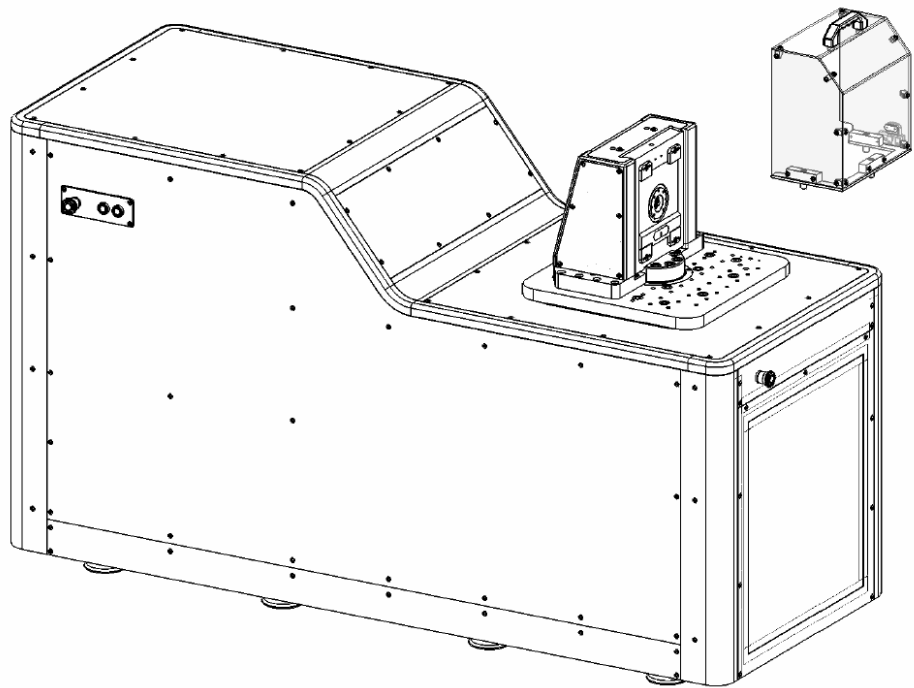


J600/J900 Fastener Test bench
August 2018





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About this Manual

This Installation Guide will explain how to prepare before the arrival of your J600/J900 Fastener Test bench and how to correctly install your J600/J900 Fastener Test bench and have it ready for operation once it has arrived to you.

Throughout this document, we may refer indiscriminately to the J600 and J900 Fastener Test benches as “J600/J900”, “machine(s)” or “unit(s)”.

Safety Information

Please follow all relevant safety and operating instructions when installing the machine to ensure the safety of both the operator and others close to the machine.

The points below are general safety instructions to be followed:

- Before beginning the installation of the J600/J900, please check for any external damage to the packaging. If any damage is found, do not continue with the installation and contact Vibrationmaster immediately
- Do not operate or store the machine where it will be exposed to external weather conditions
- Do not tamper with the electronics, controls or the control system software
- Do not repair or replace any part of the machine or attempt any servicing unless this is specifically recommended in the maintenance instructions of the Operating Manual
- To minimise the possibility of electric shock, unplug the machine from the power supply before attempting any installation

1. Before the J600/J900 arrives to you

Thank you!

Thank you for purchasing a J600 or J900 Fastener Test bench. We have put considerable effort into designing and manufacturing the J600/J900 machines and we hope it will be useful to you in testing bolted joint integrity, the relationship between applied torque and achieved tension and the self-loosening behaviour under vibration conditions.

Technical requirements

Electrical requirements

The J600/J900 is supplied with 4 meter of main power cable and requires the following electrical installation:

3-phase 400...480 V; L1, L2, L3, N; PE

Maximum current J600: 60 A

Maximum current J900: 100 A

Optional with external transformer:

3-phase 200...240 V; L1, L2, L3, N, PE

Maximum current J600: 120 A

Maximum current J900: 200 A

Connection to Internet via RJ45 cable

The J600/J900 requires connection to the Internet via an ethernet RJ45 cable to enable firmware updates to the unit's software and remote online help and service.

Connection to PC user interface

The J600/J900 broadcasts its own secure Wi-Fi network to allow easy wireless connection to the unit's PC user interface and for operation of the unit.

The J600/J900 can further connect to the unit's PC user interface via an ethernet RJ45 cabled connection.

If required and upon request, the J600/J900 can be delivered without wireless capability.

Connection to water supply

The J600/J900 does not require a water supply.

Connection to gas

The J600/J900 does not require a gas supply.

Compressed air

The J600/J900 does not require connection to compressed air.

Ventilation

The J600/J900 does not require ventilation.

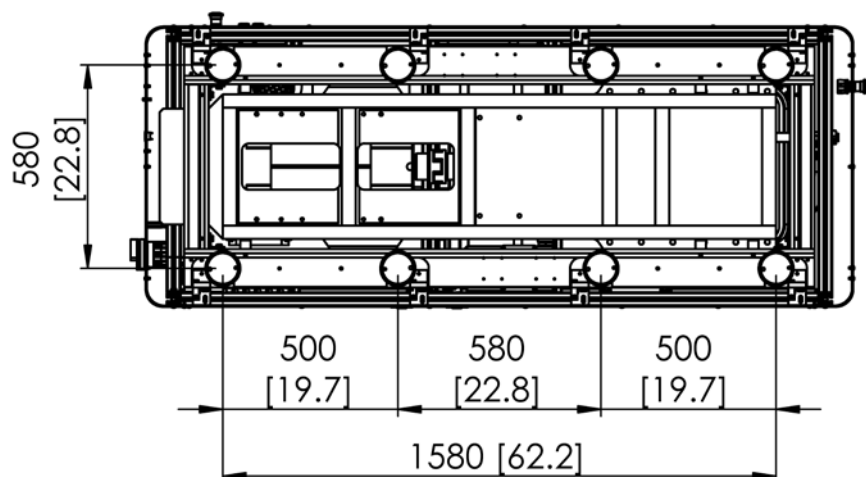
Preparing the floor space

Please verify that the following requirements for the machine with respect to floor space and strength are given.

Floor load

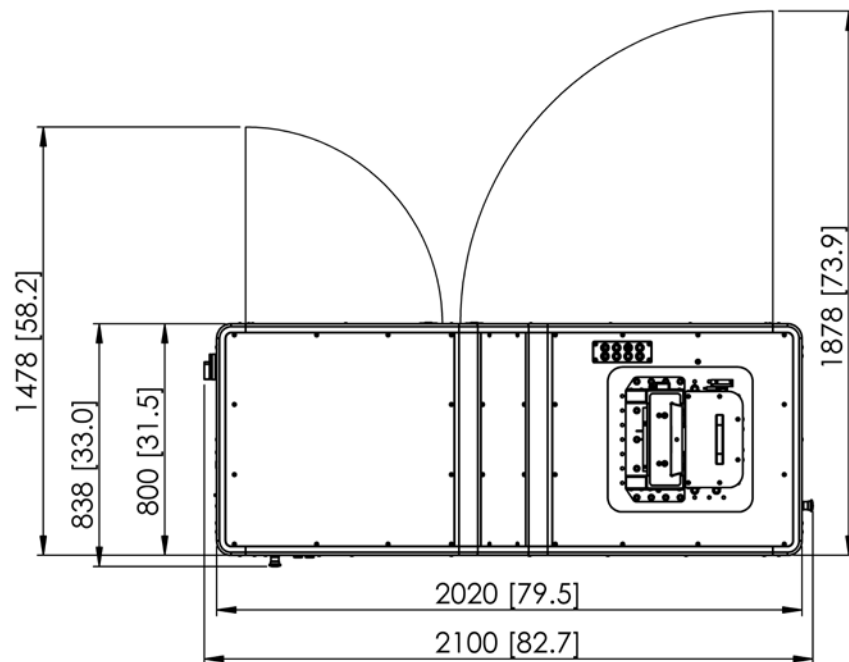
The operating location of the machine should be a levelled surface strong enough to carry the weight of the machine (1,540 kg [3,395 lbs] for J600 and 1,580 kg [3,493 lbs] for J900).

The machine is supported by eight feet which span over a surface of 1580 mm [62.2"] by 580 mm [22.8"]. The floor load is 17.2 kN/m².



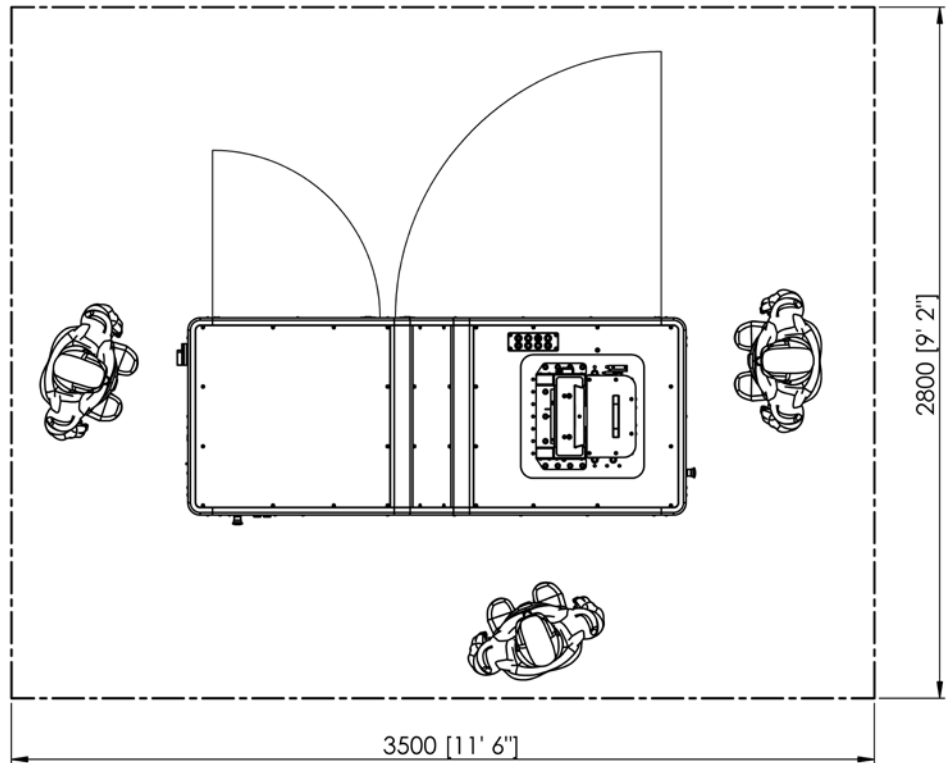
Accessibility from all sides

The J600/J900 Fastener Test Bench should be accessible from all sides. Service doors on the back of the machine have to have the necessary space so that they can be opened fully.

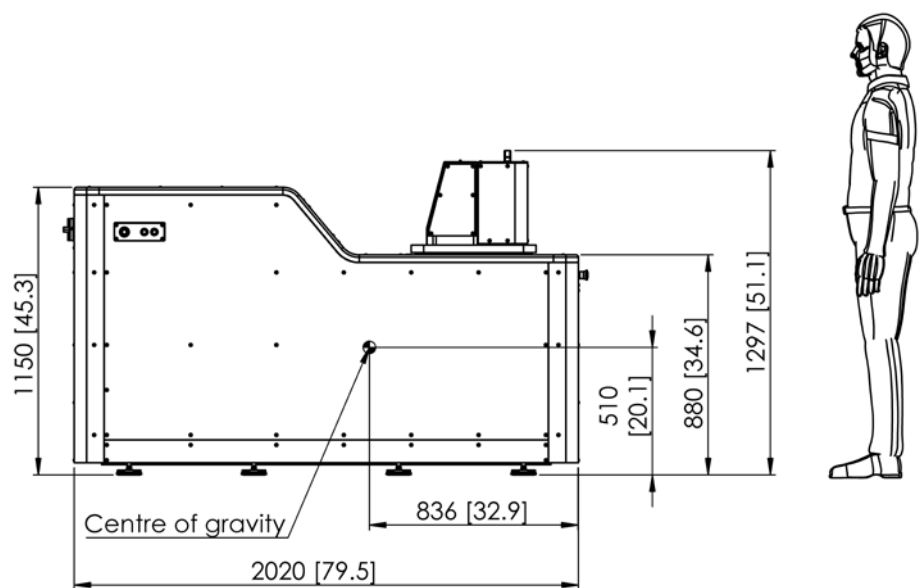


Recommended working area

In order to work comfortably around the machine, we recommend to allow for a minimum working area of 3500 mm [11'6"] by 2800 mm [9'2"].



Machine height



Environmental conditions

The J600/J900 are highly precise testing instruments with several temperature sensitive sensors and measuring devices. Certain precautions need to be considered when choosing the most appropriate location of the J600/J900.

Acoustic noise

The maximum level of noise exhibited for the J600/J900 is < 85 dB(A) as measured by a sound level meter in 1 meter distance from the J600/J900.

Electrical and magnetic fields (shielding)

The J600/J900 is not known to leak any significant electrical noise that could affect nearby equipment hence no special requirements are needed. As a general rule however, Vibrationmaster always recommend nearby electronic measuring instrument to be shielded locally and guarded by self-shielding or small screened enclosures.

Relative humidity

To ensure utmost measurement accuracy and repeatability from the J600/J900, it's advisable to set-up the unit within a climate-controlled environment according to ISO 17025 with a relative humidity within the range of 35-55% around a regulated temperature of 23°C, which reflects the original calibration environment.

However, operating the J600/J900 outside of these conditions will not cause any noticeable deterioration to the overall measurement accuracy and test result integrity. In fact, the J600/J900 may as well be positioned outside of climate-controlled rooms as long as the relative humidity does not significantly exceed 80% around a regulated temperature of 23°C ±3°C.

Condensation is to be avoided.

Temperature

To ensure utmost measurement accuracy and repeatability from the J600/J900, it's advisable to set-up the unit within a climate-controlled environment according to ISO 17025 where temperature remains within the range of 23 ±1.5°C, which reflects the original calibration environment.

However, operating the J600/J900 outside of these conditions will not cause any noticeable deterioration to the overall measurement accuracy and test result integrity. In fact, the J600/J900 may as well be positioned

outside of climate-controlled rooms as long as the temperature is kept within the range of 23°C ±3°C.

Exposure to direct sunlight and draft winds must be avoided.

Vibration

When the J600/J900 operates at maximal amplitude and load the following residual vibrations may be seen:

Test frequency (HZ)	30	25	20	15	10
External residual vibrations (m/s ²)	7.1	7.8	7.7	11.9	11.7

Packaging and shipping

Your J600/J900 will be packed in a wooden box on a pallet suitable for export and conforming to ISPM 15.

J600 shipping dimensions

Length 2240 mm x Width 1070 mm x Height 1630 mm

Net weight 1540 kg / brut weight 1781 kg

Volume 3,91 m³

J900 shipping dimensions

Length 2240 mm x Width 1070 mm x Height 1630 mm

Net weight 1580 kg / Brut weight 1821 kg

Volume 3,91 m³

2. When the J600/J900 arrives to you

Installation equipment and tools needed

Before you begin the installation, please ensure that all equipment's and tools shown in the Bill of Material below are available.

You can make the installation process go faster by gathering the pieces you need for each step prior to starting the step. The assembly can be prepared by one person, but when it comes to handling the J900, you may require assistance from a colleague.

Bill of Material needed for installing the J600/J900:

Item#	Description	Quantity
1	Fork lift with 2000 kg [4409 lbs] or more lifting capacity	1
2	Pallet jack with 2000 kg [4409 lbs] or more lifting capacity	1
3	Crow bar	1
4	Set of screw drivers	1
5	Spirit level	1

Unloading the J600/J900

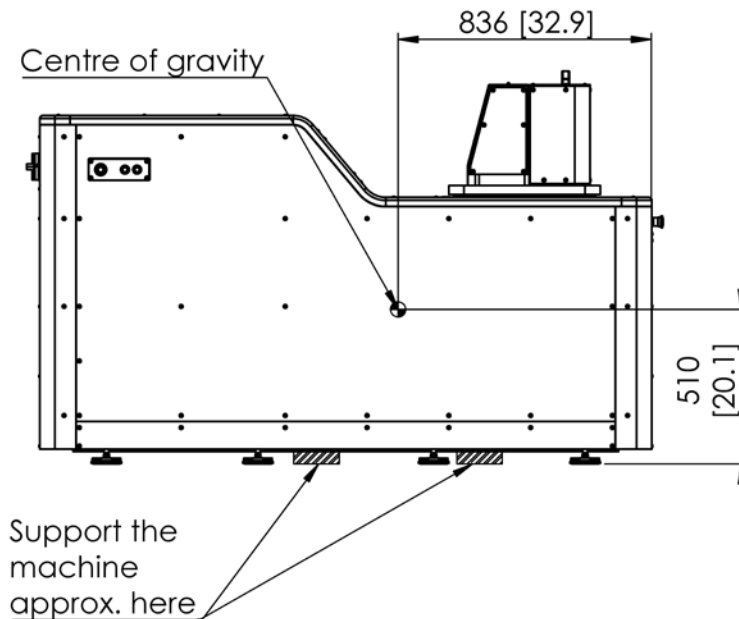
The J600/J900 Fastener Test bench will be delivered in a wooden box on a pallet. Depending on the destination, a waterproof protective film will protect the machine from humidity. The box has to be removed off the truck by using a forklift and should be placed onto solid ground. The forklift capability has to be rated for a load of 2000 kg [4409 lbs] or more.

All safety rules for the equipment used have to be adhered to. Refer to the instruction manual of the lifting equipment.

Unpacking the J600/J900

Remove the wooden top and walls with proper tools such as suitable screwdrivers resp. a crow bar.

The machine can now be lifted off the pallet by means of a forklift again and be placed on the ground to its operation location. Should space restrictions not allow for a fork lift to manoeuvre, a pallet jack can be used instead. To achieve good balance, support the machine close to its centre of gravity.



Remove the plastic wrapping. Do not use cutters or knives because of the risk that the surface of the machine will be scratched.

Preparing the J600/J900 for use

Levelling the machine

The J600/J900 rests on eight feet which are individually adjustable in height. Slight unevenness of the ground can be compensated by adjusting the feet. Use a spirit level to adjust the feet and to assure that the J600/J900 is levelled.

For most easy levelling, please turn the four inner feet off the ground and level the machine on the four outer feet only. When leveling is achieved, lower the four inner feet so that they also carry the load.

Electrical connection to the AC-main supply

The electrical connection must be done only by properly trained and certified personnel.

Connection to the AC-main supply should only be done once the machine is at its operating location and all formerly mentioned tasks are done.

Check and confirm that the supply voltage is correct. Make sure that the main switch of the machine is in position 'Off'.

Check and confirm that the connection is not powered when connecting the electrical supply to the machine.

The supplied cable consists of five wires which have to be connected as follows:

Wire Colour	Description
Brown	L1
Black	L2
Grey	L3
Blue	N
Yellow/green	PE

The J600/J900 is now ready to be operated.

Contact information

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