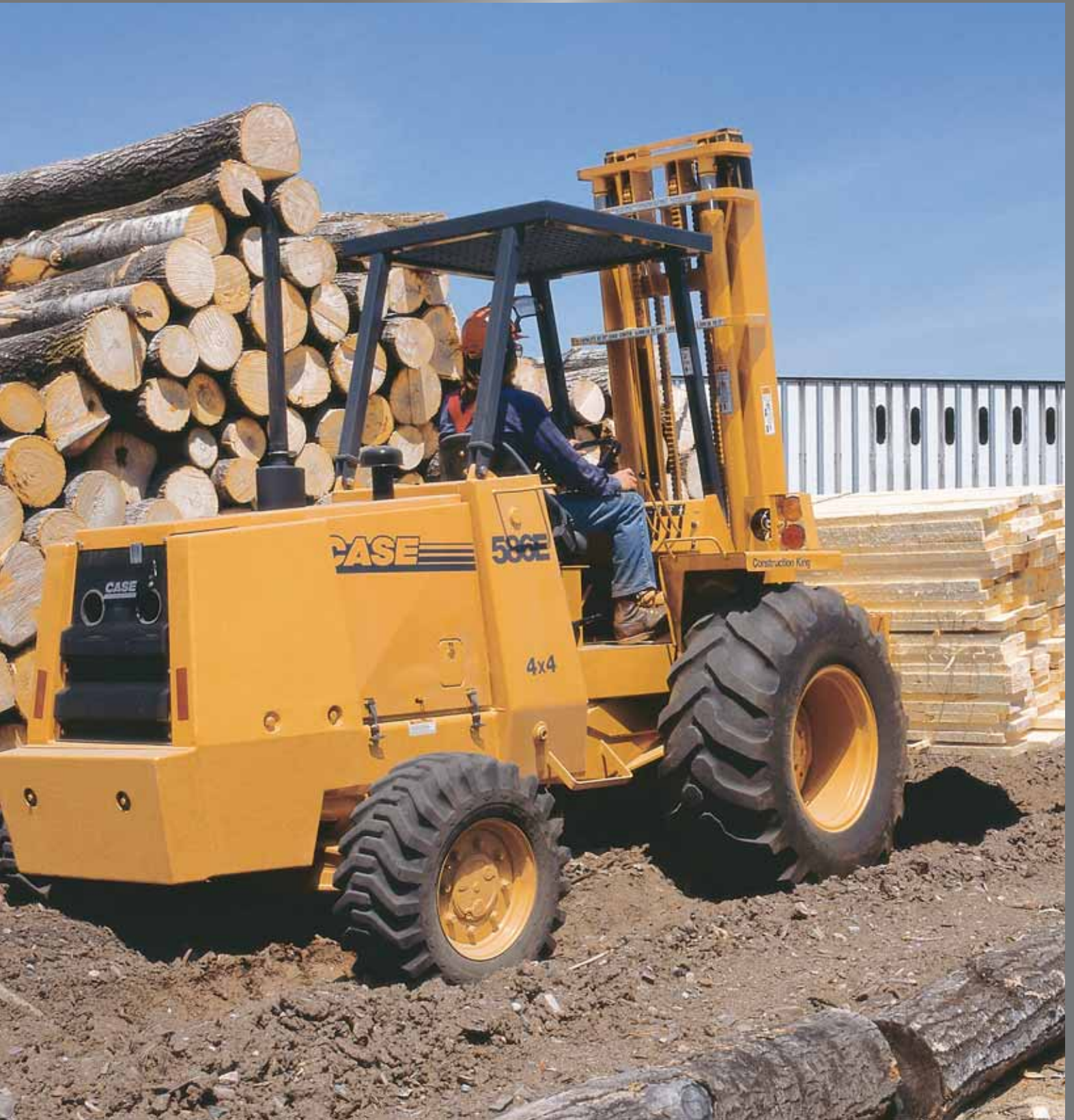


**CASE**

FORKLIFTS

**585E**  
**586E**



# ***Innovation in Performance... a Case Tradition***

Case "E" Series vertical rough terrain forklifts provide exceptional lifting power, reach height and visibility for virtually all of your material handling needs. With a wide selection of masts and mast attachments, these hard working lifts can be custom equipped to handle your particular application.

Ask your Case dealer to recommend the right "E" Series forklift and attachments for you...





# Table of Contents

- Operator Environment ..... 4
- Engine..... 5
- Electrical ..... 5
- Hydraulics..... 6
- Steering ..... 6
- Driveline..... 7
- Mast Options ..... 8
- Service..... 8
- Operating Weights ..... 9
- Lift Capacities ..... 9
- 585E Dimensions ..... 10
- 586E Dimensions ..... 11

# Operator Environment

**The 585E and 586E forklifts are designed to incorporate the power and versatility of the 580 series loader/backhoes with the visibility and performance needed for rough terrain forklift work.**

The operator's compartment is designed to provide maximum visibility for all work and transport functions. This wide, walk-through platform can be entered from either side of the machine.

Most controls include lift, raise and lower, and tilt forward and backward. The optional sideshift hydraulically maneuvers the mast left and right for accurate positioning of loads.

A drive/neutral switch located on the right side of the dash can be set to dedicate full engine horsepower to the hydraulics for maximum lifting capacity. When this switch is in the neutral position and the left master brake pedal is engaged, the transmission disengages, both drive wheels brake and engine power is diverted to the hydraulics.

A clutch cutout button located in the center of the floorboard allows on-the-go shifting from 2nd to 3rd to 4th, and from 4th to 3rd.

Hand and foot throttles allow cruise control for transporting or traveling over rough terrain, and they provide inching precision when approaching restricted areas.

The standard bucket seat can be repositioned fore and aft while in the seated position. A deluxe suspension seat is optional. A 2-inch retractable seat belt is standard, with a 3-inch belt optional.

The toolbox and battery are located under the seat, and accessed by tilting the seat forward.

For operating in low light conditions, these forklifts feature (2) front headlights and (2) rear flood lights. Turn signals and flashing lights are mounted on the fender in protective steel brackets.

The left master brake pedal brakes both drive wheels. Right-hand brake pedals allow individual braking for sharper turns.

A diagnostic position on the key start switch tests the air and hydraulic filter restriction warning lights for functionality.

A ROPS with screened roof provides rollover protection while allowing visibility to raised loads.

Gauges include:

- Converter oil temperature
- Engine coolant temperature
- Fuel
- Tachometer/hourmeter
- Voltmeter

Warning lights include:

- Engine oil pressure
- Hydraulic system filter
- Air cleaner
- Alternator



# Engine

**Designed specifically for heavy equipment applications, the Case 4-390 diesel engine has been proven to be reliable and efficient through years of the toughest on-the-job experience.**

A parent metal bore block eliminates cavitation erosion and coolant leaks in the cylinder bore for increased ring and piston life. The block is fully skirted and ribbed for exceptional strength and durability.

An induction-hardened forged steel crankshaft with full-fillet design and five main bearings ensures excellent wear for long life.

Large intake and exhaust ports provide free breathing for more effective combustion.

The integral design of the oil and coolant pumps incorporates components into the engine block.

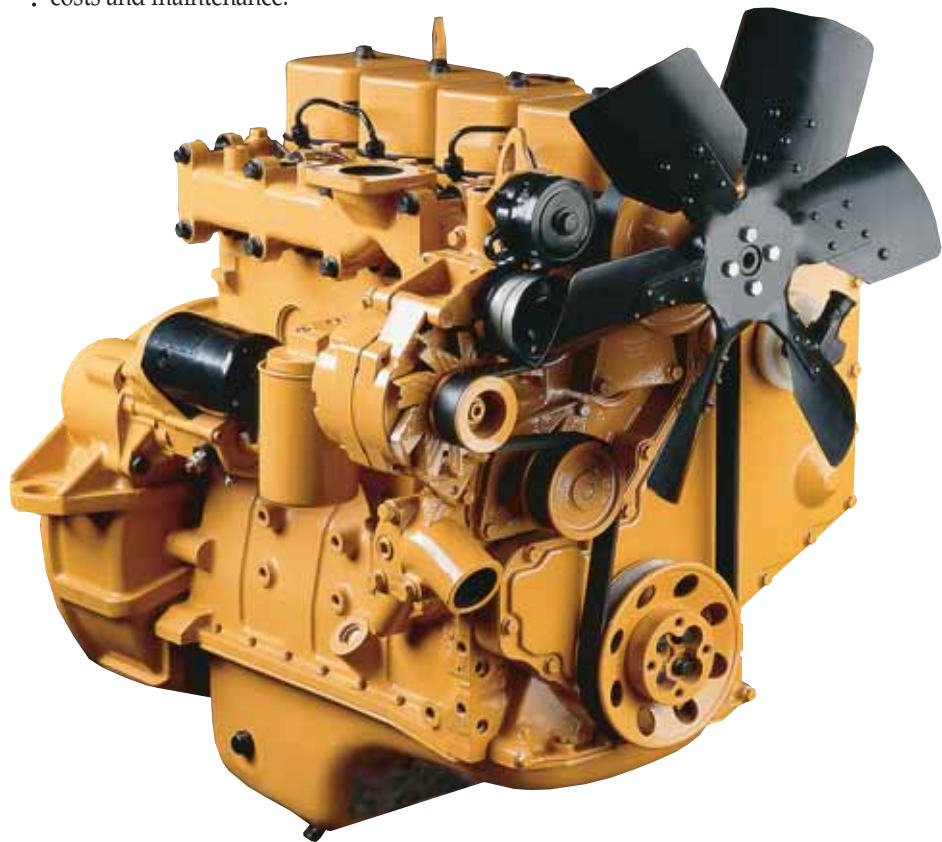
This reduces heat buildup and wear with fewer parts for lower operating costs and maintenance.

Pressurized under-piston oil nozzles provide positive cylinder wall lubrication and cooling. Deep sump is rated to supply oil lubrication at angles up to 45°.

A dual element air filter with evacuator cup draws ambient air for efficient combustion.

Optional ether cold start, engine coolant heater, engine oil heater and dual batteries allow severe, cold weather operation.

This outstanding engine is backed by one of the best warranties in the business.



Model .....	Case 4-390
Type .....	4-stroke, naturally aspirated
Fuel injection .....	Direct
Cylinders .....	4
Bore/Stroke .....	4.02" x 4.72" (102 mm x 120 mm)
Displacement .....	239 in <sup>3</sup> (3.92 L)
Horsepower*	
Gross .....	69 (51.4 kW) @ 2200 rpm
Net .....	63 (46.9 kW) @ 2200 rpm
Maximum torque:	
Gross .....	186 lb•ft (252 N•m) @ 1200 rpm
Net .....	181 lb•ft (245 N•m) @ 1200 rpm

\*Gross engine horsepower or torque at flywheel per SAE J1995.

## ELECTRICAL

Voltage .....	12 volts, negative ground
Alternator .....	65 amp
Battery .....	Low-maintenance, 685 cold-cranking amps @ 0° F (-18° C)

# Hydraulics

**Case has perfected the open-center hydraulic system through generations of machine design. The result is a smooth, fast response time.**

A clutch cutout system disengages the ground drive to dedicate full engine power to the hydraulics for maximum lift capacity.

A cast-iron gear pump provides 23 gpm (87.1 L/min) positive flow to the steering and forklift circuits.

The sideshift valve can be utilized to power optional attachments such as carton clamps and barrel handlers.



Hydraulic pump..... Front-mounted, positive displacement, gear-type  
 Pump capacity..... 23 gpm @ 2200 rpm @ 2000 psi (87.1 L/min @ 2200 r/min @ 138 bar)  
 Filtration 7-micron, replaceable cartridge on return line, condition indicator light for filter  
 Main relief pressure ..... 2200 psi (152 bar)  
 Control valve ..... 3-spool valve for lift, tilt and sideshift

# Steering

**Up to 3.0 gpm (11.4 L/min) of on-demand priority flow is utilized by the hydrostatic power steering when turning from stop-to-stop. Excess oil from the 23 gpm (87.1 L/min) pump not used by the steering system is available to the forklift circuit.**

- 2100 psi (145 bar) operating pressure.
- Two double-acting steering cylinders.
- 2WD turning ratio stop-to-stop is 3.5 turns.
- 4WD turning ratio stop-to-stop is 3.75 turns.



### Turning Clearance Circle:

#### 2WD

w/brakes ..... 23'10" (7.26 m)  
 w/o brakes ..... 25'9" (7.85 m)

#### 4WD

#### Engaged:

w/brakes ..... 23'5" (7.14 m)  
 w/o brakes ..... 33'0" (10.06 m)

#### Disengaged:

w/brakes ..... 26'5" (8.05 m)  
 w/o brakes ..... 30'3" (9.22 m)

#### Axle Oscillation:

Front..... Fixed  
 Rear 2WD..... 22°  
 4WD..... 23°

# Driveline

**Whether you're using your forklift for construction, logging, or industrial use, the 585E and 586E forklifts offer you smooth, high performance operation.**



Sliding spur gear in 1st and 2nd and synchromesh in 3rd and 4th, combined with hydraulically actuated clutches, allow quick response to changing ground or road conditions.

The power shuttle-shift produces smooth directional changes and fast cycle times for excellent productivity.

A single-stage torque converter with 2.78-to-1 stall ratio reduces shock loads placed on powertrain components by automatically adjusting torque to handle heavy workload conditions at peak engine efficiency.

The shuttle transaxle incorporates bull gears for reduced gear loading in severe applications. A mechanical differential lock provides added traction in slippery conditions.

Dry disc brakes are hydraulically actuated and can be operated individually for pivot turns or simultaneously for normal braking.

Continuous flow oil cooling between the torque converter and oil cooler prevents overheating to extend service life.

A modular powertrain makes servicing quicker and easier for less downtime. Each component can be removed separately without disturbing the remaining parts.

An optional 4-wheel drive is easily engaged by a lever located on the side of the seat. The heavy-duty rear axle with outboard planetary drive provides added tractive effort for rough terrain capability.

## TIRE OPTIONS

**DRIVE TIRES**  
19.5L X 24 12PR

**STEERING TIRES**  
2WD  
11L X 16 10PR  
4WD  
12 X 16.5 8PR



## TRAVEL SPEEDS MPH (km/h)

	1st	2nd	3rd	4th
Forward.....	3.6 (5.8)	6.8 (10.9)	12.9 (20.8)	22.5 (36.2)
Reverse.....	3.2 (5.2)	6.2 (10.1)	11.5 (18.5)	19.9 (32.0)

NOTE: Engine at full throttle, 19.5L x 24 drive tires.

# Mast Options

**Visibility is crucial when moving heavy loads on rough terrain. A clear field of vision improves operator efficiency when approaching, lifting or placing a load.**

Site-View, a standard feature on all masts except the 14'3" (4.3 m) and freelif mast, offers exceptional visibility through the mast for all work and load situations. By placing the cylinders behind the mast and channels, visibility is excellent and the lift cylinders are protected.

Added benefits of Site-View are wear plate serviceability and easy lift cylinder replacement.

Optional freelif masts permit loads to be lifted before the mast extends, allowing easier maneuverability inside warehouses or factories.

Mast Size	585E	586E
12' (3.7 m)	●	●
14'3" (4.3 m)	●	●
21'6" (6.6 m)	●	●
28' (8.5 m)	●	
14'3" Freelif (4.3 m)		●
21'6" Freelif (6.6 m)		●



**Groundline servicing makes daily maintenance fast and easy for maximum uptime.**

Easy-opening side panels allow quick access to the engine for service and maintenance on both sides of the unit.

A wide filler opening and dipstick oil check facilitate daily engine maintenance.

A maintenance schedule decal lists capacity, requirements and intervals for convenience of service technicians.

## SERVICE CAPACITIES

Fuel tank .....	26.5 gal (100.3 L)
Hydraulic reservoir:	
w/filter .....	15.25 gal (57.7 L)
w/o filter .....	13.25 gal (50.2 L)
Transaxle (includes transmission, differential, final drives).....	20.0 qt (18.9 L)
Engine oil	
w/filter .....	11.6 qt (11.0 L)
Cooling system .....	18.0 qt (17.0 L)

# Service





# Operating Weights

Mast	585E		586E	
	2WD	4WD	2WD	4WD
12' (3.7 m)	11,390 lb (5166 kg)	12,066 lb (5473 kg)	12,062 lb (5471 kg)	12,716 lb (5768 kg)
14'3" (4.3 m)	11,548 lb (5238 kg)	12,224 lb (5545 kg)	12,220 lb (5543 kg)	12,874 lb (5840 kg)
21'6" (6.6 m)	12,866 lb (5836 kg)	13,520 lb (6133 kg)	13,229 lb (6001 kg)	13,883 lb (6297 kg)
28' (8.5 m)	13,198 lb (5987 kg)	13,852 lb (6283 kg)	NA	NA
14'3" (4.3 m) Freelift	NA	NA	12,262 lb (5562 kg)	12,916 lb (5859 kg)
21'6" (6.6 m) Freelift	NA	NA	13,464 lb (6107 kg)	14,118 lb (6404 kg)

**NOTE:**

2WD equipped with 19.5L x 24 12PR drive tires, 11L x 16 10PR steering tires, 48" (1.22 m) forks, ROPS, standard equipment, 175 lb (79 kg) operator.

4WD equipped with 19.5L x 24 12PR drive tires, 12 x 16.5 8PR steering tires, 48" (1.22 m) forks, ROPS, standard equipment, 175 lb (79 kg) operator.

# Lift Capacities

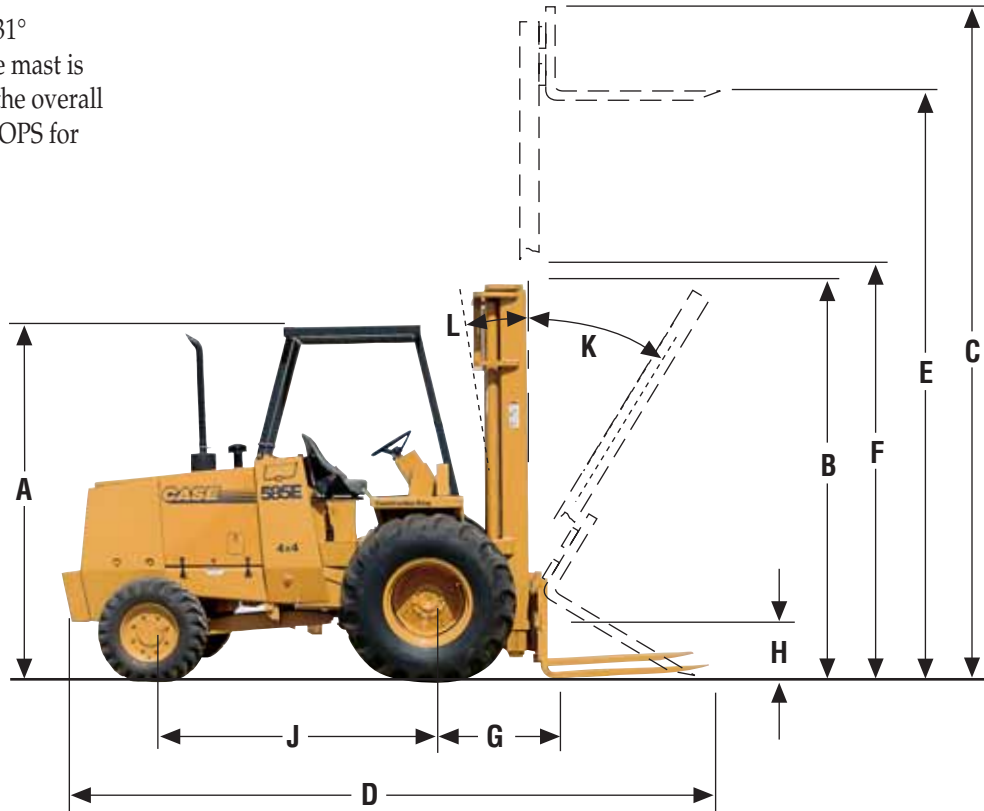
	12' Mast	14'3" Mast	21'6" Mast	28' Mast	Freelift	
	(3.7 m)	(4.3 m)	(6.6 m)	(8.5 m)	14'3" (4.3 m)	21'6" (6.6 m)
<b>585E</b>						
Maximum at						
24" (610 mm) load center	5,000 lb* (2268 kg)	5,000 lb** (2268 kg)	5,000 lb* (2268 kg)	5,000 lb* (2268 kg)		
15' (4.6 m)			4,000 lb (1814 kg)	4,000 lb (1814 kg)		
21'6" (6.6 m)			2,500 lb (1134 kg)	2,500 lb (1134 kg)		
28' (8.5 m)				1,000 lb (454 kg)		
<b>586E</b>						
Maximum at						
24" (610 mm) load center	6,000 lb* (2722 kg)	6,000 lb** (2722 kg)	6,000 lb* (2722 kg)		6,000 lb** (2722 kg)	6,000 lb* (2722 kg)
15' (4.6 m)			4,000 lb (1814 kg)			4,000 lb (1814 kg)
21'6" (6.6 m)			2,500 lb (1134 kg)			2,500 lb (1134 kg)

\*to 12' (3.7 m)

\*\*to 14' (4.3 m)

# 585E Dimensions

The 585E forklift has a 31° forward tilt mast. When the mast is tilted forward the full 31°, the overall height is to the top of the ROPS for easy transportation.

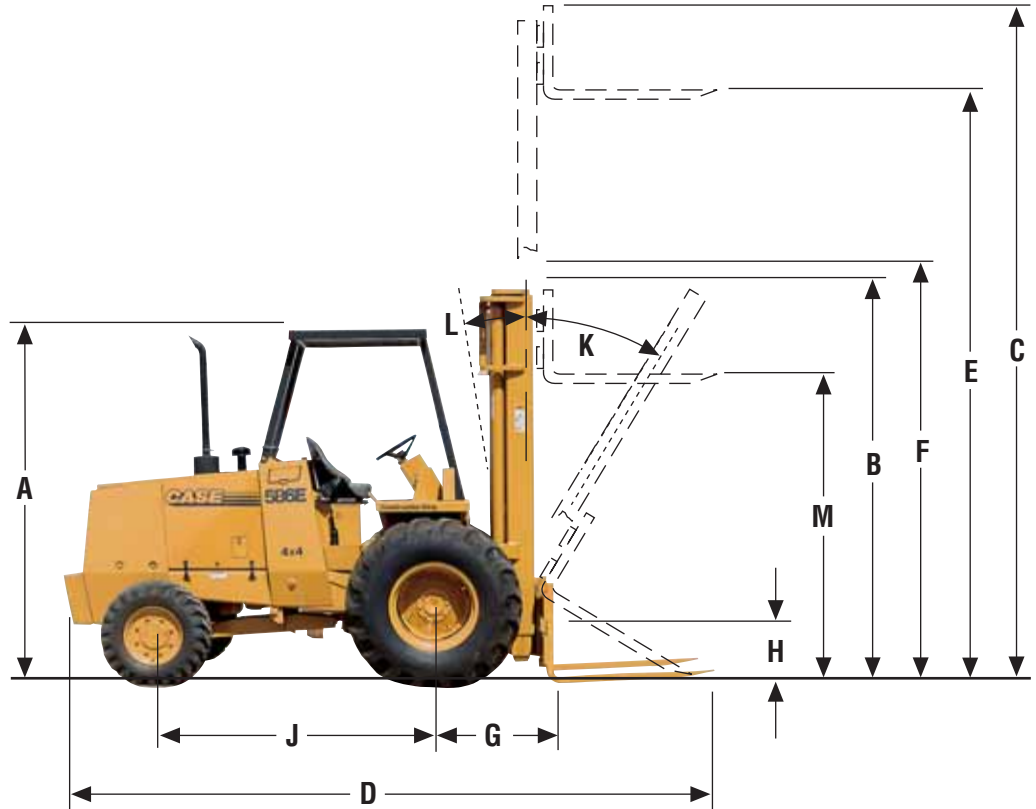


<b>585E</b>	<b>12' Mast (3.7 m)</b>	<b>14'3" Mast (4.3 m)</b>	<b>21'6" Mast (6.6 m)</b>	<b>28' Mast (8.5 m)</b>
A. Height to top of ROPS canopy....	106" (2.69 m)	106" (2.69 m)	106" (2.69 m)	106" (2.69 m)
B. Overall height – mast closed .....	8'8" (2.64 m)	9'9" (2.97 m)	9'11" (3.02 m)	12' (3.66 m)
C. Overall height – mast raised .....	14'7" (4.45 m)	16'10" (5.13 m)	24' (7.32 m)	30'7" (9.32 m)
D. Overall length .....	15'9" (4.80 m)	15'9" (4.80 m)	16'2" (4.93 m)	15'9" (4.80 m)
Lateral fork adjustment (inside)...	48.5" (1.23 m)	48.5" (1.23 m)	50.5" (1.28 m)	50.5" (1.28 m)
Sideshift from center .....	3" (76 mm)	3" (76 mm)	3" (76 mm)	3" (76 mm)
E. Maximum fork height – forks horizontal.....	12'1" (3.68 m)	14'5" (4.39 m)	21'5" (6.53 m)	28' (8.53 m)
F. Overall height at low carry – forks 6" off ground .....	8'9" (2.67 m)	10' (3.05 m)	10'1" (3.07 m)	12'3" (3.73 m)
Rate of lift, maximum load.....	62 fpm (0.32 m/s)	62 fpm (0.32 m/s)	93 fpm (0.47 m/s)	93 fpm (0.47 m/s)
G. Reach from centerline of drive wheels .....	33" (838 mm)	33" (838 mm)	35" (889 mm)	34" (864 mm)
H. Mast ground clearance .....	15" (381 mm)	15" (381 mm)	15" (381 mm)	15" (381 mm)
J. Wheelbase .....	82" (2.08 m)	82" (2.08 m)	82" (2.08 m)	82" (2.08 m)
K. Degrees tilt – forward.....	31°	31°	31°	31°
L. Degrees tilt – rear .....	9°	9°	9°	9°
Overall width				
2WD.....	81" (2.06 m)	81" (2.06 m)	81" (2.06 m)	81" (2.06 m)
4WD.....	83" (2.11 m)	83" (2.11 m)	83" (2.11 m)	83" (2.11 m)
Tread – drive wheels				
2WD.....	62" (1.57 m)	62" (1.57 m)	62" (1.57 m)	62" (1.57 m)
4WD.....	63" (1.60 m)	63" (1.60 m)	63" (1.60 m)	63" (1.60 m)
Tread – steering wheels				
2WD.....	61" (1.55 m)	61" (1.55 m)	61" (1.55 m)	61" (1.55 m)
4WD.....	68" (1.73 m)	68" (1.73 m)	68" (1.73 m)	68" (1.73 m)

# 586E Dimensions

The 586E forklift has a 31° forward tilt mast. When the mast is tilted forward the full 31°, the overall height is to the top of the ROPS for easy transportation.

Freelift on the 586E is an advantage when working in buildings. With freelift, the forks can be raised 7' (2.13 m) before the mast extends, making it easy to maneuver inside factories and warehouses.



586E	12' Mast (3.7 m)	14'3" Mast (4.3 m)	21'6" Mast (6.6 m)	14'3" Freelift (4.3 m)	21'6" Freelift (6.6 m)
A. Height to top of ROPS canopy ...	106" (2.69 m)	106" (2.69 m)	106" (2.69 m)	106" (2.69 m)	106" (2.69 m)
B. Overall height – mast closed.....	8'8" (2.64 m)	9'9" (2.97 m)	9'11" (3.02 m)	9'9.5" (2.99 m)	10'2" (3.10 m)
C. Overall height – mast raised.....	14'7" (4.45 m)	16'10" (5.13 m)	24' (7.32 m)	16'9.5" (5.12 m)	24'2" (7.37 m)
D. Overall length .....	16'1" (4.90 m)	16'1" (4.90 m)	16'2" (4.93 m)	16'2" (4.93 m)	16'3" (4.95 m)
Lateral fork adjustment .....	48.5" (1.23 m)	48.5" (1.23 m)	48.5" (1.23 m)	48.5" (1.23 m)	48.5" (1.23 m)
Sideshift from center .....	3" (76 mm)	3" (76 mm)	3" (76 mm)	3" (76 mm)	3" (76 mm)
E. Maximum fork height – forks horizontal.....	12'1" (3.68 m)	14'5" (4.39 m)	21'5" (6.53 m)	14' (4.27 m)	21' (6.40 m)
F. Overall height at low carry – forks 6" off ground .....	8'9" (2.67 m)	10' (3.05 m)	10'1" (3.07 m)	9'9.5" (2.99 m)	10'2" (3.10 m)
Rate of lift, maximum load.....	62 fpm (0.32 m/s)	62 fpm (0.32 m/s)	93 fpm (0.47 m/s)	90 fpm (0.46 m/s)	89 fpm (0.45 m/s)
G. Reach from centerline of drive wheels.....	33" (838 mm)	33" (838 mm)	35" (889 mm)	32" (813 mm)	35" (889 mm)
H. Mast ground clearance.....	15" (381 mm)	15" (381 mm)	15" (381 mm)	15" (381 mm)	15" (381 mm)
J. Wheelbase.....	82" (2.08 m)	82" (2.08 m)	82" (2.08 m)	82" (2.08 m)	82" (2.08 m)
K. Degrees tilt – forward.....	31°	31°	31°	30°	31°
L. Degrees tilt – rear.....	9°	9°	9°	10°	9°
M. Freelift .....	NA	NA	NA	7' (2.13 m)	7' (2.13 m)
Overall width					
2WD .....	81" (2.06 m)	81" (2.06 m)	81" (2.06 m)	81" (2.06 m)	81" (2.06 m)
4WD.....	83" (2.11 m)	83" (2.11 m)	83" (2.11 m)	83" (2.11 m)	83" (2.11 m)
Tread – drive wheels					
2WD .....	62" (1.57 m)	62" (1.57 m)	62" (1.57 m)	62" (1.57 m)	62" (1.57 m)
4WD.....	63" (1.60 m)	63" (1.60 m)	63" (1.60 m)	63" (1.60 m)	63" (1.60 m)
Tread – steering wheels					
2WD .....	61" (1.55 m)	61" (1.55 m)	61" (1.55 m)	61" (1.55 m)	61" (1.55 m)
4WD.....	68" (1.73 m)	68" (1.73 m)	68" (1.73 m)	68" (1.73 m)	68" (1.73 m)

# PRODUCT SUPPORT

## COMMITTED TO EVERY PART™

At Case we are as proud of our service support as we are of our products. Your Case dealer has skilled technicians to handle any service requirement with advanced diagnostics and the latest service techniques.

Case parts support includes well-stocked shelves and a computerized network of parts inventories that crosses the continent. In seconds, we can locate the part you need at its closest location.

See your Case dealer for prompt service and parts backup to maximize uptime and productivity.

# CASE



### SAFETY NEVER HURTS!

Always read the Operator's Manual before operating any equipment. Inspect equipment before using it, and be sure it is operating properly. Follow the product safety signs and use any safety features provided.

**NOTE:** All specifications are stated in accordance with SAE Standards or Recommended Practices, where applicable.

**IMPORTANT:** Case Corporation reserves the right to change these specifications without notice and without incurring any obligation relating to such change. Units shown may be equipped with non-standard equipment.

© 1997 CASE CORPORATION  
All Rights Reserved

CASE is a registered trademark of Case Corporation.

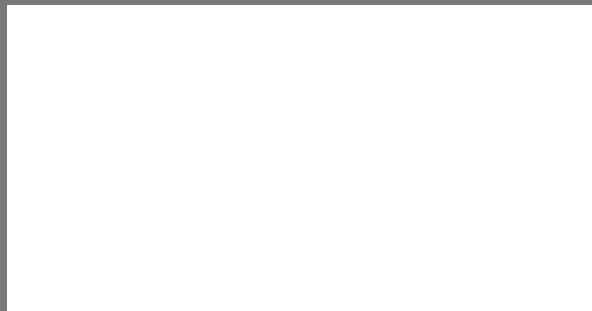
#### CASE CORPORATION

700 STATE STREET  
RACINE, WI 53404 U.S.A.

#### CASE CANADA CORPORATION

450 SHERMAN AVENUE  
HAMILTON, ON L8N 4C4 CANADA

Attachments from other manufacturers are shown for illustration only. Case Corporation does not warrant the safety or reliability of these attachments.



Visit Case Corporation on the Web at: <http://www.casecorp.com>

Form No. CE 053-3-97

Printed in USA

