BRIDGEMASTER

SF77A-Ⅳ

	SF77A-Ⅳ
Platform Height	7.44 m
Horizontal Outreach	R5.73 m
Platform Capacity	200 kg
Platform Insertion	7.54 m
Platform Downreach	-7.62 m

SF77A-Ⅳ

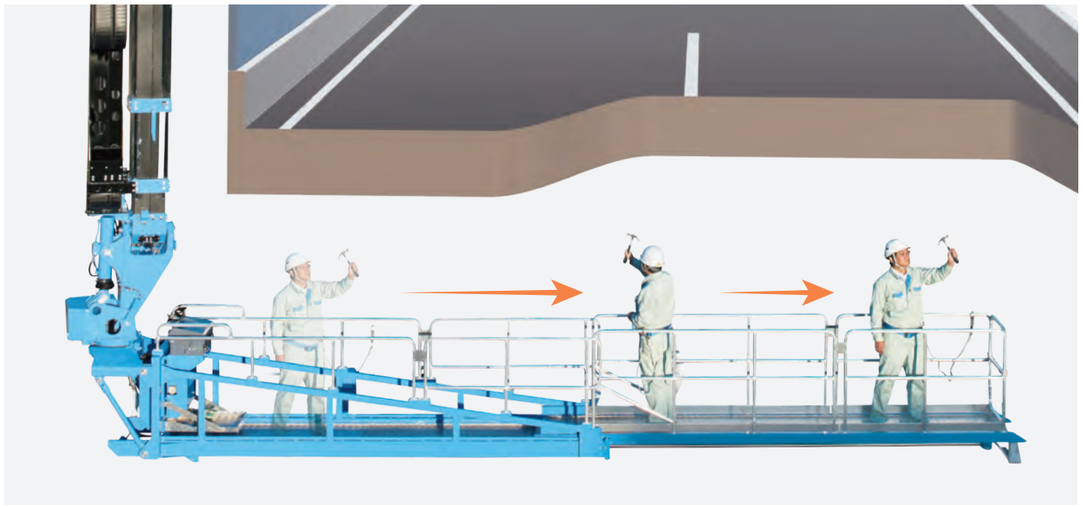
PHOTO GALLERY

Ⅳ

Corridor-type platform lets you walk right up to where you need to work!

CHECK! Scan here to watch product video

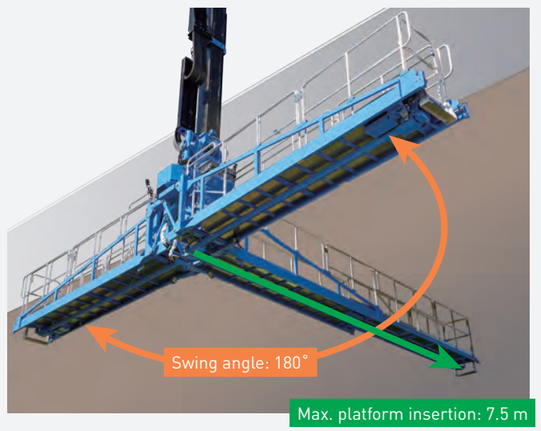
Workers can walk on the platform to be close where they need to go, making it possible to do a walking inspection of several points at one time.
This improves work efficiency.



Workers can carry out inspections by walking to each point.

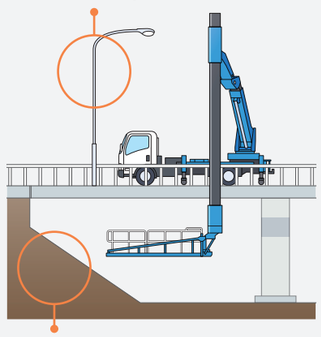
Platform can swing 180˚!

Thanks to the platform's ability to swing 180˚ and a maximum platform insertion of 7.5 m, the platform allows a wide area of work, covering around 66 m^2.
This allows workers to get close to the area of inspection and check everything at once without having to set up the vehicle again, making work more efficient.



Work site example

The platform on this model can swing around work site obstacles like streetlights.



The platform can swing to the front of the vehicle, allowing you to set up the vehicle or insert the platform without interfering with sloped surfaces.

Point of inspection can be approached from either side

The vehicle can also be approached from the right side, eliminating the need to make a U-turn when setting the vehicle up in the right-side lane.
This offers improved safety by avoiding the danger of parking in the opposite lane on one-way roads like expressways or national highway bypasses.

No need to make a U-turn when setting the vehicle up in the right-side lane

Compact vehicle size makes it easier to drive safely

This model features a low vehicle height, which helps prevent contact-related accidents with the infrastructure when driving through tunnels and underpasses.

SF77A-IV

Varies somewhat depending on the aerial device chassis.

Minimum outrigger extension now possible

A minimum outrigger extension is now available, which drastically minimizes the width required by the vehicle to do the work.
This vehicle can now be used for work in cramped places that was previously difficult to accomplish.

Max. Mid. 2 Mid. 1 Min.

Outrigger extension	Location	SF77A-IV	(Previous) SF77A-III
Max.	Left side	3065	3255
Mid. 2	Left side	2865	3070
Mid. 1	Left side	2635	2665
Min.	Left side	2405	Not available

Width required by vehicle (units:mm)

Functions and Equipment

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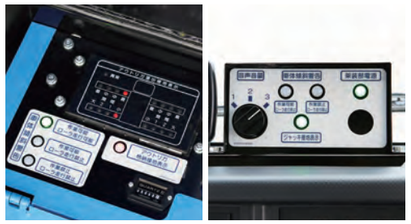
Intercom

The driver in the cabin can talk with the operators on the platform, which makes it easier for them to signal each other when the vehicle starts moving or when work safety must be confirmed.



Platform tilt warning system

This system detects the angle at which the vehicle is tilted, and displays whether work can be carried out at a fixed position or whether the rollers can operate. This helps improve safety when working.

Supplemental holding brake system

This lets you apply brakes to all four wheels when working while the vehicle is stopped, ensuring your safety during work.

The method of display depends on the aerial device chassis.

Platform press-down prevention system

This system uses sensors underneath the platform to detect objects, preventing the platform from coming into contact with them while lowering.

Boom underside contact prevention system

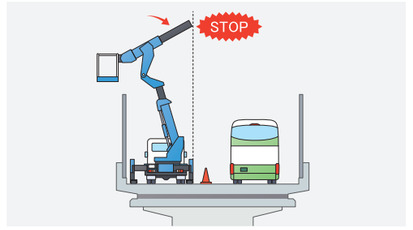
This system uses an infrared sensor to detect any objects between the boom and link, preventing contact in situations such as when the boom may collide with a noise barrier or the like when it is lowered.

100 V Power outlet

You can connect the lower outlet to an electric generator to supply power to any power tools that are used on the platform.

Automatic stowage system

This system greatly reduces the time it takes to stow parts of the vehicle, giving you automatic control over the post elevation, arm rotation, and the rotation, extension, retraction and elevation of the boom.

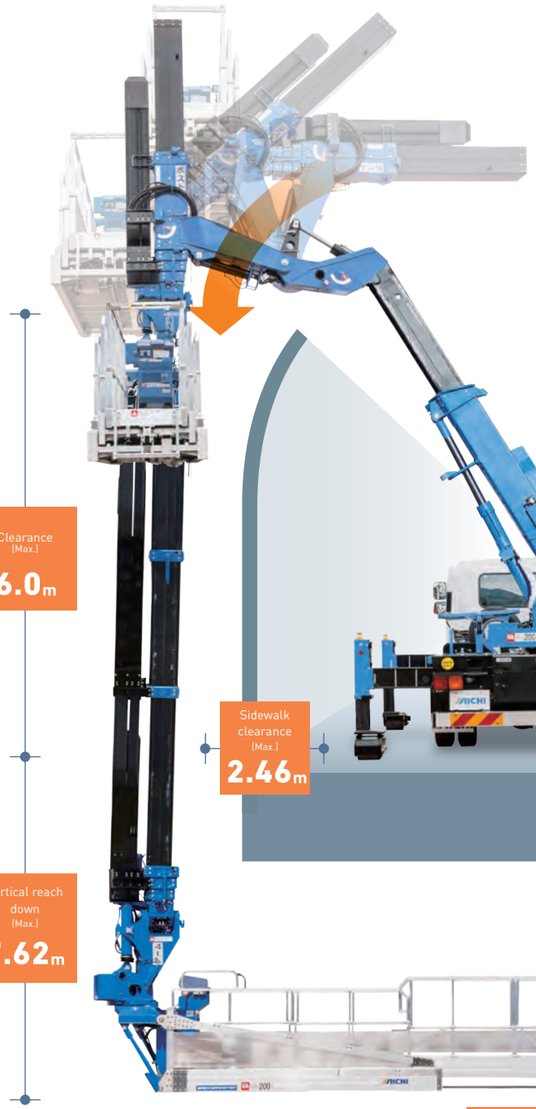


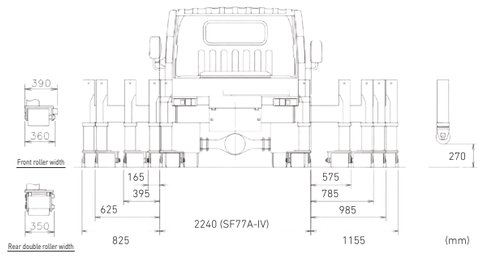
Machine width extending-off prevention system

This system restricts the boom rotation and post protrusion on the left and right sides of the vehicle, preventing them from coming into contact or colliding with other cars that pass the sides of this vehicle.

Optional on the SF77A-IV.

SF77A-IV



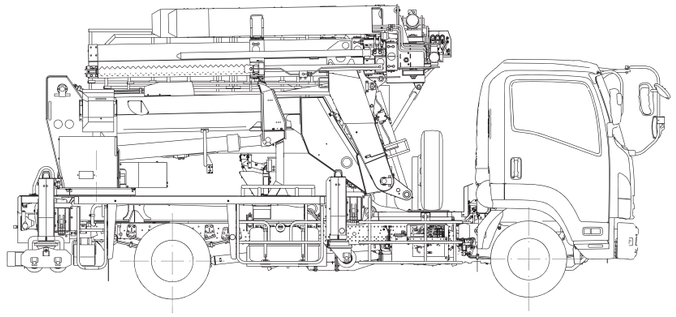


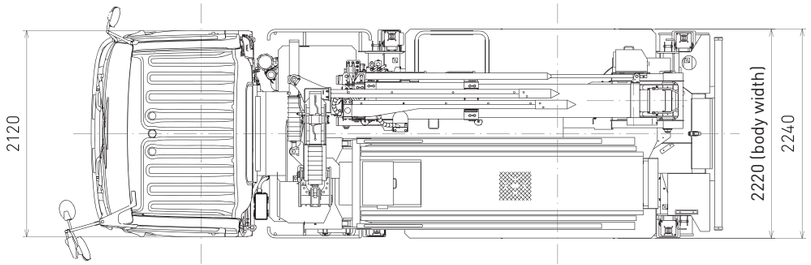
Clearance	Vertical reach down
1 m	7.30 m
2 m	6.28 m
3 m	5.22 m
4 m	4.20 m
5 m	3.35 m
6 m	2.35 m

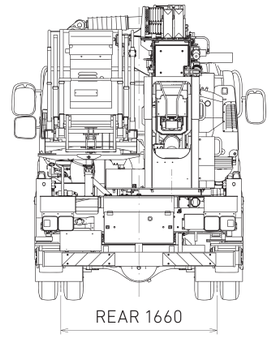
Note 1: The above figures are guidelines.
Note 2: This may vary with road conditions.
Note 3: These numbers are for work done on the left side.

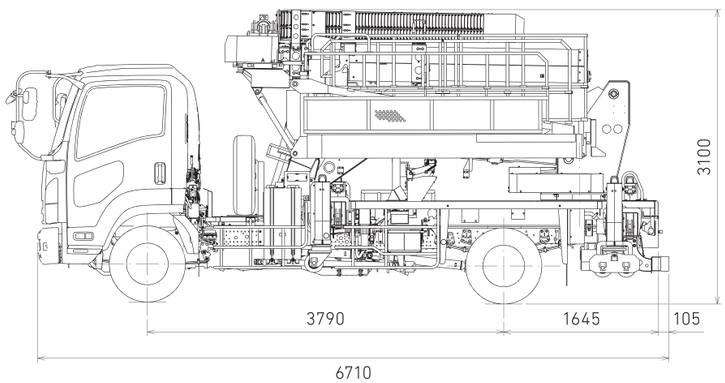
This model uses double roller jacks for rear left/right motion.
Contact pressure with the ground is distributed between the two rollers.

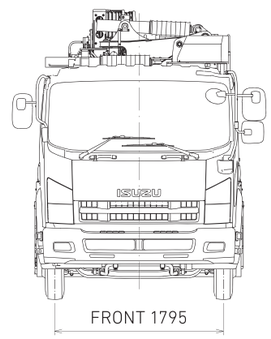
SF77A-IV









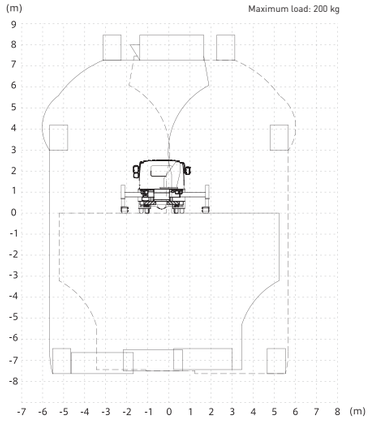


Note 1: Units used in the vehicle dimensions are in mm.
Note 2: Vehicle dimensions may vary depending on the chassis.

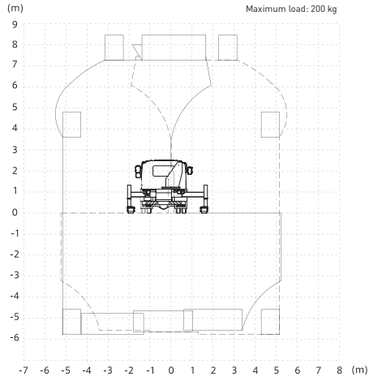
Working Range diagrams

SF77A-Ⅳ

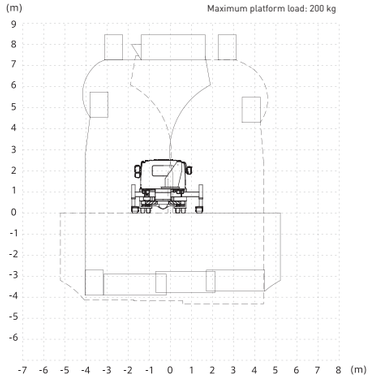
Outrigger extension, max. (left side: 1.81–1.84; right side: 2.14–2.17)
From vehicle center



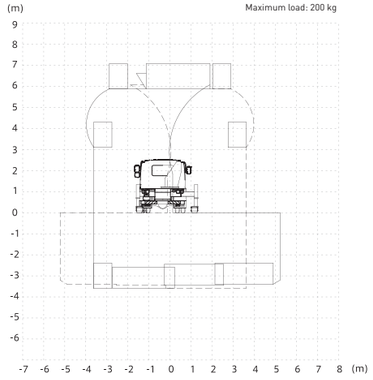
Outrigger extension, mid. 2 (left side: 1.61–1.81; right side: 1.97–2.14)
From vehicle center



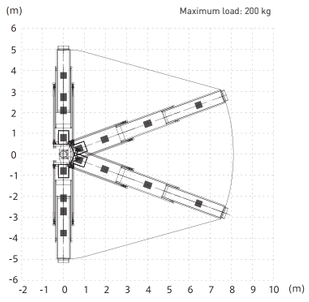
Outrigger extension, mid. 1 (left side: 1.38–1.61; right side: 1.77–1.97)
From vehicle center



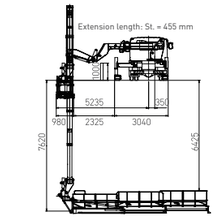
Outrigger extension, min. (left side: 1.15–1.38; right side: 1.56–1.77)
(work only possible on left side)—from vehicle center



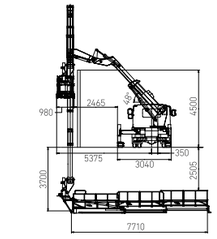
Outrigger extension, stowed (left side: 1.01–1.15; right side: 1.01–1.56)
Platform working range—from vehicle center



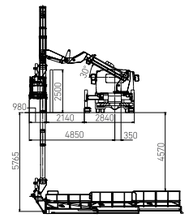
SF77A-Ⅳ



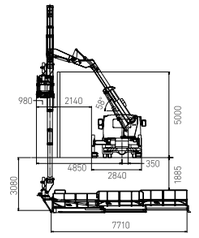
Left side outrigger max. extension
Working posture at max. vertical reach down
(Boom elevation angle: 0.0°)



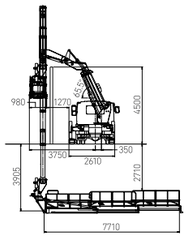
Left side outrigger max. extension
Working posture at max. sidewalk clearance
(Boom elevation angle: 48°)



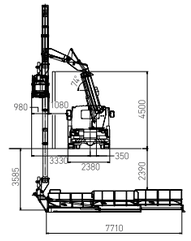
Left side outrigger mid. 2 extension
Working posture at max. vertical reach down
(Boom elevation angle: 30°)



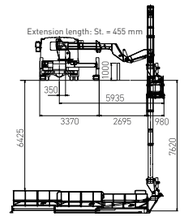
Left side outrigger mid. 2 extension
Working posture at max. sidewalk clearance
(Boom elevation angle: 58°)



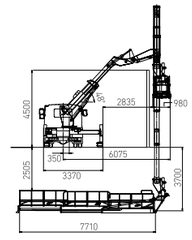
Left side outrigger mid. 1 extension
Working posture at max. vertical reach down
Working posture at max. sidewalk clearance
(Boom elevation angle: 65.5°)



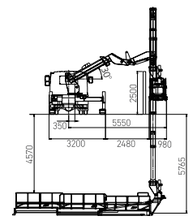
Left side outrigger min. extension
Working posture at max. vertical reach down
Working posture at max. sidewalk clearance
(Boom elevation angle: 74°)



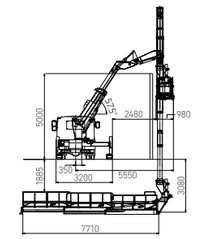
Right side outrigger max. extension
Working posture at max. vertical reach down
(Boom elevation angle: 0.0°)



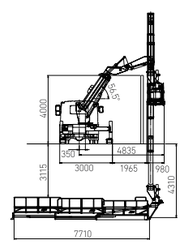
Right side outrigger max. extension
Working posture at max. sidewalk clearance
(Boom elevation angle: 48°)



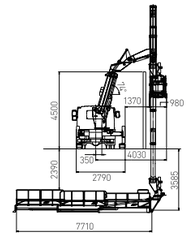
Right side outrigger mid. 2 extension
Working posture at max. vertical reach down
(Boom elevation angle: 30°)



Right side outrigger mid. 2 extension
Working posture at max. sidewalk clearance
(Boom elevation angle: 57.5°)



Right side outrigger mid. 1 extension
Working posture at max. vertical reach down
Working posture at max. sidewalk clearance
(Boom elevation angle: 56.5°)



Right side outrigger min. extension
Working posture at max. vertical reach down
Working posture at max. sidewalk clearance
(Boom elevation angle: 74°)

Main Specifications

BRIDGEMASTER

Model			SF77A-IV
Name			Bridge Inspection Work Platform
Platform	Maximum platform capacity		200 kg
	Outer dimensions (L x W x H)	Extended	7.62 × 0.66 × 1.00 m
		Retracted	3.02 × 0.92 × 1.00 m
	Maximum platform height		7.44 m
	Maximum platform lowering depth		7.62 m
	Maximum working radius		5.73 m (from rotational axis)
	Maximum platform under reach		7.54 m
	Platform rotation angle		0° Up to 180°
Arm	Arm rotation angle		0° Up to 90°
	Arm length		0.755 m
Post	Post elevation angle		0° Up to 90°
	Post length		3.45–8.94 m (with a +1.2 m slide)
	Type		5 stages hydraulic, telescopic
	No. of post stages		4 stages + post slide
Boom	Boom elevation angle		0° Up to 80°
	Boom rotation angle		Left: 100° / Right: 100°
	Boom length		3.4 m–4.8 m
Function speed	Boom elevation	Up	0° Up to 80°/35 sec
		Down	0° Up to 80°/35 sec
	Boom telescoping	Extend (OUT)	1.4 m/20 sec
		Retract (IN)	1.4 m/20 sec
	Boom rotation		200°/65 sec
	Post elevation	Up	90°/40 sec
		Down	90°/40 sec
	Post telescoping	Extend (OUT)	6.69 m/75 sec
		Retract (IN)	6.69 m/75 sec
	Platform rotation		180°/40 sec
	Platform extension		4.6 m/20 sec
	Arm swing	Stow (CLOSE)	90°/20 sec
		Deploy (OPEN)	90°/20 sec
Outriggers	Outrigger width	Left	1.010–1.840 m (from center of vehicle)
		Right	1.010–2.170 m (from center of vehicle)
	Jack stroke		0.345 m
Common hydraulic pressure			20.6 Mpa {210 kgf/cm²}
Hydraulic pump type			Gear type
Vehicle specifications	Mounting chassis		6-ton class
	Length		6.71 m
	Height		3.10 m
	Width		2.24 m
	Vehicle weight		10,830 kg

Comparison of working ranges	Outrigger width	Location	Width required by vehicle	Maximum working radius	Sidewalk clearance
	Max.	Left side	3.065 m	5.725 m	2.465 m
	Mid.2	Left side	2.865 m	5.200 m	2.140 m
	Mid.1	Left side	2.635 m	4.100 m	1.270 m
	Min.	Left side	2.405 m	3.680 m	1.080 m
	Max.	Right side	3.395 m	5.725 m	2.835 m
	Mid.2	Right side	3.225 m	5.200 m	2.480 m
	Mid.1	Right side	3.025 m	4.485 m	1.965 m
	Min.	Right side	2.815 m	3.680 m	1.370 m

Note 1: This may vary depending on the chassis and specifications.

Note 2: "Jack extension width" refers to the width from the center of the left jack to the center of the right jack.

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Safety instructions

- Operator of the machine must receive safety training to ensure safe operations. Incorrect use of the machine can cause serious injury or death. All personnel are requested to receive safety training and only trained and authorized personnel are permitted to operate the machine.
- Ultimate compliance to national safety regulations is the responsibility of the user and their employer.
- All owners and users of the machine must read, understand, and comply with all applicable regulations.

*Due to continuous product improvements, we reserve the right to make specification and/or equipment changes without prior notice.

*The photos and/or drawings in this brochure are for illustrative purpose only.

*This information, while believed to be completely reliable, is not to be taken as a warranty for which we assume legal responsibility.