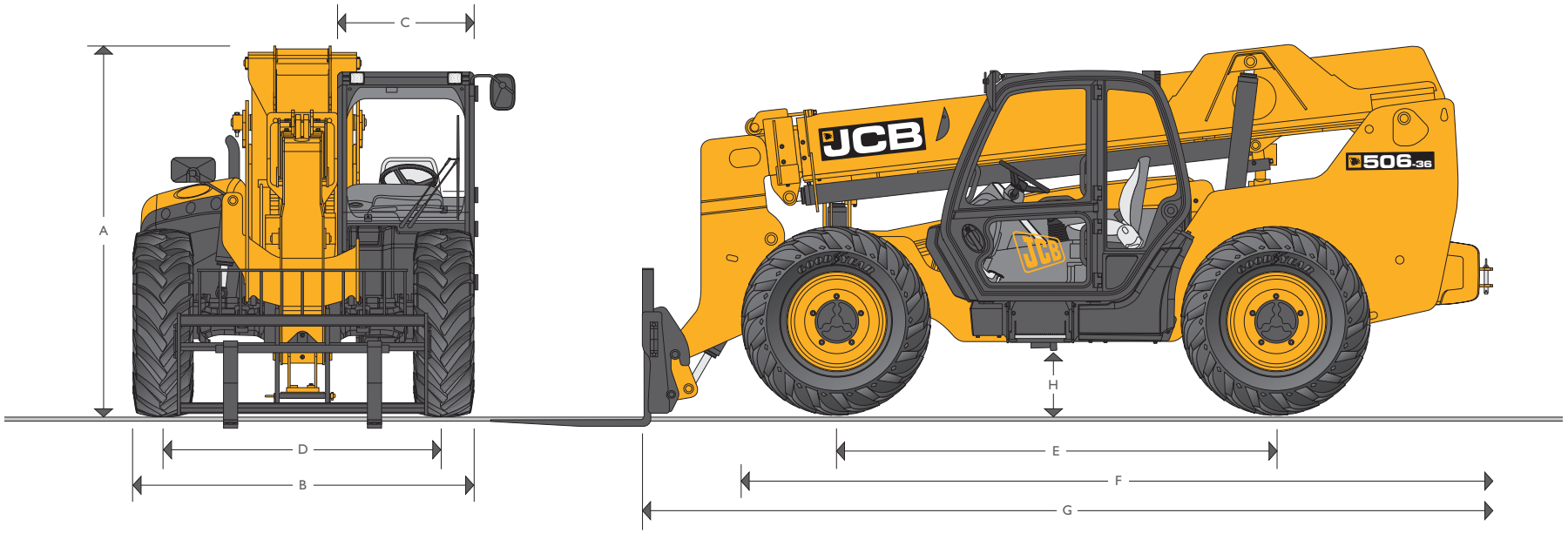
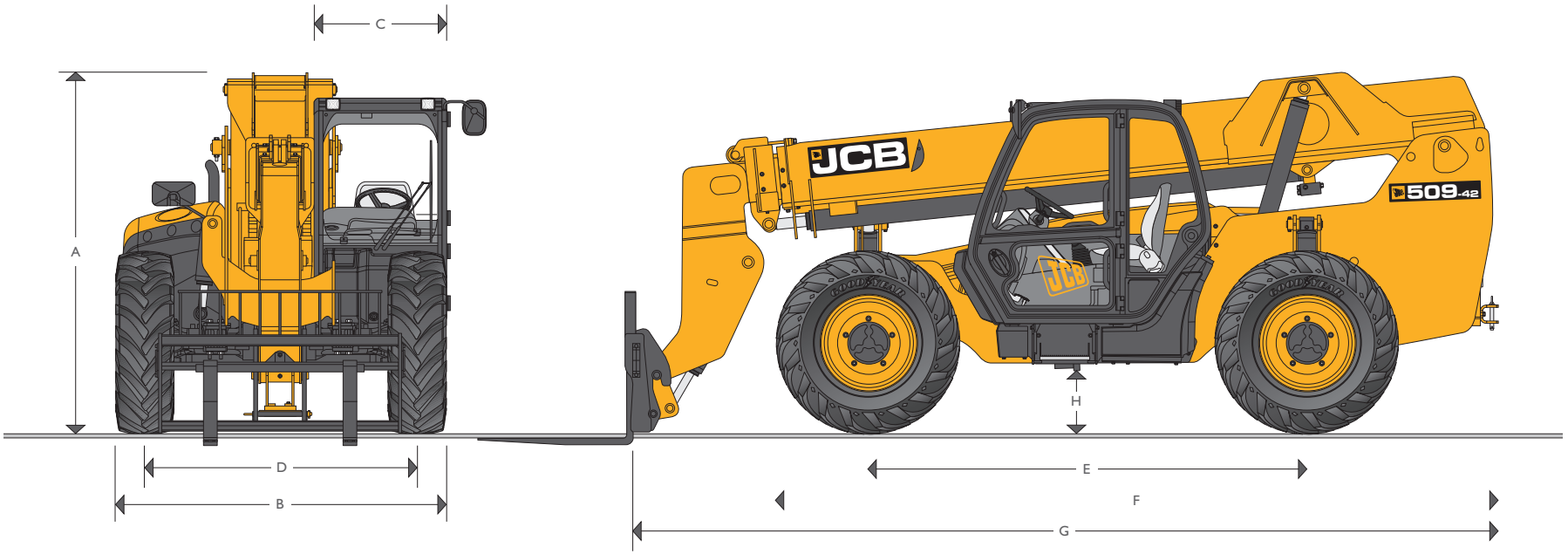



## STATIC DIMENSIONS 506-36

| | | | |
|---|---|---|---|
| A | Overall Height | ft-in (mm) | 8-3 (2510) |
| B | Overall Width | ft-in (mm) | 7-10 (2388) |
| C | Inside Width of Cab | ft-in (mm) | 3-3 (940) |
| D | Front Track | ft-in (mm) | 6-4 (1936) |
| E | Wheelbase | ft-in (mm) | 10-0 (3048) |
| F | Overall Length to Front Tires | ft-in (mm) | 17-1 (5211) |

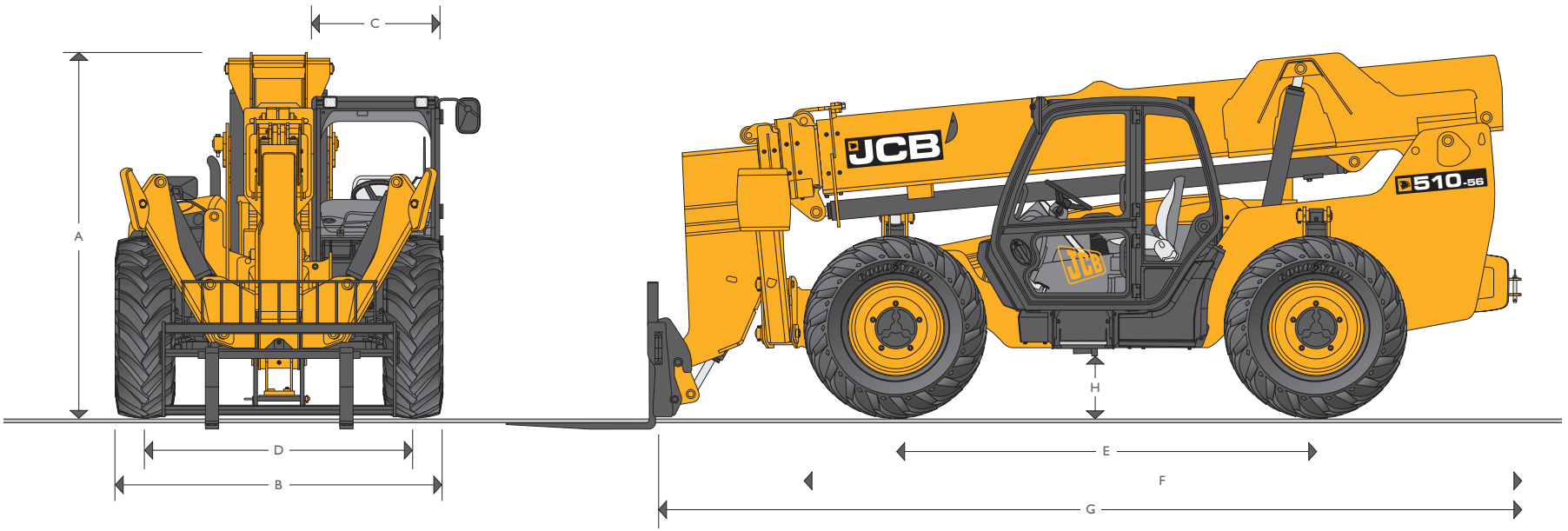
| | | | |
|---|---|---|---|
| G | Overall Length to Front of Carriage | ft-in (mm) | 19-5 (5918) |
| H | Ground Clearance | ft-in (mm) | 1-3½ (396) |
| | Outside Turn Radius (over tires) | ft-in (mm) | 14-6 (4420) |
| | Tires | | 13.00-24 |
| | Weight (unladen) | lb (kg) | 20,270 (9193) |




## STATIC DIMENSIONS 509-42

| | | | |
|---|---|---|---|
| **A** | Overall Height | ft-in (mm) | 8-3 (2525) |
| **B** | Overall Width | ft-in (mm) | 7-10 (2388) |
| **C** | Inside Width of Cab | ft-in (mm) | 3-3 (940) |
| **D** | Front Track | ft-in (mm) | 6-7 (2008) |
| **E** | Wheelbase | ft-in (mm) | 10-4 (3150) |
| **F** | Overall Length to Front Tires | ft-in (mm) | 17-0 (5183) |

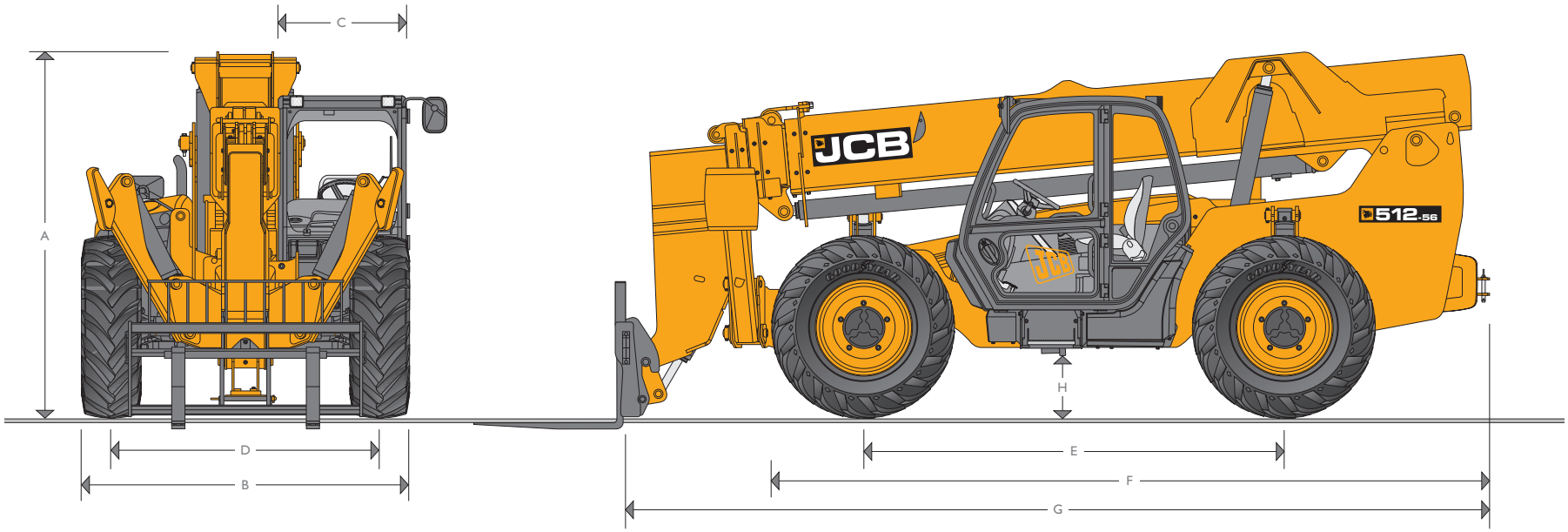
| | | | |
|---|---|---|---|
| **G** | Overall Length to Front of Carriage | ft-in (mm) | 20-7 (6274) |
| **H** | Ground Clearance | ft-in (mm) | 1-3½ (396) |
| | Outside Turn Radius (over tires) | ft-in (mm) | 13-9 (4191) |
| | Tires | | 14.00-24 16PR |
| | Weight (unladen) | lb (kg) | 22,430 (10,172) |




## STATIC DIMENSIONS 510-56

| | | | |
|---|---|---|---|
| A | Overall Height | ft-in (mm) | 8-10 (2692) |
| B | Overall Width | ft-in (mm) | 8-1 (2471) |
| C | Inside Width of Cab | ft-in (mm) | 3-1 (940) |
| D | Front Track | ft-in (mm) | 6-7 (2008) |
| E | Wheelbase | ft-in (mm) | 10-4 (3150) |
| F | Overall Length to Front Tires | ft-in (mm) | 17-9 (5406) |

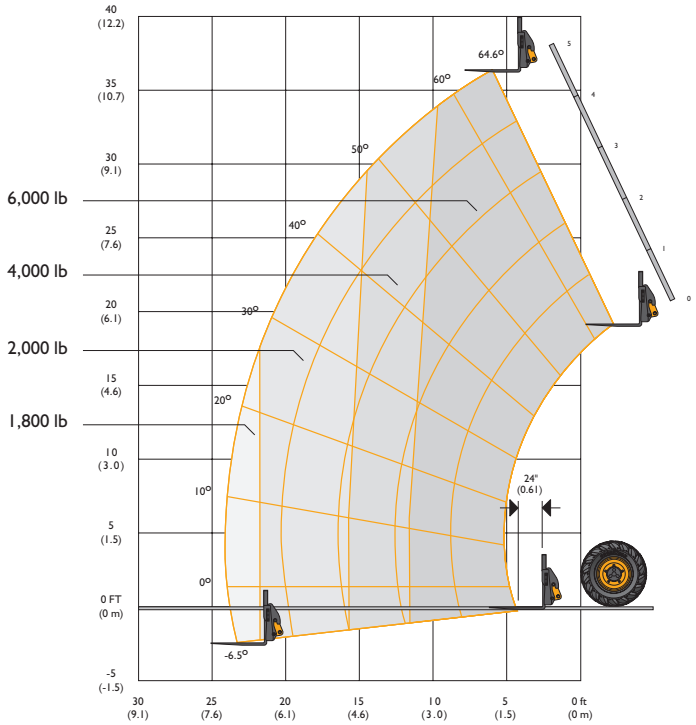
| | | | |
|---|---|---|---|
| G | Overall Length to Front of Carriage | ft-in (mm) | 21-7 (6579) |
| H | Ground Clearance | ft-in (mm) | 1-5½ (444) |
| | Outside Turn Radius (over tires) | ft-in (mm) | 14-1 (4293) |
| | Tires | | 17.5-25 |
| | Weight (unladen) | lb (kg) | 29,900 (13,560) |




## STATIC DIMENSIONS 512-56

| | | | |
|---|---|---|---|
| A | Overall Height | ft-in (mm) | 8-10 (2692) |
| B | Overall Width | ft-in (mm) | 8-1 (2471) |
| C | Inside Width of Cab | ft-in (mm) | 3-1 (940) |
| D | Front Track | ft-in (mm) | 6-7 (2008) |
| E | Wheelbase | ft-in (mm) | 10-4 (3150) |
| F | Overall Length to Front Tires | ft-in (mm) | 17-9 (5406) |
| G | Overall Length to Front of Carriage | ft-in (mm) | 21-7 (6579) |
| H | Ground Clearance | ft-in (mm) | 1-5½ (444) |
| | Outside Turn Radius (over tires) | ft-in (mm) | 14-1 (4293) |
| | Tires | | 17.5-25 |
| | Weight (unladen) | lb (kg) | 30,635 (13,900) |

## LIFT PERFORMANCE




This load chart is for the rated capacity of the machine with 66" wide standard carriage and 48" pallet forks. Use only JCB approved attachments and check the relevant load chart for the machine model. If in doubt, consult your dealer.

If the load rating of the machine differs to that of the attachment, the lower rating becomes the overall capacity.

## LIFT PERFORMANCE

| | | |
|---|---|---|
| Maximum Lift Capacity | lb (kg) | 6000 (2722) |
| Lift Capacity to Full Height | lb (kg) | 6000 (2722) |
| Lift Capacity at Full Reach | lb (kg) | 1800 (816) |
| Lift Height | ft-in (m) | 36-4 (11.07) |
| Reach at Maximum Lift Height | ft-in (m) | 6-4 (1.93) |
| Maximum Forward Reach | ft-in (m) | 24-0 (7.31) |
| Frame Sway Left or Right | degrees | 10° |

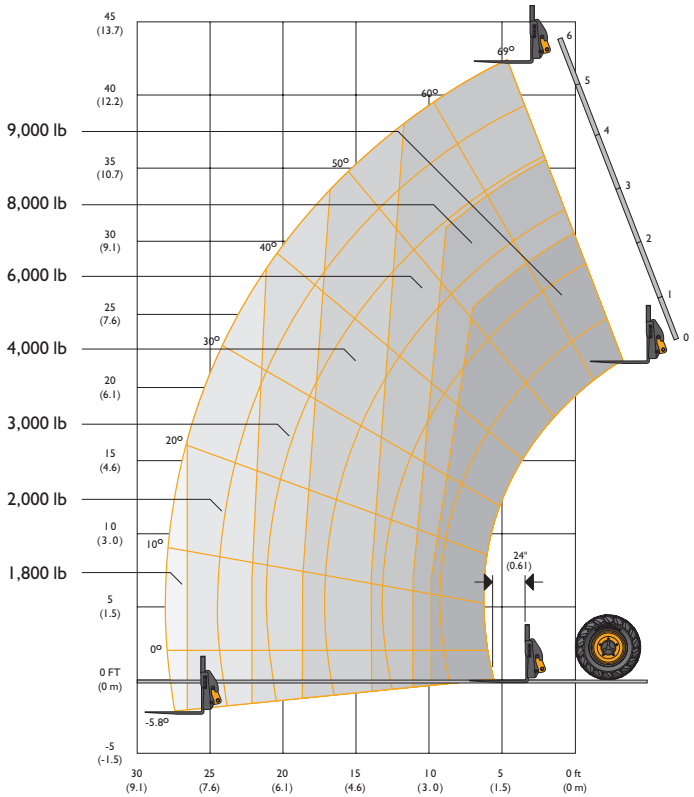
Complies with ASME B56.6 2002

## ENGINE

Latest technology and advanced design provides low fuel consumption, reduced noise, high torque and power output, total reliability and minimal maintenance. Two-stage, dry type air filter with primary and safety elements. EPA Tier III, EU Stage 3 emissions compliant.

| **Machine Model – 506-36** | | **Standard** | **Optional** |
|---|---|---|---|
| Displacement | $in^3$ (l) | 269 (4.4) | 269 (4.4) |
| Number of Cylinders | | 4 | 4 |
| Bore Size | in (mm) | 4.05 (103) | 4.05 (103) |
| Stroke | in (mm) | 5.0 (132) | 5.0 (132) |
| Aspiration | | Turbo | Turbo |
| **Power Rating** | | | |
| Power @ 2200 rpm | hp (kW) | 85 (63) | 100 (74.2) |
| **Torque Rating** | | | |
| Torque @ 1200 rpm | lb ft (nm) | 267 (362) | – |
| Torque @ 1300 rpm | lb ft (nm) | – | 324 (440) |

## LIFT PERFORMANCE




This load chart is for the rated capacity of the machine with 66" wide standard carriage and 48" pallet forks. Use only JCB approved attachments and check the relevant load chart for the machine model.If in doubt, consult your dealer.

If the load rating of the machine differs to that of the attachment, the lower rating becomes the overall capacity.

## LIFT PERFORMANCE

| | | |
|---|---|---|
| Maximum Lift Capacity | lb (kg) | 9000 (4084) |
| Lift Capacity to Full Height | lb (kg) | 6000 (2722) |
| Lift Capacity at Full Reach | lb (kg) | 1800 (816) |
| Lift Height | ft-in (m) | 42-0 (12.8) |
| Reach at Maximum Lift Height | ft-in (m) | 4-11 (1.50) |
| Maximum Forward Reach | ft-in (m) | 28-0 (8.53) |
| Frame Sway Left or Right | degrees | 10° |

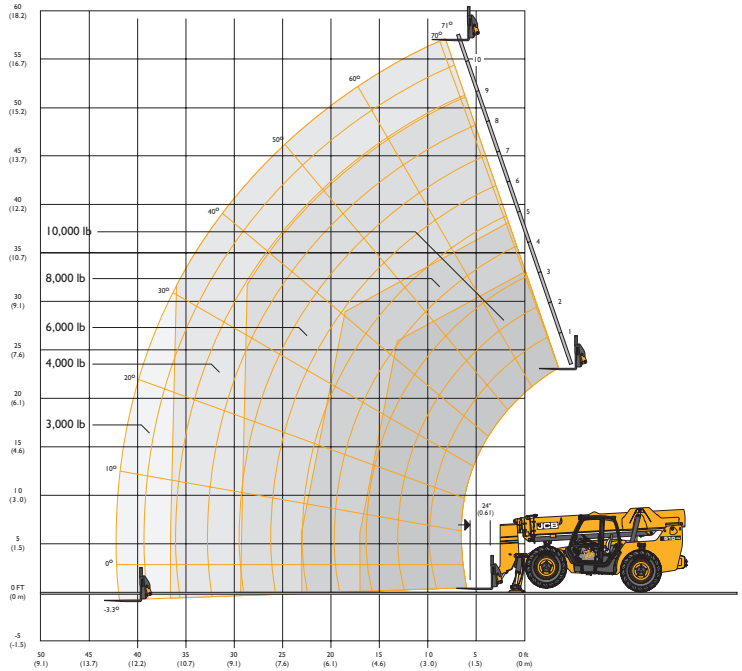
Complies with ASME B56.6 2002

## ENGINE

Latest technology and advanced design provides low fuel consumption, reduced noise, high torque and power output, total reliability and minimal maintenance. Two-stage, dry type air filter with primary and safety elements.

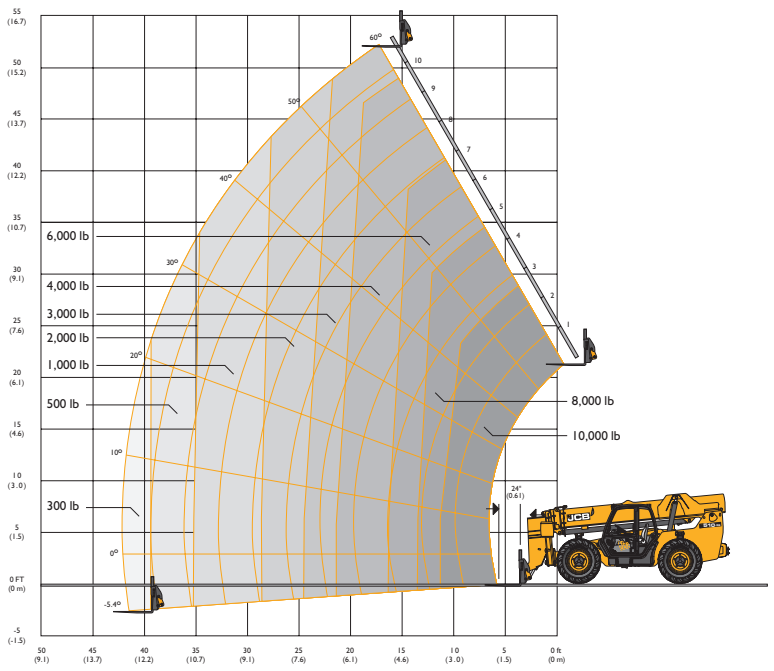
| **Machine Model – 509-42** | | **Standard** |
|---|---|---|
| Displacement | $in^3$ (l) | 269 (4.4) |
| Number of Cylinders | | 4 |
| Bore Size | in (mm) | 4.05 (103) |
| Stroke | in (mm) | 5.0 (132) |
| Aspiration | | Turbo |
| **Power Rating** | | |
| Power @ 2200 rpm | hp (kW) | 100 (74.2) |
| **Torque Rating** | | |
| Torque @ 1300 rpm | lb ft (nm) | 324 (440) |

## LIFT PERFORMANCE – STABILIZERS EXTENDED




These load charts are for the rated capacity of the machine with 66" wide standard carriage and 48" pallet forks. Use only JCB approved attachments and check the relevant load chart for the machine model.

## LIFT PERFORMANCE – STABILIZERS RETRACTED




## ENGINE

Latest technology and advanced design provides low fuel consumption, reduced noise, high torque and power output, total reliability and minimal maintenance. Two-stage, dry type air filter with primary and safety elements. EPA Tier III and EU Stage 3 emission compliant.

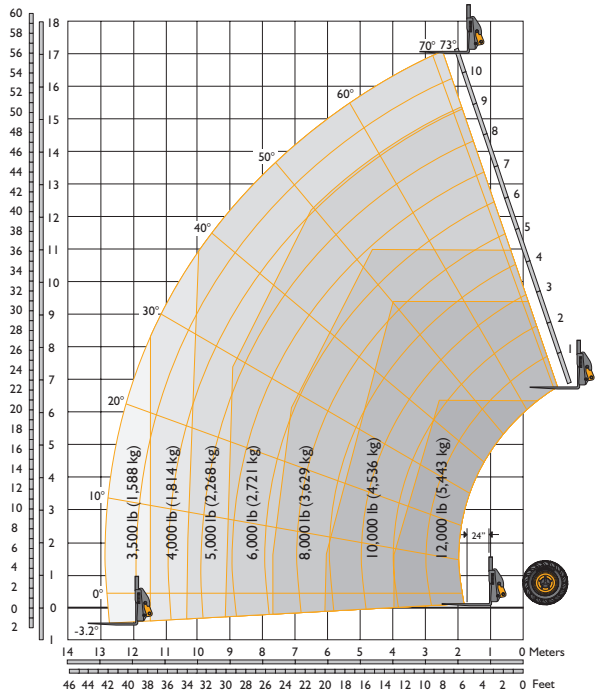
| Machine Model – 510-56 | | Standard |
|---|---|---|
| Displacement | $in^3$ (l) | 269 (4.4) |
| Number of Cylinders | | 4 |
| Bore Size | in (mm) | 4.05 (103) |
| Stroke | in (mm) | 5.0 (132) |
| Aspiration | | Turbo |
| **Power Rating** | | |
| Power @ 2200 rpm | hp (kW) | 114 (85) |
| **Torque Rating** | | |
| Torque @ 1300 rpm | lb ft (nm) | 324 (440) |

## LIFT PERFORMANCE

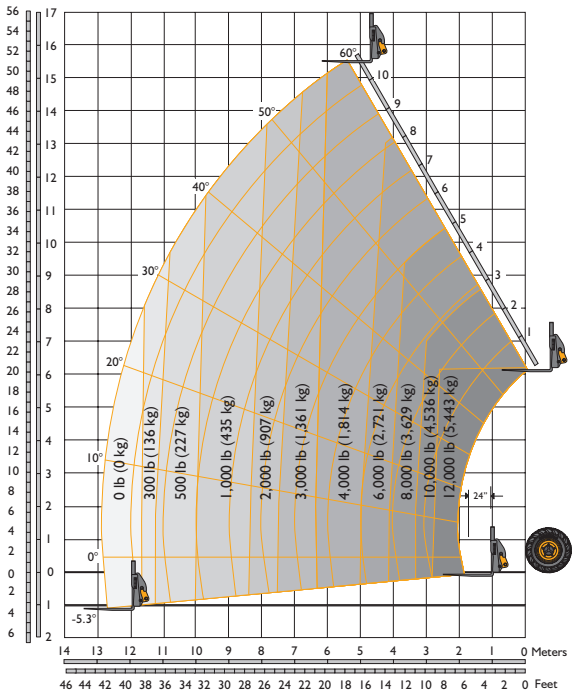
| | | |
|---|---|---|
| Maximum Capacity | lb (kg) | 10,000 (4537) |
| Lift Capacity to 52 ft (on tires) | lb (kg) | 3000 (1361) |
| Lift Capacity to Full Height (on stabilizers) | lb (kg) | 4000 (1814) |
| Lift Capacity at Full Reach (on tires) | lb (kg) | 300 (136) |
| Lift Capacity at Full Reach (on stabilizers) | lb (kg) | 3000 (1360) |
| Lift Height | ft-in (m) | 56 (17.07) |
| Reach at Maximum Lift Height | ft-in (m) | 8-2 (2.49) |
| Maximum Forward Reach | ft-in (m) | 42 (12.80) |
| Frame Sway Left or Right | degrees | 10 |

Complies with ANSI/ITSDF B56.6

## LIFT PERFORMANCE – STABILIZERS EXTENDED




## LIFT PERFORMANCE – STABILIZERS RETRACTED




These load charts are for the rated capacity of the machine with 72" wide standard carriage and 48" pallet forks.

## ENGINE

Latest technology and advanced design provides low fuel consumption, reduced noise, high torque and power output, total reliability and minimal maintenance. Two-stage, dry type air filter with primary and safety elements. EPA Tier III and EU Stage 3 emission compliant.

| Machine Model – 512-56 | | Standard |
|---|---|---|
| Displacement | $in^3$ (l) | 269 (4.4) |
| Number of Cylinders | | 4 |
| Bore Size | in (mm) | 4.05 (103) |
| Stroke | in (mm) | 5.0 (132) |
| Aspiration | | Turbo |
| **Power Rating** | | |
| Power @ 2200 rpm | hp (kW) | 114 (85) |
| **Torque Rating** | | |
| Torque @ 1300 rpm | lb ft (nm) | 324 (440) |

## LIFT PERFORMANCE

| | | |
|---|---|---|
| Maximum Capacity | lb (kg) | 12,000 (5444) |
| Lift Capacity to 52 ft (on tires) | lb (kg) | 4000 (1814) |
| Lift Capacity to Full Height (on stabilizers) | lb (kg) | 5000 (2268) |
| Lift Capacity at 38 ft Reach (on tires) | lb (kg) | 300 (136) |
| Lift Capacity at Full Reach (on stabilizers) | lb (kg) | 3500 (1588) |
| Lift Height | ft-in (m) | 56 (17.07) |
| Reach at Maximum Lift Height | ft-in (m) | 8-2 (2.49) |
| Maximum Forward Reach | ft-in (m) | 42 (12.80) |
| Frame Sway Left or Right | degrees | 10 |

Complies with ANSI/ITSDF B56.6

## TRANSMISSION

JCB powershift transmission incorporating torque converter, bevel box and a 4 speed powershift gearbox in one resiliently mounted unit.
A combined steering column mounted switch incorporating directional control and 4 forward and 4 reverse powershift gears.
Travel Speed 15.5 mph (25 kph).
**Front and Rear Drive Axles:** JCB epicyclic hub reduction drive/steer axles with Max-Trac torque proportioning differentials. Permanent 4 wheel drive.

## BRAKES

**Service Brakes:** Servo-assisted-hydraulically activated, self-adjusting, oil-immersed multi-disc type. 506-36 In front axle, 509-42, 510-56 and 512-56 In front and rear axles.
**Parking Brake:** Hand operated disc brake on output of gearbox.

## BOOM AND CARRIAGE

Boom is manufactured from high tensile steel.
Low maintenance, hard wearing pads.
JCB Toolcarrier for quick attachment changes.
One boom end auxiliary hydraulic service fitted as standard.

## SAFETY CHECK VALVES

Fitted to carriage tilt, telescopic and boom lift rams.

## SERVICE CAPACITIES

| | | |
|---|---|---|
| Fuel Tank | gal (l) | 35 (132) |
| Hydraulic Tank | gal (l) | 34 (128) |
| Coolant | gal (l) | 6 (23) |

| Hydraulic Cycle Times (seconds) | 506-36 | 509-42 | 510-56 / 512-56 |
|---|---|---|---|
| Boom Raise | 11.2 | 13.8 | 18.0 |
| Boom Lower | 7.3 | 9.2 | 12.4 |
| Extend | 8.5 | 9.7 | 24.2 |
| Retract | 9.9 | 10.6 | 6.4 |
| Forks Dump | 4.0 | 4.0 | 6.4 |
| Forks Crowd | 3.0 | 3.0 | 3.7 |
| Stabilizer Down | | | 5.5 |
| Stabilizer Up | | | 4.0 |
| Rear Axle Stabilization (RAS) System. | No | Yes | Yes |

## HYDRAULICS

Two stage gear pump with suction strainer and filter.

| | | |
|---|---|---|
| Operating System Pressure | psi (bar) | 3770 (260) |
| Pump Flow | gal/min (l/min) | 29 (110) |

## ELECTRICS

12 V negative earth. 130 AH battery. 95 amp alternator. Reverse alarm.

## CAB

Quiet, safe and comfortable cab conforms to ROPS ISO 3471 and FOPS ISO 3449. Available as safety frame or fully enclosed. Both feature all time display hour meter, visible from outside the cab. Glazed RH side and rear window as standard. Audio-visual warning system for coolant temperature, engine oil pressure, air cleaner, battery charge, transmission oil temperature and pressure, water in fuel. Engine speed indicator, engine temperature, fuel gauge, clock and lateral inclinometer. Indication of rear axle stabilization mode of operation. (510-56 and 512-56 indication of stabilizers when on firm ground)

Oil servo joystick to lift, extend and tilt. Direct acting mechanical levers on sway and auxiliary. Tilt adjustable steer column with stalk control of powershift change and forward/reverse shuttle. Throttle and brake pedal. Adjustable seat with adjacent park brake.

## STEERING

Hydrostatic power steering.
Three steer mode options: front wheel steer; all wheel steer; crab steer: operated from in the cab by a selection lever.

## OPTIONS AND ACCESSORIES

**Options:** Road light kit, fenders, screen and roof blinds, screen and roof guards, air conditioning, block heater, radio kit, front and rear work lights, rotating flashing beacon, fire extinguisher, industrial tires.
**Attachments:** Contact your local dealer for details of the comprehensive range.

# A GLOBAL COMMITMENT TO QUALITY

JCB's total commitment to its products and customers has helped it grow from a one-man business into one of the world's largest manufacturers of backhoe loaders, crawler excavators, wheeled excavators, telescopic handlers, wheeled loaders, dump trucks, rough terrain fork lifts, industrial fork lifts, mini/midi excavators, skid steer loaders and tractors.

By making constant and massive investments in the latest production technology, the JCB factories have become some of the most advanced in the world.

By leading the field in innovative research and design, extensive testing and stringent quality control, JCB machines have become renowned all over the world for performance, value and reliability.

And with an extensive dealer sales and service network in over 150 countries, we aim to deliver the best customer support in the industry.

Through setting the standards by which others are judged, JCB has become one of the world's most impressive success stories.

JCB Headquarters Savannah, 2000 Bamford Blvd, Savannah, GA 31322 Tel: (912) 447-2000 Fax: (912) 447-2299 www.jcb.com

JCB reserves the right to change design, materials and/or specifications without notice. Specifications are applicable to units sold in the United States and Canada. The JCB logo is a registered trademark of J C Bamford Excavators Ltd.

DWUSA 2979 12/11