

Crawler Excavator

R 954 C

Litronic®

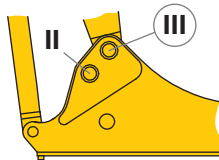
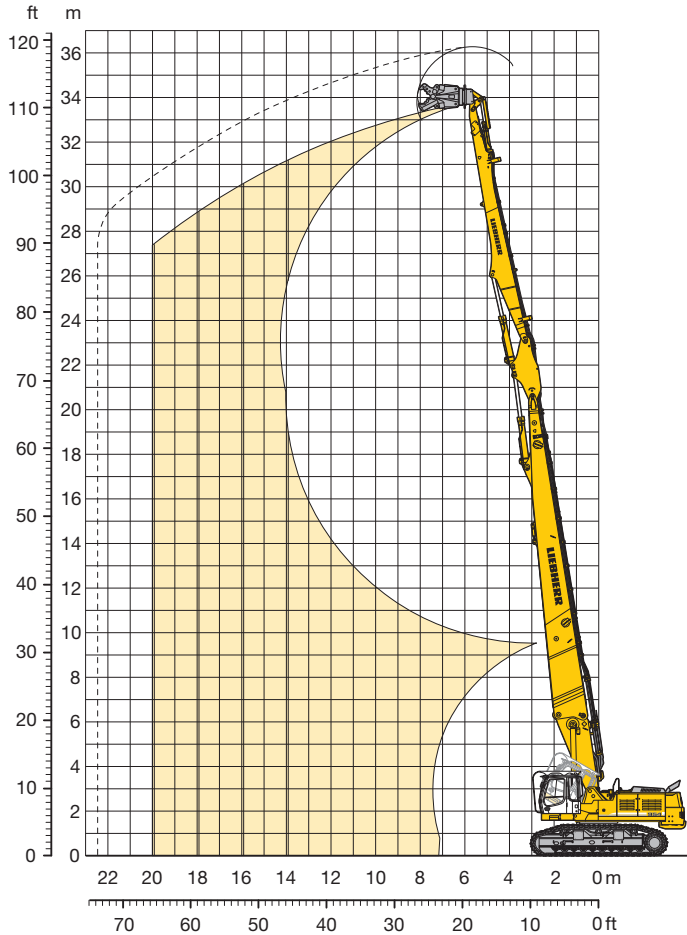
Attachment Information

Liebherr Crawler Excavator
with Demolition Attachment
111'7"



LIEBHERR

Demolition Attachment 111'7"



Uppercarriage demolition with 30° tiltable cab

To order a complete machine you need the following

- 30° tiltable cab for demolition application
- Hydraulic control for rotation
- Hydraulic control for hammer/shears with Tool Control and Liebherr-Demolition-Control (LDC)
- Hoist cylinders with regeneration plus and load holding valves
- Basic boom pinned in mounting hole III of boom foot bracket
- Heavy duty counterweight 31,966 lb (removable 23,810 lb)
- Hydraulic accessory for quick change adapter on basic boom

For demolition application, following additional items are also required:

- Demolition boom 47'7"
- Intermediate boom 8'2"
- Demolition stick 36'1" with linkage 932 Li
- Tool (backhoe bucket, demolition shears, concrete nibblers, etc.)
- Supports for demolition attachment
- Integrated protection grid for cab FOPS

Optional

- Integrated protection grid for cab on tilting device FOPS
- Hydraulic for removable counterweight
- Storage rack with catwalks
- Demolition stick with linkage 922 Li

Reach Limitation

| | 45'11" | 52'6" | 59'1" | 65'7" |
|--------------------------|--------------------|-------|-------|-------|
| Demolition boom 47'7" | | | | |
| + Intermediate boom | | | | |
| + Demolition stick 36'1" | | | | |
| | Tool weight* in lb | | | |
| VH-HDW-Undercarriage | 6,614 | 6,063 | 5,511 | 4,409 |

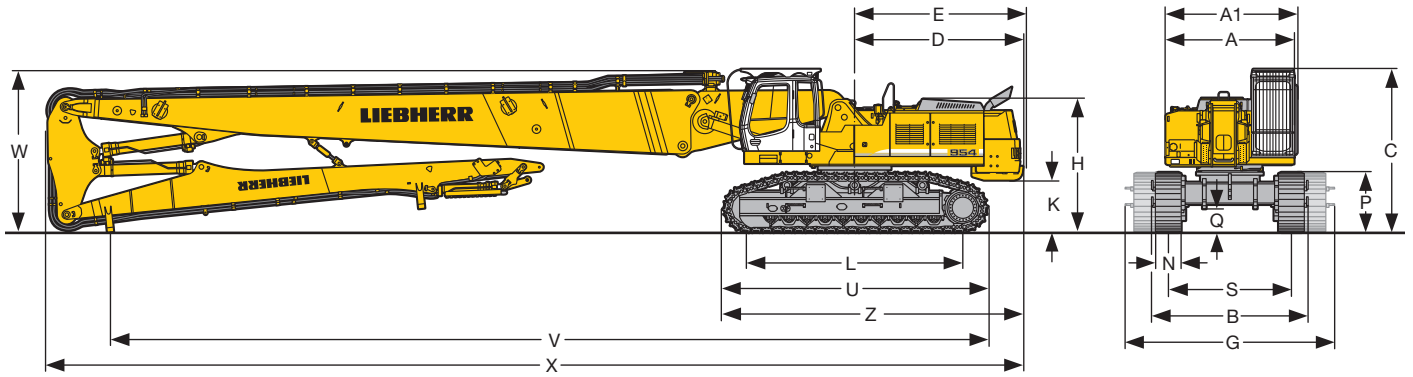
* included quick change adapter, adapter plate and tool

Operating Weight and Ground Pressure

Operating weight includes basic machine with heavy duty counterweight 31,966 lb, demolition boom 47'7", intermediate boom, demolition stick 36'1" and working tool 5,511 lb.

| Undercarriage | VH-HDW | |
|-----------------|--------|---------|
| Pad width | in | 24" |
| Weight | lb | 188,492 |
| Ground pressure | psi | 18.8 |

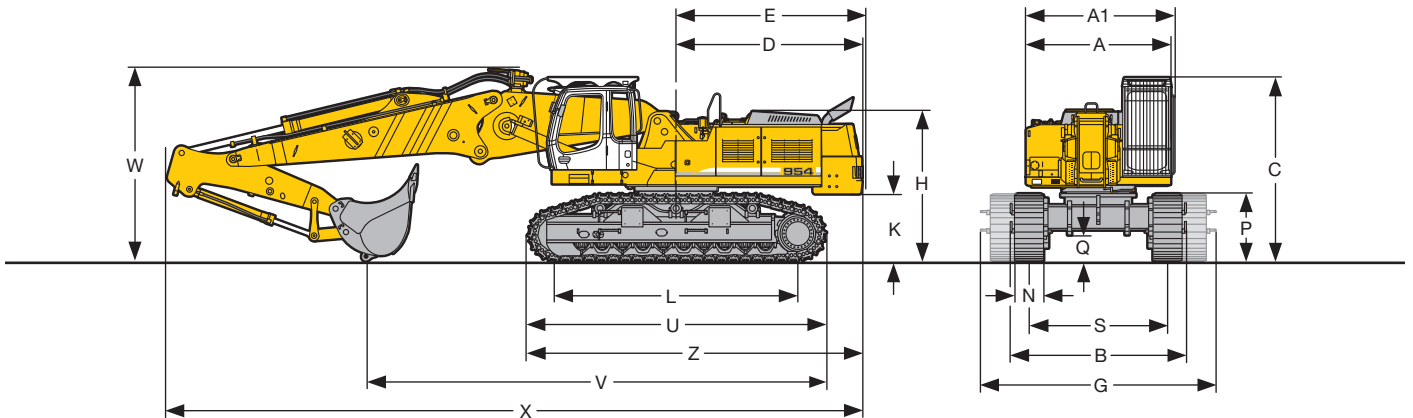
Dimensions



| | ft in |
|----|---------|
| A | 9' 9" |
| A1 | 10' |
| C | 12' 5" |
| D | 12' 10" |
| E | 13' |
| H | 10' 2" |
| K | 3' 11" |
| L | 16' 5" |
| P | 4' 7" |
| Q | 22" |

| | ft in |
|----|------------------|
| S | 9' 4" – 12' 8" |
| U | 20' 1" |
| Z | 22' 10" |
| N | 24" |
| B | 11' 10" – 15' 1" |
| G* | 12' 8" – 15' 11" |
| V | 66' 7" |
| W | 12' 4" |
| X | 74' 4" |

* Width with access steps



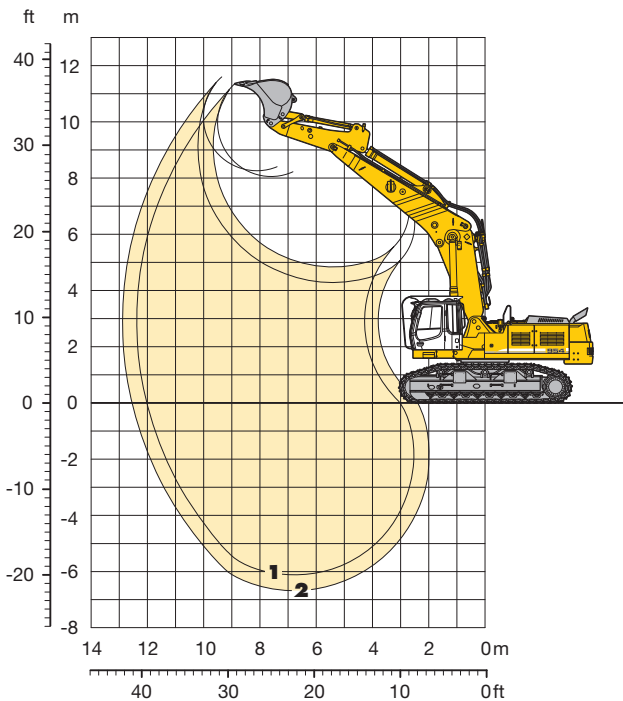
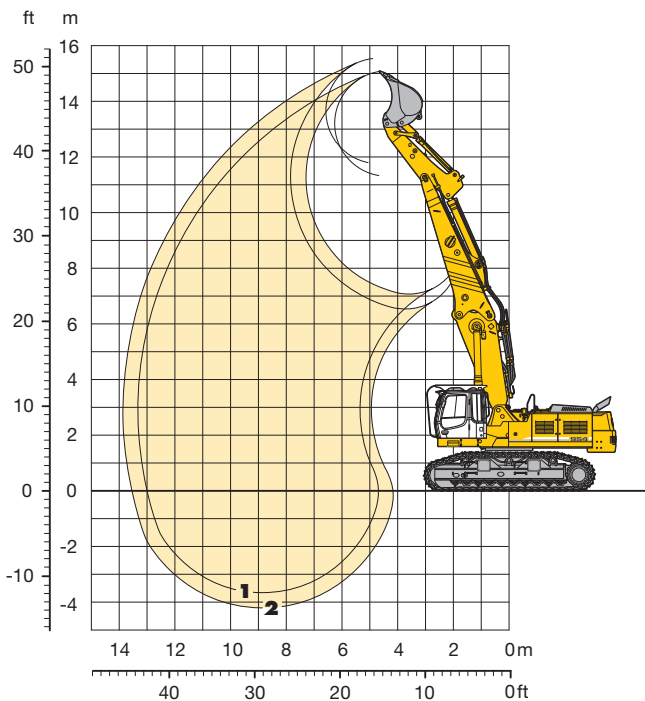
| | ft in |
|----|------------------|
| A | 9' 9" |
| A1 | 10' |
| C | 12' 5" |
| D | 12' 7" |
| E | 12' 9" |
| H | 10' 2" |
| K | 4' 7" |
| L | 16' 5" |
| P | 4' 7" |
| Q | 22" |
| S | 9' 4" – 12' 8" |
| U | 20' 1" |
| Z | 22' 7" |
| N | 24" |
| B | 11' 10" – 15' 1" |
| G* | 12' 8" – 15' 11" |

| | Stick Length | Main Boom 18'1" |
|---|--------------|-----------------|
| | ft in | ft in |
| V | 7'9" | 31'0" |
| | 9'6" | 29'2" |
| W | 7'9" | 13'1" |
| | 9'6" | 13'5" |
| X | 7'9" | 47'1" |
| | 9'6" | 47'1" |

* Width with access steps

Backhoe Attachment

with Main Boom 18'1"



For backhoe application, following items are required

- Main boom 18'1"
- Stick HD 7'9"
- Stick HD 9'6"
- Supports for backhoe attachment

Optional

- Hydraulic lines AHS* for basic boom 18'1"
- Hydraulic lines AHS* for stick HD 7'9"
- Hydraulic lines AHS* for stick HD 9'6"
- Hydraulic lines rotary drive for for basic boom 18'1"
- Hydraulic lines rotary drive for stick HD 7'9"
- Hydraulic lines rotary drive for stick HD 9'6"
- Backhoe bucket – as required
- Storage racks with catwalks for backhoe attachment

* AHS = hydraulic control for hydraulic accessor

Digging Envelope Main Boom pinned in upper (in lower) bearing

| | | 1 | 2 |
|----------------------------|--------|-------------------------------|---------------|
| Stick lengths | ft in | 7'9" | 9'6" |
| Max. digging depth | ft in | 12' (20') 13' 9" (21'10") | |
| Max. reach at ground level | ft in | 42'8" (39'4") 44' 5" (41' 2") | |
| Max. dump height | ft in | 37'1" (26'5") 38' 7" (27' 1") | |
| Max. teeth height | ft in | 49'5" (37'1") 50'10" (37'11") | |
| Digging force SAE | lbf/lb | 52,381/52,470 | 46,311/46,297 |
| Digging force ISO | lbf/lb | 55,753/56,879 | 48,784/48,722 |
| Breakout force SAE | lbf/lb | 60,474/60,407 | 60,474/60,407 |
| Breakout force ISO | lbf/lb | 70,365/70,327 | 70,365/70,327 |

Max. breakout force ISO 77,559 lbf (77,603 lb)

Operating Weight and Ground Pressure

Operating weight includes basic machine with counterweight 25,353 lb, main boom 18'1", stick HD 7'9" and backhoe bucket HD 3.1 yd³ (6,724 lb).

| | | VH-HDW |
|-----------------|-----|---------|
| Undercarriage | | VH-HDW |
| Pad width | in | 24" |
| Weight | lb | 169,312 |
| Ground pressure | psi | 16.9 |

Backhoe Bucket

| | in | 61" | 69" | 77" | 83" |
|---------------------------------|--------------------|-------|-------|-------|-------|
| Cutting width | in | 61" | 69" | 77" | 83" |
| Capacity ISO 7451 | yd ³ | 2.6 | 3.1 | 3.5 | 3.9 |
| Max. material weight | | | | | |
| with stick 7'9" | lb/yd ³ | 3,034 | 3,034 | 3,034 | 3,034 |
| with stick 9'6" | lb/yd ³ | 3,034 | 3,034 | 2,528 | 2,023 |
| Weight HD backhoe bucket (V 61) | lb | 6,173 | 6,724 | 7,275 | 7,606 |

Lift Capacities

with Main Boom 18'1" (pinned in upper bearing) and Counterweight 25,353 lb

Stick 7'9"

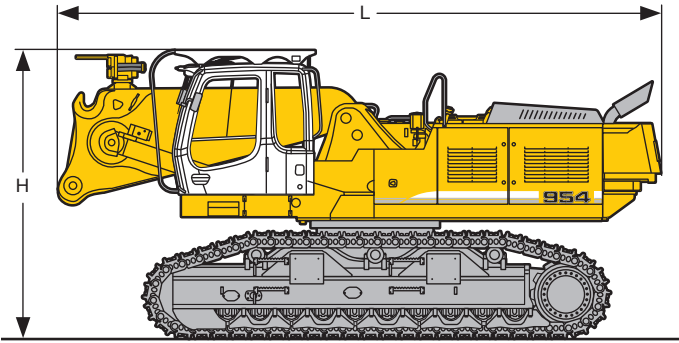
| Height (ft) | Under-carriage | Radius of load from centerline of machine (ft) | | | | | |
|-------------|----------------|------------------------------------------------|-------------------|-------------------|-------------------|-------------------|----|
| | | 15 | 20 | 25 | 30 | 35 | 40 |
| 45 | VH-HDW | | | | | | |
| 40 | VH-HDW | | | | | | |
| 35 | VH-HDW | | | 21,826x (21,826x) | 10,582x (10,582x) | | |
| 30 | VH-HDW | | 27,470x (27,470x) | 26,235x (26,235x) | 21,539x (21,539x) | | |
| 25 | VH-HDW | 53,374x (53,374x) | 40,080x (40,080x) | 32,937x (32,937x) | 28,043x (28,043x) | 16,843x (16,843x) | |
| 20 | VH-HDW | | 46,231x (46,231x) | 36,112x (36,112x) | 28,440 (30,336x) | 21,495 (24,537x) | |
| 15 | VH-HDW | | 41,800x (41,800x) | 35,913 (39,595x) | 26,896 (32,342x) | 20,679 (27,844x) | |
| 10 | VH-HDW | | 19,158x (19,158x) | 33,643 (42,527x) | 25,530 (34,194x) | 19,908 (27,999) | |
| 5 | VH-HDW | | 21,297x (21,297x) | 32,298 (44,225x) | 24,560 (34,833) | 19,313 (27,359) | |
| 0 | VH-HDW | | 31,680x (31,680x) | 31,791 (44,401x) | 24,074 (34,304) | 19,026 (27,073) | |
| - 5 | VH-HDW | | | 31,945 (42,990x) | 24,074 (34,304) | 19,136 (27,183) | |
| - 10 | VH-HDW | | | | | | |

Stick 9'6"

| Height (ft) | Under-carriage | Radius of load from centerline of machine (ft) | | | | | |
|-------------|----------------|------------------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | | 15 | 20 | 25 | 30 | 35 | 40 |
| 45 | VH-HDW | | 12,236x (12,236x) | | | | |
| 40 | VH-HDW | | | 14,903x (14,903x) | | | |
| 35 | VH-HDW | | | 18,431x (18,431x) | 14,418x (14,418x) | | |
| 30 | VH-HDW | | | 20,746x (20,746x) | 18,850x (18,850x) | 11,045x (11,045x) | |
| 25 | VH-HDW | 32,805x (32,805x) | 28,792x (28,792x) | 26,081x (26,081x) | 22,994x (22,994x) | 17,394x (17,394x) | |
| 20 | VH-HDW | 47,951x (47,951x) | 43,409x (43,409x) | 34,326x (34,326x) | 28,770 (28,947x) | 21,649 (22,333x) | 8,068x (8,068x) |
| 15 | VH-HDW | | 50,199x (50,199x) | 36,575 (37,964x) | 27,161 (31,107x) | 20,746 (26,786x) | 13,536x (13,536x) |
| 10 | VH-HDW | | 30,093x (30,093x) | 34,128 (41,271x) | 25,684 (33,180x) | 19,886 (27,977) | 15,631 (16,557x) |
| 5 | VH-HDW | | 26,059x (26,059x) | 32,496 (43,475x) | 24,560 (34,767x) | 19,180 (27,227) | 15,278 (17,196x) |
| 0 | VH-HDW | | 31,725x (31,725x) | 31,702 (44,269x) | 23,898 (34,150) | 18,761 (26,786) | 13,250x (13,250x) |
| - 5 | VH-HDW | | 42,373x (42,373x) | 31,592 (43,497x) | 23,722 (33,951) | 18,695 (26,742) | |
| - 10 | VH-HDW | | | 32,077 (40,940x) | 24,052 (33,224x) | | |

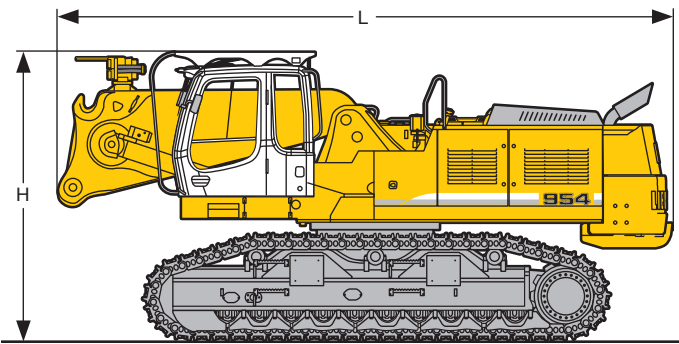
The lift capacities are stated in pounds (lb) on the backhoe bucket's lifting eye, and can be lifted 360° on firm, level supporting surface. Values quoted in brackets are valid for the undercarriage when in longitudinal position. Capacities are valid for 30" wide triple grouser pads. Indicated loads are based on ISO 10567 standard and do not exceed 75 % of tipping or 87 % of hydraulic capacity (indicated via x). Maximum load for the backhoe bucket's lifting eye is 59,525 lb. Without bucket HD (3.1 yd³), the lift capacities will increase by 6,724 lb, without bucket cylinder, link and lever they increase by an additional 1,709 lb. Lifting capacity of the excavator is limited by machine stability, hydraulic capacity and maximum permissible load of the load hook.

Dimensions and Weights



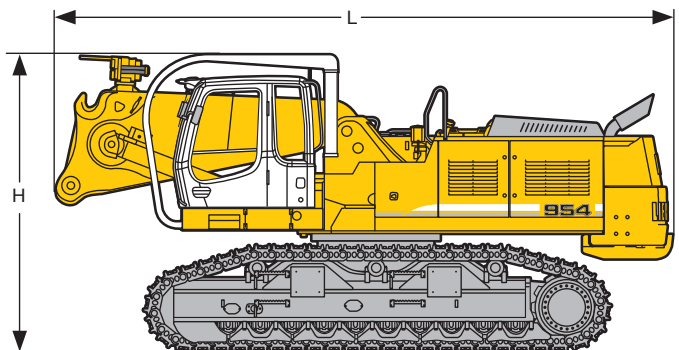
Basic machine with 30° tiltable cab and integrated protection grid without counterweight

| | | |
|--------|-------|---------|
| L | ft in | 26'1" |
| H | ft in | 12'5" |
| Weight | lb | 129,410 |



Basic machine with 30° tiltable cab and integrated protection grid

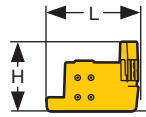
| | | |
|--------|-------|---------|
| L | ft in | 26'7" |
| H | ft in | 12'5" |
| Weight | lb | 153,220 |



Basic machine with 30° tiltable cab and integrated protection grid on tilting device

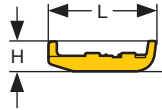
| | | |
|--------|-------|---------|
| L | ft in | 26' 9" |
| H | ft in | 12'10" |
| Weight | lb | 154,100 |

Dimensions and Weights



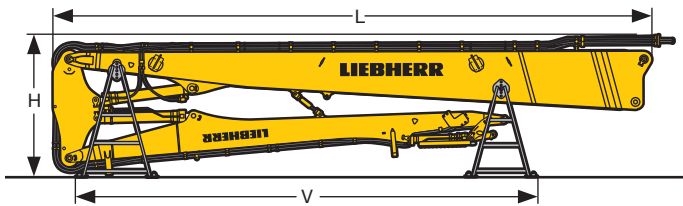
Counterweight

| | | |
|----------|-------|--------|
| L Length | ft in | 3' 6" |
| H Height | ft in | 2' 8" |
| Width | ft in | 9'11" |
| Weight | lb | 17,197 |



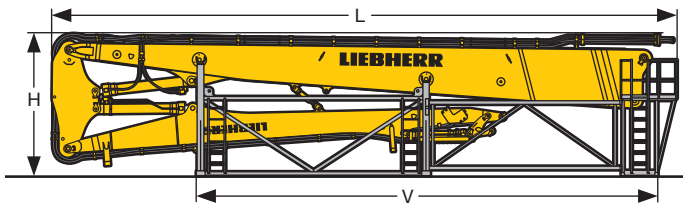
Additional Counterweight

| | | |
|----------|-------|-------|
| L Length | ft in | 4' 2" |
| H Height | ft in | 13" |
| Width | ft in | 9'11" |
| Weight | lb | 6,614 |



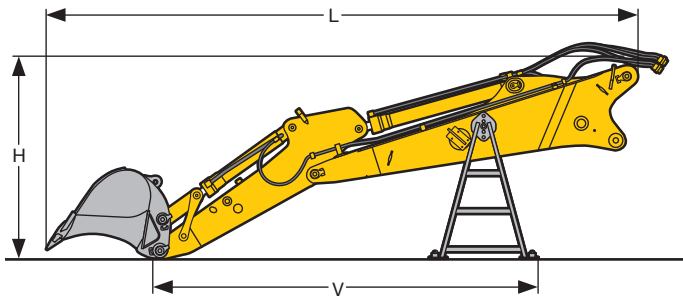
Demolition Attachment with Support

| | | |
|-----------------------------|-------|--------|
| L Length | ft in | 49' 7" |
| H Height | ft in | 11'10" |
| V | ft in | 38' 3" |
| Width | ft in | 7'10" |
| Weight without working tool | lb | 33,510 |



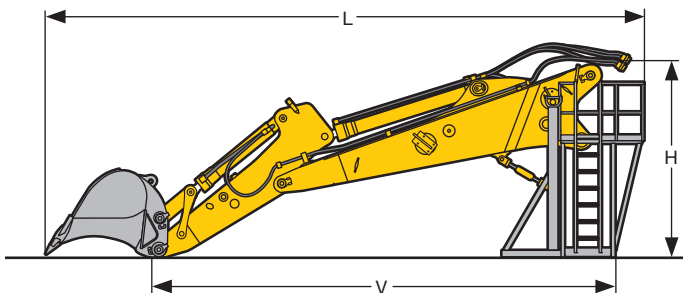
Demolition Attachment with Storage Rack with Catwalks

| | | |
|-----------------------------|-------|--------|
| L Length | ft in | 51' 9" |
| H Height | ft in | 11'10" |
| V | ft in | 38' 3" |
| Width | ft in | 7'10" |
| Weight without working tool | lb | 38,360 |



Backhoe Attachment with Supports

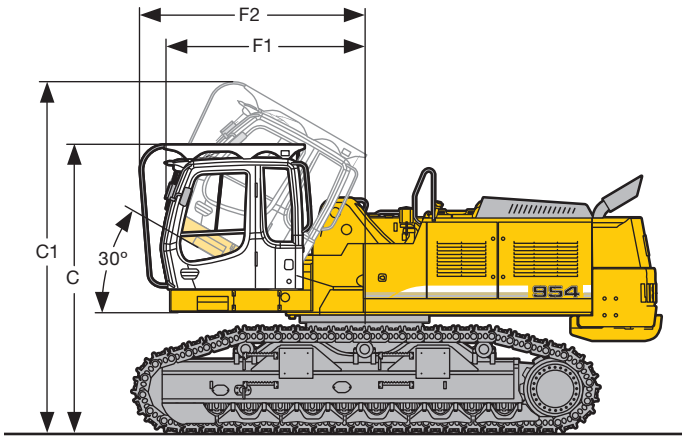
| | | | |
|-----------------------|-------|--------|--------|
| Stick lengths | ft in | 7' 9" | 9' 6" |
| L Length | ft in | 30' 8" | 32' 8" |
| H Height | ft in | 11' 2" | 11' " |
| V | ft in | 19' 5" | 21' 4" |
| Width | ft in | 7'10" | 7'10" |
| Weight without bucket | lb | 18,850 | 19,180 |



Backhoe Attachment with Storage Rack with Catwalks

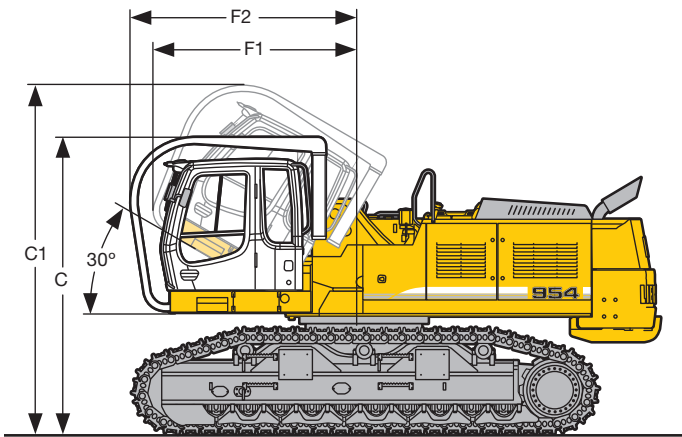
| | | | |
|-----------------------|-------|--------|--------|
| Stick lengths | ft in | 7' 9" | 9' 6" |
| L Length | ft in | 33' 4" | 35' 1" |
| H Height | ft in | 10'10" | 10'10" |
| V | ft in | 25' 9" | 27' 9" |
| Width | ft in | 8' 2" | 8' 2" |
| Weight without bucket | lb | 20,280 | 20,610 |

Choice of Cab Elevations



Version 30° tiltable with integrated protection grid

| | | |
|----|-------|-------|
| C | ft in | 12'5" |
| C1 | ft in | 15'2" |
| F1 | ft in | 8'6" |
| F2 | ft in | 9'8" |



Version 30° tiltable with integrated protection grid on tilting device

| | | |
|----|-------|--------|
| C | ft in | 12'10" |
| C1 | ft in | 15' 1" |
| F1 | ft in | 9' 1" |
| F2 | ft in | 10' 1" |