

KOMATSU

1.0-3.5 ton

DIESEL and GASOLINE FORKLIFT TRUCKS

AX50 / BX50 Series

www.Komatsu-utility.com

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Komatsu Utility Co., Ltd.

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Destined Evolution

Workability

- Smooth starting even while performing stationary steering
- Easy lifting without revving up engine
- Free stationary steering to change steering direction with light effort
- Thoughtful consideration of comfortable operation

Safety

- Operator Presence Sensing System
- Superior Visibility

Comfort

- Dual 'Floating' Structure
- Wide Floor and Open, Non-slip Step
- Increased Operator Head Clearance (BX50 Diesel)

Ecology

- EPA Tier3/EU Stage IIIA Compliant Diesel Engine
- Powerful lift truck with lower fuel consumption



Komatsu AX50/BX50 Series that reviewed the performance required from a lift truck has unrivaled performance and functions clearly different from those of competitors. Increased safety, reduced total lifetime costs, high operability with less fatigue, and environmental performance carefully considered. You will certainly be satisfied with Komatsu's unique benefits. These features will be the true standard for the future, providing increased satisfaction on the job.

AX50 Series

- Standard model
- 1.0 ton
- 1.5 ton
- 1.75 ton [Diesel]
- [Gasoline]



BX50 Series

- Standard model
- 2.0 ton
- 2.5 ton
- 3.0 ton [Diesel]
- 3.5 ton [Gasoline]



- 109 Series
- 2.0 ton
- 2.5 ton
- 3.0 ton [Gasoline]



Satisfying high workability and environmental performance required by the jobsite

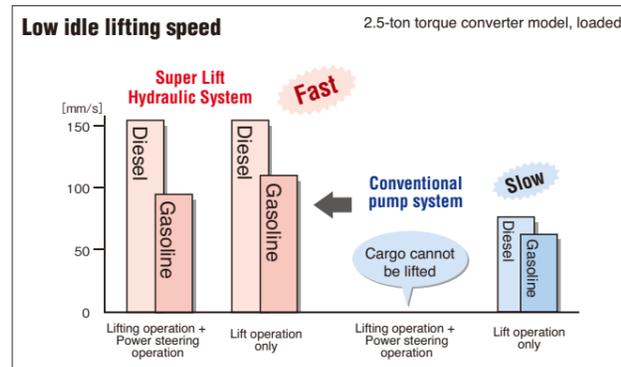
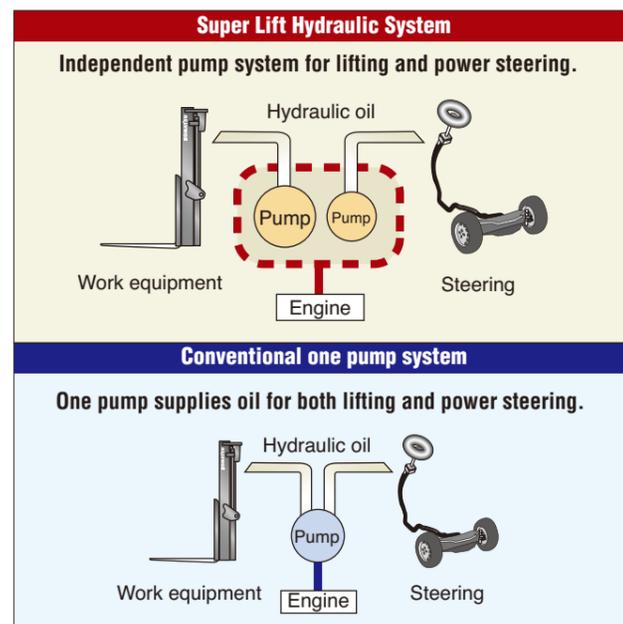


Excellent lifting performance to speed up work

Super Lift Hydraulic System*

The tandem pump operates the power steering and the lifting equipment independently. Komatsu's hydraulic technology lifts the cargo at about double the lift speed of the previous model when idling. The truck also features fine adjustments for the fork position and superior operability of attachments when idling.

*The Super Lift Hydraulic Systems available on the BX50 Series.

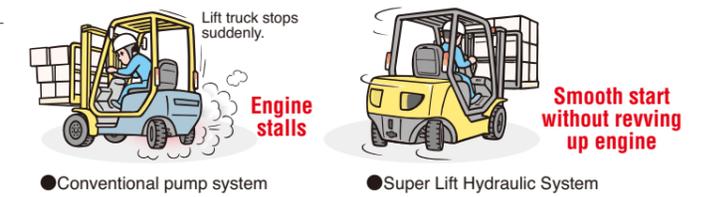


Excellent starting performance even at a jobsite where stationary steering is often required

Super Lift Hydraulic System* allows operator to perform stationary steering and start the truck smoothly without revving up the engine. Even in that case, the engine does not stall. This system is highly appreciated at jobsites where stationary steering is often required.

*The Super Lift Hydraulic Systems available on the BX50 Series.

Starting while performing stationary steering



Komatsu Reliability

Komatsu's unique designs have further extended the life span of the truck. Both the new frame structure and changes to the mast improve durability. Improvement of the heat balance also enhances reliability during heavy operations. The meantime between failures (MTBF) has been extended by 40% plus. Maintenance and repair costs are minimized by extensive testing and quality inspections under different operating environments.

Durability improved 40% Up

(Compared with previous model)

Exceptional Heat Balance

The bell-shaped shroud concentrates cooling air into the radiator. The unique shape of the counterweight opening and fan improves cooling performance by increasing the airflow of cooling air. Plus, the Super Lift Hydraulic System (BX50 Series) is designed to reduce oil pressure loss, which also prevents the oil temperature from overheating.

Travel control as intended

Small diameter steering wheel and fully hydrostatic power steering mechanism.

The small diameter steering wheel provides 100% stationary steering and switch backs. The superior responsiveness of the steering wheel optimizes maneuverability even in narrow spaces. Fluctuations during traveling have also been reduced by more than 30% to improve travel performance.



Consideration for Comfortable Operation

Komatsu's Research and Development team considers operators. Every aspect concerning an operator's comfort and ease of use have been thoroughly studied and implemented in each design. For instance, the control indicators and levers have been ergonomically designed and arranged in accessible and visible locations.

Komatsu prides itself on developing products, which are designed to optimize both comfort and productivity.



Pursuing environmental performance

EPA Tier3 and EU Stage IIIA compliant diesel engines

Diesel engines that incorporate Komatsu's advanced engine technologies feature excellent environmental performance and conform to the world latest EPA Tier3 and EU Stage IIIA emission regulations.

The diesel engines mounted on the BX50 Series reduce particulate matter (PM) in the exhaust gases by 30% to reduce environmental load.

Powerful engine with low fuel consumption

Thanks to the EPA Tier3 and EU Stage IIIA compliant engine and the Super Lift Hydraulic System*¹, fuel consumption is reduced and powerful performance is realized. Fuel consumption is further improved by 8%*² and CO₂ emissions are also reduced.

*1 The Super Lift Hydraulic Systems available on the BX50 Series.

*2 Measurements of test conducted on Komatsu test course, comparison with FD25T-16.

Comfort and safe design pursued thoroughly from the viewpoint of operators



Less fatigue even after long work periods

Dual 'Floating' Structure

Komatsu's original suspension cab design has evolved. The wide-set front mounts and high position rear mounts allow the entire cabin to float on the chassis. The power train floats the engine and transmission on the frame, and a universal joint is used to reduce engine and motion vibrations on the front axle. The combined technology of both of these Komatsu designed systems further reduce the vibrations transferred to the mast, fork, steering wheel and control lever, as well as the operator's seat. Therefore, ultimately improving operator comfort and cargo safety.



Suspension Cab

The suspension cab design reduces travel vibrations by 30%, compared with the former truck.

Power Train Floating

The power train floating structure cuts operator fatigue substantially, by limiting vibrations from the operation systems.

New Operator's Suspension Seat

The operator's seat is equipped with an all new suspension system and remodeled cushion and damper. The improved seat design holds the operator's body firmly in place for greater comfort and less fatigue during extended operations.



- Six-step reclining backrest
- Seat cushion adjustment dial
- 170 mm slide distance backward and forward
- The retractable seat belt

Wide Floor and Open, Non-Slip Step



The wide, flat floor accommodates the tilt cylinder under the floor. Suspended (type) pedals are used to provide extra foot space, which significantly reduces operator fatigue. The new wide-open, non-slip step and spoon-curved fender makes getting in and out easy and safe.

Safe design to prevent careless mistakes

Operator Presence Sensing System (Lifting/Traveling Interlocking Mechanism) OPTION

The Operator Presence Sensing System is a safety option that only allows lifting operations while traveling, when the operator is seated. The alarm is activated once the operator leaves the seat. The interlock is a double safety measure and remains activated even when the operator returns to the seat. The interlock can only be released by returning the respective levers to a safe position.

Traveling Interlocking Mechanism cuts power transmission off but does not serve to apply the brake. This mechanism is not installed on the lift truck with a clutch.



The interlock state is also indicated on the meter panel.

A Neutral Safety Function for Preventing a Sudden Start



Neutral indicator for at-a-glance information.

The engine cannot be started unless the F-R switch is in the neutral position.

Parking Brake Alarm



A double caution type brake lever prevents mishandling.

Superior Visibility

The mast rail section has been flattened and the inside width expanded for superior front visibility. With the lowered position of 3-stage mast center cylinder and the tilt stay, plus the inclined backrest, front visibility is improved, and blind spots are reduced. The BX50 Series also provides clear fork tip visibility. The size and layout of the dashboard and meter panel are optimized.



Safe Travel in Reverse

The upper corners of the counterweight are inclined to improve visibility. The edge of the counterweight, which is visible from the operator's seat, is designed to provide better visibility when confirming distances while reversing. The new counterweight outlets are flow-directional, which are designed to prevent hot air from blowing onto the operator while reversing. The tail pipe has also been repositioned and is now located at the lowest point of the counterweight. This improves driver comfort and prevents stains that are caused by exhaust gas.



Easy rear confirmation

The wide-angle center mirror provides a greater sight area for safety traveling.



Major equipment

●: Standard ○: Option ◎: Standard for BX50 —: N/A

Vehicle type	AX50/BX50 Series							
	Standard model				109 Series	High performance model (H type)		
	Gasoline		Diesel		Gasoline	Gasoline	Diesel	
Engine	TORQFLOW		TORQFLOW		TORQFLOW	TORQFLOW	TORQFLOW	
Transmission	Clutch	TORQFLOW	Clutch	TORQFLOW	TORQFLOW	TORQFLOW	TORQFLOW	
Driving/operation	Dual floating structure	●	●	●	●	●	●	●
	New operator's seat with suspension	●	●	●	●	●	●	●
	Small-sized steering wheel	●	●	●	●	●	●	●
	Tiltable steering column	●	●	●	●	●	●	●
	Electric forward/reverse lever (TORQFLOW model)	—	●	—	●	●	●	●
	Double-cone synchronized clutch (clutch model)	●	—	●	—	—	—	—
	Combination switch (turn signal light and light switch)	●	●	●	●	●	●	●
	Indicator auto-return mechanism	●	●	●	●	●	●	●
	Full-open step	●	●	●	●	●	●	●
	Under-floor tilt cylinder	●	●	●	●	●	●	●
Meters	Paper binder	●	●	●	●	●	●	●
	Glove box	●	●	●	●	●	●	●
	Meter panel	●	●	●	●	●	●	●
	Hourmeter	●	●	●	●	●	●	●
	Engine water temperature gauge	●	●	●	●	●	●	●
Safety indicators	Torque converter oil temperature gauge	—	○	—	○	○	○	○
	Fuel gauge	●	●	●	●	●	●	●
	Engine oil pressure warning lamp	●	●	●	●	●	●	●
	Charge warning lamp	●	●	●	●	●	●	●
	Air cleaner element warning lamp	○	○	○	○	○	○	○
	Fuel level warning lamp	○	○	○	○	○	○	○
	Radiator cooling water level warning lamp	○	○	○	○	○	○	○
	Battery electrolyte level warning lamp	○	○	○	○	○	○	○
	Neutral indicator	●	●	●	●	●	●	●
	Sedimeter warning lamp	—	—	●	●	—	—	●
Electric components	Glow indicator	—	—	●	●	—	—	●
	Full-transistor-type IC distributor	●	●	—	—	●	●	—
	Alternator with built-in IC regulator	●	●	●	●	●	●	●
	Quick auto glow system	—	—	●	●	—	—	●
	Neutral safety mechanism	●	●	●	●	●	●	●
	Auto fuse	●	●	●	●	●	●	●
	Low maintenance battery	●	●	●	●	●	●	●
	Engine key stop mechanism	—	—	●	●	—	—	●
	Halogen headlight	●	●	●	●	●	●	●
	Rear combination light	●	●	●	●	●	●	●
Mechanism	Back-up buzzer	●	●	●	●	●	●	●
	Operator Presence Sensing System	○	○	○	○	○	○	○
	Auto choke	●	●	—	—	●	●	—
	Super Lift Hydraulic System	◎	◎	◎	◎	◎	◎	◎
	Self-adjustment clutch	●	—	●	—	—	—	—
	Sedimentary with priming pump	—	—	●	●	—	—	●
	Cyclone air cleaner	●	●	●	●	●	●	●
	Parking brake with release button	●	●	●	●	●	●	●
	Fully hydrostatic power steering*	●	●	●	●	●	●	●
	Soft landing mast system	●	●	●	●	●	●	●
Exterior	Non-asbestos brake linings	●	●	●	●	●	●	●
	Non-asbestos clutch disk	●	—	●	—	—	—	—
	Easy replacement hydraulic oil filter	○	○	○	○	○	○	○
	Floor mat	●	●	●	●	●	●	●
	Assist grips	●	●	●	●	●	●	●
	Head guard with front/rear conduits	●	●	●	●	●	●	●
	Wide angle center mirror	●	●	●	●	●	●	●
	Full shield solid-state engine hood	●	●	●	●	●	●	●
	One-touch open floor panel	●	●	●	●	●	●	●
	One-touch removable radiator cover	●	●	●	●	●	●	●
Engine hood stopper	●	●	●	●	●	●	●	
Engine hood lock	●	●	●	●	●	●	●	
Radiator reservoir tank	●	●	●	●	●	●	●	
Wide fork carriage	●	●	●	●	●	●	●	
Resin dashboard cover	●	●	●	●	●	●	●	
Jacking points	●	●	●	●	●	●	●	

*1 Steering synchronizer function is available as an option.

Optional Specification Truck

LPG Specification truck

Komatsu offers both single fuel (LPG) and dual fuel (LPG and Gasoline) systems for the LPG Specification truck. The truck has superior fuel consumption, the service life of the engine oil, filters, and plugs are extended, and the engine delivers clean combustion exhaust gases. Cold starts are possible even in temperatures as low as -5°C.



Swing-down Bracket (optional for the LPG truck)

The LPG cylinder is easily installed and removed in a lower position with minimal effort. In addition to the normal counterweight, this is also applicable for both the 2.5t and 3t trucks with sunken counterweights.



The sunken counterweight* specification truck with an expanded rear view area.
By lowering the position of the LPG cylinder, installation and removal is easier, and permits a wider rear view area for greater reversing safety.

Dust Proof Specification

This truck is reliable for the handling of powdered products such as concrete, secondary products, ceramics and flour millings, or for operations in similar dusty conditions.

Fishery Specification

Waterproofing, sealing, and anticorrosion coatings significantly improve the durability of the exterior, parts, and the brake system under salt-water conditions.

Options

Steel Cabin*

The steel cabin provides superior comfort and protection from severe cold or very noisy environments. Heaters and air conditioners are also available.

Protective Resin Head Guard Cover

The resin cover resists stains and provides protection from the rain.

Digital Load Checker

Loads are measured and displayed in 10 kg units.



Operator Presence Sensing System

Easy-Replacement Oil Filter

This simple design enables easier and timely maintenance.

Mast Tilt Angle Meter

The pointer on the meter indicates the mast tilt angle. Once the mast reaches a preset angle, the lamp will light. When there is no load on the lift, the Auto Stop Function stops the tilt operation once the mast reaches the preset position. This is especially convenient for loading operations on inclined surfaces.



Engine and Operation Equipment

- Three-Way Catalytic System for Gasoline and LPG Trucks
- Spark arrester
- Upward exhaust pipe
- Radiator screen
- Large capacity alternator (for the diesel truck only)
- Pre-cleaner

Exterior parts

- Tilt cylinder boots
- Power steering cylinder boots
- Fuelcap with key
- Fire extinguisher

Electrical Equipment

- Yellow strobe light
- Red strobe light
- Rear working light
- Front working light
- Back-up chime

Meters and Gauges

- Torque converter oil temperature gauge
- Ammeter
- Speedometer (with alarm)
- Mast tilt angle meter
- Traveling speed limiter
- Fork positioning sensor

Tyres

- Color tyres

*except for the 109 Series

Attachments



■ Roll clamp



■ Side shifter



■ Bale clamp



■ Rotating fork



■ Fork clamp

● Although specifications are provided for attachments, some attachments cannot be installed on specific masts depending on their types.
● For details, please contact Komatsu Forklift's dealers.