to the active rear stabilizer control, the active mast function controller system uses the same patented technology to sense various factors that lead to potential longitudinal instability. When the SAS controller senses potential longitudinal instability, two systems are activated to help reduce the chances of forward or rearward tipovers: forward tilt angle control and rear tilt speed control.

Forward Tilt Angle Control will sense load weight and mast height, then automatically override the operator's manual control and limit forward tilt to decrease the chance of spilling a load or tipping the lift truck forward.



**Rear Tilt Speed Control** utilizes the same load and mast height sensors to govern the mast's reverse tilt speed to half, thereby decreasing the chances of spilling unsecured loads or tipping the lift truck backward.



# Performance

## Why 8 is the new number one.

Innovations in layout, steering control and load-handling assistance—and a variety of other 8-Series features—have been designed with the operator's productivity in mind. From the 4Y-ECS engine, which is capable of meeting and exceeding the performance demands of tough workplace environments, to the full-hydrostatic power steering engineered for smoother and more precise handling with less operator fatigue, the 8-Series takes lift truck productivity to a whole new level.

- ▶ **Automatic idle-up system**<sup>1</sup> allows feathering of the hydraulic lever under the loaded condition for fast, efficient, smooth load handling.
- ▶ **Full-hydrostatic power steering** offers low-effort steering control while providing precise maneuverability and load handling in confined work areas.
- ▶ **Heavy-duty 60-amp capacity alternator** ensures sufficient electrical power is available for lights and additional electrical options. (4Y-ECS engine only).
- ▶ **High capacity 70-amp alternator** also is available when installing additional electrical devices such as warehouse management systems.



▲  
**Toyota's 4Y-ECS Hi-Power engine** option is available for those applications looking to obtain even higher levels of productivity.



▲  
**The powerful 2.5-liter (1DZ-II) diesel engine** is a quiet, quick starting, high-torque engine with plenty of horsepower.



▲  
**Optional integral sideshifter** minimizes truck movements for storing and retrieving loads—to increase overall operator efficiency.

**Optional integral sideshifting** fork positioner further enhances operator productivity.



▲  
**Independent brake and inching control pedals** provide excellent stopping power and precise positioning of the lift truck.

**Optional combination brake and inching pedal** is available for customer preference.

1. Automatic idle-up system is included with the travel speed/acceleration control system option.





- ◀ **One-way automatic fork leveling** consistently levels the forks parallel to the ground, improving operating efficiency and productivity while reducing product damage.
- ◀ Starting from a back tilt position, the **one-way automatic fork leveling** feature positions the forks horizontally to the floor with the simple push of a button on the tilt lever, allowing safer and easier load handling.
- ◀ **Two-way automatic fork leveling** is included in the mini-lever and joystick control options.

# Ergonomics

## Innovation at your fingertips.

The 8-Series' innovative ergonomic features were designed to help make operators more comfortable and, as a result, more productive. These and other features make the 8-Series Toyota's most ergonomically advanced lift truck ever.

**Curvilinear overhead guard legs** provide a wider opening for operator entry/exit.

**Toyota's deluxe steel cab** option provides operators maximum comfort in the harshest of weather conditions.

The numerous visibility, noise reduction and comfort features are sure to impress even your most critical of drivers.



◀ **Electric shift lever** offers easily accessible fingertip control for fast and easy directional changes.

◀ **Automotive style light switch and turn signal levers** are integrated into the slim profile steer column for easy accessibility and simple operation.



◀ **12-inch-long dual operator assist grips** have been designed to meet the needs of varying operator sizes and are in line with the overhead guard pillars for improved operator peripheral vision.



◀ **Low profile front cowl** results in enhanced forward visibility and lessens back strain by reducing the need for the operator to lean forward to view load and fork tips.



◀ **Foot-activated parking brake** further lessens operator back strain by reducing the need to lean forward to activate and disengage parking brake. Foot brake location also eliminates clutter from cowl area, enhancing forward visibility.

**Overly spacious legroom** provides unsurpassed comfort levels throughout the operator's work shift.

**Heavy-duty, non-slip floor mat** adds to this comfort by minimizing noise, heat and vibration.



▲ **Optional EZ Pedal** allows operators to quickly and easily change travel direction without removing hands from steering wheel or hydraulic controls.

▲ **Mini-lever or joystick hydraulic controls with Ergo-Shift** feature a three-way adjustable armrest to enhance operator comfort and productivity.

**Two-way auto fork leveling** is standard with these options.





▲ **High mount key switch and parking brake release lever** have been strategically placed to minimize the need for an operator to lean forward in the seat.



▲ **Cowl-mounted hydraulic levers** are ergonomically situated for improved operator comfort and unobstructed entry/exit from the right side of the truck.



▶ **Slim-profile steer column**, which features a small 11.8-inch-diameter steering wheel and optional steer assist knob, reduces operator arm and shoulder strain. The small diameter wheel also provides greater legroom and wider service access and simplifies operator entry/exit.



▶ **Optional rear assist grip with horn button** enhances reverse travel comfort and productivity by allowing the operator to maintain control of the steering wheel at all times.



▶ **Ultra-comfort vinyl full suspension seat with 4-way adjustability** provides unequalled operator comfort. Ultra-comfort cloth full suspension seat with 4-way adjustability also is available for use in hot, humid applications and for added resistance against tears and punctures.



▶ **Non cinching seat belt** provides additional comfort in applications requiring frequent reverse travel operations.



● **Fully hydraulic power steering system** provides smooth, responsive operation while isolating vibration and shock from the operator's hands, helping reduce operator fatigue.

● **Synchronized steering option** automatically corrects misalignment between the angle of the steering wheel and the turn angle of the steer tires. This maintains consistent steering wheel position for improved forward visibility and hand placement during operation.



▲ **Oversized cup holder and amenity trays** have been designed for today's large beverages and various work tools.



▲ **Tilt steer column and seat travel adjustability** have been expanded to improve operator comfort levels, regardless of operator size.



▲ **Optional swivel seat** rotates and locks 17.5° to the right, allowing the operator to assume a more comfortable posture and expanded range of visibility when traveling in reverse over long distances. Seat also will rotate 20 degrees to the left, facilitating easier entry/exit for the operator.



# Visibility

## See what you've been missing.

A variety of features provides optimal visibility, which translates into better performance and productivity. Dash-mounted displays and the low profile cowl with sloped dashboard provide an unobstructed view of the fork tips in any position. Strategic placement of the overhead guard bars provides ideal visibility when positioning forks and handling loads high on racking. And tapered rear overhead guard legs and low profile LPG tank placement give operators the view they require when driving in reverse.

### Upward Visibility

- Overhead guard bars configured front to back
- Angled front overhead guard tie-bar



### Forward Visibility

- Improved mast hosing
- Wide-view mast design
- In-line operator assist grips
- Mini-lever and Joystick control options



### Fork Tip Visibility

- Repositioned, lowered mast cross-member
- Low profile cowl with sloped dashboard
- Uncluttered dash
- Load backrest extension with angled tie-bar
- Integral sidsifter option
- Slim-profile steer column
- Small-diameter, 2-spoke steering wheel





#### Rear Visibility

- Swivel seat option provides improved rearward visibility
- Low profile LPG tank bracket
- Tapered rear leg pillars improve peripheral vision
- High mount rear combination lights

# Operability

## Innovative functions for added control.

Whether you need to set predefined speed limits or give operators more control functions, Toyota's travel speed/acceleration control system<sup>1</sup> option helps you achieve your goal. Choose any of the features below according to the demands of your work environment and you'll enjoy the added peace of mind that only Toyota can offer.



▲ **Vehicle speed control feature<sup>1</sup>** can be programmed through the digital display to automatically regulate the lift truck's maximum travel speed to meet a wide range of job applications and operator skill levels.



▲ **Low-speed setting<sup>1</sup>** feature can be used to limit the lift truck's maximum travel speed at the touch of a button to a preset value for those applications that require varying travel speeds.



▲ **Orange seat belts** are available to assist managers in monitoring operators' use of seat belts from a distance.



▲ **Operator Presence Sensing System (OPSS)** prevents operators from using the hydraulic functions or driving the lift truck when they're not seated in the proper operating position.

- ▶ **Lift-height and load-sensing acceleration control<sup>1</sup>** feature suppresses the lift truck's acceleration rate if it detects that the operator is attempting to suddenly drive off with a load at a high lift height.
- ▶ **Lift-height and load-sensing vehicle-speed control<sup>1</sup>** feature limits the lift truck's maximum travel speed in the event that the operator attempts to travel while carrying a load at a high lift height.
- ▶ **Adjustable headlights with guards** help improve visibility.

- ▶ **Rear combination lights** option is mounted high on the overhead guard to make stops and turns highly visible in the work place.
- ▶ **Strobe light and smart alarm** options signal pedestrians that a lift truck is operating near their vicinity.
- ▶ **Rear assist grip with horn button** option enhances reverse travel operability by allowing the operator to maintain control of the steering wheel at all times.



1. Toyota's travel speed/acceleration control system option includes the vehicle speed control, low-speed setting, lift-height/load-sensing acceleration control and lift-height/load-sensing vehicle-speed control features.





# Serviceability

## No tools, no time, no problem.

Routine maintenance is faster and requires less work thanks to the 8-Series' many ease-of-service features. The no-tool floorboard lifts out in seconds to expedite daily operator checks. The hydraulic return filter is located outside the hydraulic tank near the air cleaner for easier servicing and replacement. There are even self-diagnostic features, including a planned maintenance hour meter that notifies operators of the need for routine maintenance via the optional digital display monitor.

## Integrated Monitoring System

The monitoring system provides instant access to virtually every aspect of the lift truck's operating system.



▲ **Self-diagnostics with built-in analyzer** capabilities are offered through the optional multifunction digital display, eliminating the need for a hand-held analyzer.



▲ **Analyzer Mode** displays the status of the electrical system and allows instantaneous access to information on errors detected by the controller.



▲ **Planned maintenance hour meter** notifies operators of the need for routine maintenance and service via the digital display monitor. The service intervals are programmable.



▲ **One-touch LP tank bracket latch** with rubber grommet is designed to unlatch/latch the LP tank in one motion, while preventing noise caused by truck vibration as it travels over uneven surfaces.



▲ **Engine hood release lever** is located at the front end of the engine hood. The engine hood can be opened without having to adjust the steering wheel position.

1. Brake, engine coolant level and air cleaner warning lights are included with the OK Monitor option.



### Swing-down LP tank bracket

option makes tank changes fast and easy—and helps reduce back strain.



▲ **Easy-lift engine hood** features a convenient, wide-access design and an assist damper that automatically holds the hood open at 75 degrees for easier access to the engine compartment.

▲ **No-tool floorboard** lifts out in seconds for fast, easy access during daily operator checks.

▲ **Radial Seal high-flow, 2-stage air cleaner** features an easy-to-change filter for faster servicing. The extensive pleated surface area provides excellent dirt-trapping capabilities.

▲ **Radiator screen** option helps reduce the accumulation of lint, fibers and other workplace debris in the radiator fins to insure cooler operation and extended radiator life.

▲ **Brake fluid level check** is conveniently mounted on the cowl for quick reference to expedite routine maintenance.





# Environment

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## **TOMORROW'S CLEAN AIR TECHNOLOGY—TODAY**

At Toyota, we operate under a global charter that promotes environmental responsibility throughout our entire company. Toyota's commitment to a cleaner environment for our children is as strong as our relentless pursuit of quality. With the 8-Series, Toyota demonstrates this commitment with lift trucks that not only eliminate the use of environmentally unfriendly substances such as mercury, cadmium and asbestos, but also increase the amount of recyclable parts used.

And when it comes to the quality of the air we breathe, no other lift truck company is more devoted than Toyota. The new 8-Series lift trucks features an exclusive emission system that not only surpasses 2007 Federal EPA emission standards, but also meets California's stringent 2010 emission standards—three years early.<sup>1</sup> The result is a new line of lift trucks that produce 70% less smog-forming emissions than the 2007 standard.

1. Receipt of CARB Certification expected December 2006. Upon receipt of certification, all Toyota 8-Series internal combustion models will count as 0.6 grams HC+NOx toward California's end user fleet average calculation.

All Toyota 8-Series internal combustion models feature an emission system which produces 70% less smog-forming emissions than the 2007 EPA and CARB standard.<sup>1</sup>





All Toyota 8-Series lift trucks sold in North America are manufactured and assembled at our state-of-the-art manufacturing facility in Columbus, Indiana. Toyota Industrial Equipment Manufacturing (TIEM) has attained ISO 14001 certification for environmental compliance and ISO 9001 for quality management excellence.



TOYOTA CANADA INC. (TCI) has received ISO 14001 certification for its Toronto, Ontario based head office facilities and parts distribution centre. This internationally recognized certification illustrates Toyota's global commitment to protecting the environment.

Established in 1970, Toyota Canada Inc., Industrial Equipment Division (TCI-IED), headquartered in Toronto, Ontario, is the only major lift truck supplier to have a head office and parts distribution centre in Canada dedicated to supporting the Canadian market.

Toyota's commitment to customer service extends nationwide. Thirty-two authorized Toyota Industrial Equipment Dealer facilities located throughout Canada offer comprehensive customer support including one-stop shopping for lift trucks, genuine Toyota parts and Toyota University accredited service technicians.

Not only is Toyota committed to Canada, but is proud of its overall commitment to North America, which includes:

- Direct North American employment: 38,041
- Direct North American Investment: CDN \$20.3 B

We are committed to supporting our products, and most importantly, our customers. For more information contact your local authorized Toyota Industrial Equipment dealer, fax Toyota direct at **1-800-592-3851**, or visit the Toyota Industrial Equipment web site at **[www.forklift.toyota.ca](http://www.forklift.toyota.ca)**.

Truck may be equipped with optional equipment. Some product features here-in are optional. Please contact your dealer for specifications. Details of specifications are based on information available at time of printing and may change without notice.



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**ISO 14001**

**TOYOTA CANADA INC.**

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