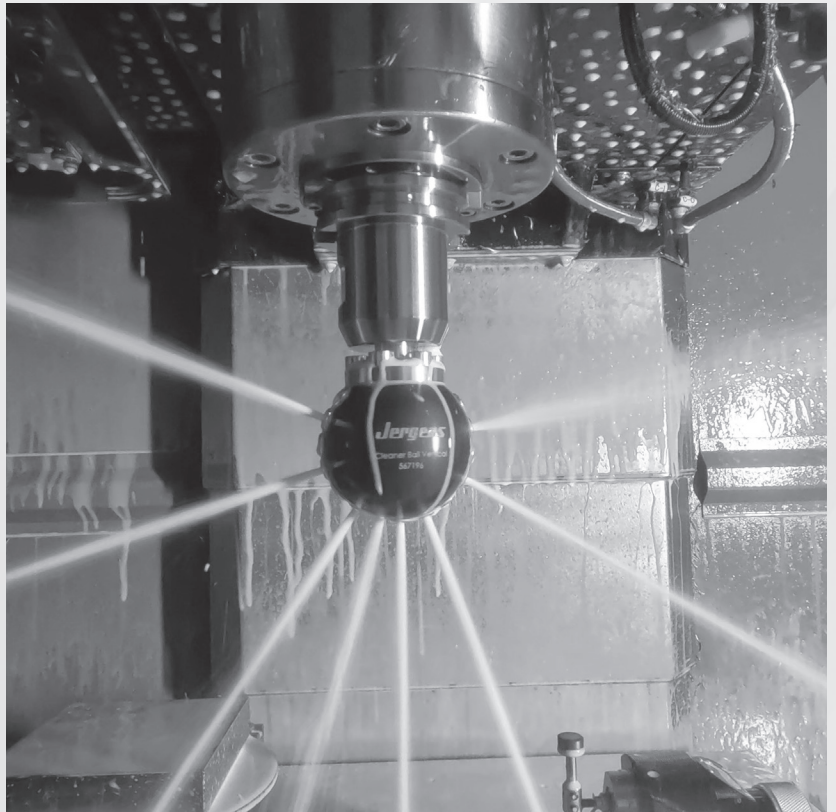


## INSTALLATION INFORMATION JERGENS WASHDOWN TOOL (567196)



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## GENERAL NOTES

This installation manual will help you become familiar with your new product. For that reason, we recommend that you read the documentation carefully and follow all instructions. For additional information, we request that you contact our technical service.

## THIS MANUAL

Please consider this installation manual as an important component of the delivered system. It should be well taken care of during the entire time the system is in use.

A copy of this installation manual must be made available to the installation, operating and maintenance personnel.

Please ensure that all additional documents delivered are integrated into this manual. If you transfer your system to a third party, please pass on this manual.

## STORAGE OF THE MANUAL

This manual must always be handled with care. It is not allowed to tear out pages or modify it. Please store these documents protected from heat and humidity.

Jergens, Inc. reserves the right to replace parts of the instructions contained herein at any time in the course of product improvement or if construction or commercial changes so demand, without immediately providing a new edition.

Jergens, Inc., as the originator of this manual, hereby prohibits any reproduction either in whole or in part, and the disclosure of this manual to third parties without written consent. Any modification of the product requires permission of the manufacturer.



## 0. INTRODUCTION

This installation manual will help you become familiar with your new product. For that reason, we recommend that you read the documentation carefully and follow all instructions. For additional information, we request that you contact our technical service.



### CAUTION:

**The original configuration of this system must not be altered under any circumstances.**

Using this system for purposes other than those which the manufacturer intended can damage the system or harm the operator. The manufacturer's consent must be obtained before working on materials other than those described in these instructions.

## SYMBOLS USED



Machining processes that represent a risk or can cause injuries or harm to health if they are not properly performed.



Machining processes that may only be performed by qualified specialist personnel. The possibility of residual risks cannot be ruled out.

## 0.1 Operating Personnel

As already mentioned above, certain operations must be performed exclusively by qualified or trained personnel. The following standard features are used to describe the qualification level:

Qualified personnel possess the technical knowledge and/or the operating experience required for detecting and preventing potential hazards (engineers and technicians).

Trained personnel are adequately instructed and/or supervised by qualified persons to enable potential hazards to be detected and prevented (personnel familiar with operation or maintenance). They must be qualified as follows:

1. They must be trained and authorized to safely operate the product, feed or interrupt operating pressure and label the equipment in accordance with the standard safety provisions.
2. They must be trained in the correct procedure for maintaining and using the safety equipment in accordance with the standard safety provisions.

Before commissioning the equipment, the customer is obligated to make sure:

1. That the personnel have received, read and understood the installation manual
2. That the personnel observe the given instructions.



## 0.2 Trained Personnel

**MACHINE OPERATORS:** One or more person who, on the basis of appropriate instructions from the owner of the product described here, are assigned and authorized to operate this product and the equipment connected to it. Another prerequisite is the complete knowledge and unrestricted understanding of the contents of this manual.

## 0.3 Individual Protective Equipment



The personnel mentioned in the paragraph above must wear the appropriate protective clothing, which is required for the use of the machine on which the system described here is installed.

Safety shoes are required, whereas the need to wear hearing protection, safety helmets and safety goggles must be judged by the operating company.

The wearing of loose clothing that could become caught in the movable machine components is not permitted.

## 0.4 General Safety Instructions



The following regulations and recommendations correspond to the applicable legal regulations and are largely based on the observance of such safety regulations.

**Jergens, Inc., is not liable for any harm to persons or property that can be traced back to disregarding the applicable safety regulations and/or the instructions contained in this manual. The latest version of the installation manual shall apply.**

**All affected operators are therefore urged to follow and apply the instructions below and to strictly comply with the accident protection regulations applicable in the country in which the system is installed und used.**

**All ordinary and extraordinary maintenance steps must be undertaken with the pressure supply cut off.**

**Prior to connecting the pressure, it is necessary to check whether the operating pressure matches the maximum permitted operating pressure.**

**The transportation, installation, operation, as well as the ordinary and extraordinary maintenance of the system described therein is reserved for personnel who meet the requirements set out in section 0.1 and 0.2.**



## 0.5 What to do in case of emergency



In case of emergencies, we recommend applying the procedure in the operating and maintenance manual for the machine, on which the system described here, is installed.

In particular, measures must be taken so that no danger to persons or property can arise in case of a defect.

In case of fire, the extinguishing equipment provided must be used and steps must be taken to ensure the absence of operating pressure.

## 0.6 Restrictions on usage



The system described here may be used exclusively for the purposes described in the operating manual and only in connection with the components recommended and approved by Jergens, Inc.

**Permitted use of the Jergens Washdown Tool:** The Jergens Washdown Tool is mounted in the machine spindle mainly via a tool holder. They are designed for cleaning work pieces, clamping fixtures and machine interiors and may be used only within boundaries of their technical data. During such usage, the maximum loads specified by the manufacturer must not be exceeded. All other types of use must be agreed with the manufacturer.

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## CAUTION:



Labels must not be removed under any conditions, even if the equipment is to be resold.

Should the label be damaged or become detached, please contact Jergens, Inc. to obtain a copy.

Please quote the model stamped on the label on all communication with Jergens, Inc.

Disregarding these provisions releases Jergens, Inc. from any liability for damage or accidents caused thereby. In this case, the operating company is solely liable to the authorities.

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## 1. TRANSPORT

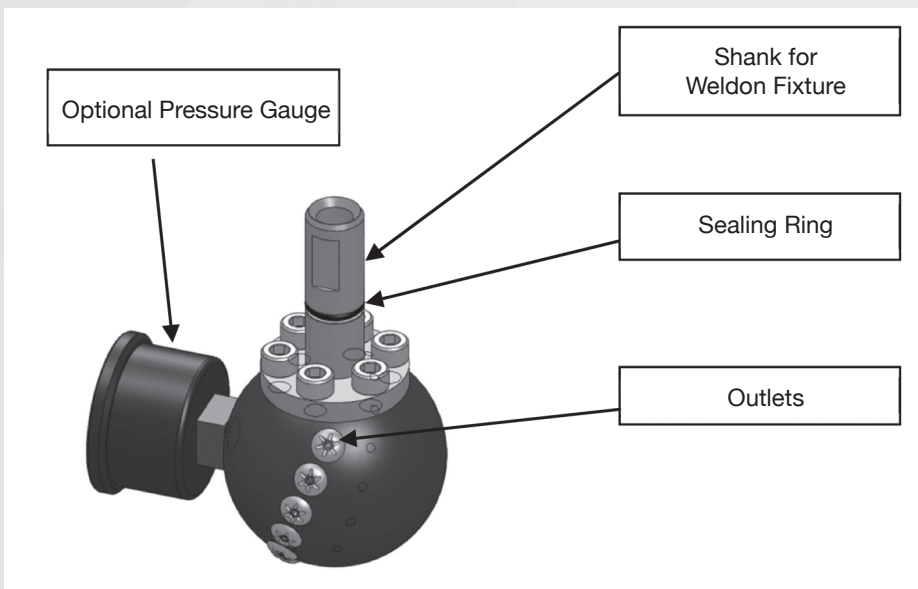
Every Jergens Washdown Tool is carefully checked prior to dispatch. On receipt of the goods, please check the integrity of the packing and the content (in the absence of any instructions to the contrary from Jergens, Inc.), in order to ensure that the goods have not been damaged during transportation and that the consignment corresponds to the specification on the order. Please report any defects or damage immediately to Jergens, Inc. and the shipper who is liable for the transport damage.



## 2. DESCRIPTION OF THE SYSTEM

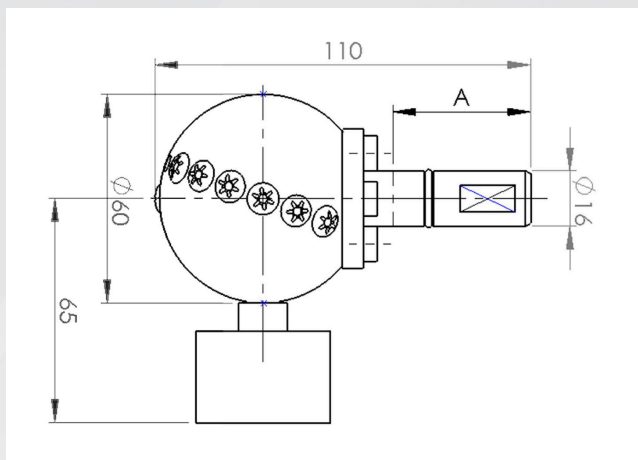
	UNIT	567196
Tool Holder	-	Weldon
Shank Diameter	[mm]	16
Weight	[g]	331
Operating Pressure	[psi]	72-1,740
Operating Medium	-	Cooling lubricant
Permitted Spindle Speed	[rpm]	5-100

### 2.1 Design



### 2.2 Dimensions

Dimension A = 40mm Insertion depth



## 2.3 Operation and Instructions for Use

The Jergens Washdown Tool, is a quality cleaning tool for CNC machines.

The Jergens Washdown Tool should only be used within the specified pressure limits of 72-1,740 psi. For correct cleaning, a pressure of > 72 psi should prevail inside the ball. The internal pressure can be adjusted by opening the requisite number of nozzles.

With washdown tools inserted in vertical spindles, the nozzles of the oblique nozzle series should be utilized. In this case, the selected direction of rotation must allow the uppermost jet to lead.

With a horizontal spindle position, the nozzles arranged in a straight line should be utilized. Alternating rotational directions for cleaning away chips from top to bottom can be expedient.

Adjust the tool to the flow or the pumped cooling lubricant quantity and to the required cleaning range. To do this, you can close or open every individual nozzle by screwing the grub screw in or out using a 1.5 mm hexagon wrench.

The pressure gauge can be used to check the state of the cooling lubricant unit through to the spindle nose. Reduced pump performance, clogged filters and other factors that result in an inadequate delivery quantity and hence often inadequate pressure and tool break are quickly detected. The spindle should stop and the cooling lubricant pressure should adjust to the tool. If, when 1 or 2 nozzles are open, the pressure in the cleaning tool drops significantly below a static pressure – all nozzles closed – this indicates dirty filters or too small a flow cross section in the supply line.

The Jergens Washdown Tool is mounted in Weldon design tool fixtures. Alternatively, the tool can be inserted into fixtures with a suitable collet.

## 3. INSTALLATION

### 3.1 General

The Jergens Washdown Tool can be inserted into fixtures with a 16mm bore. Please note that the permitted tool length must be exceeded.

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### CAUTION:



The Jergens Washdown Tool must be integrated into a machine tool only by qualified personnel.

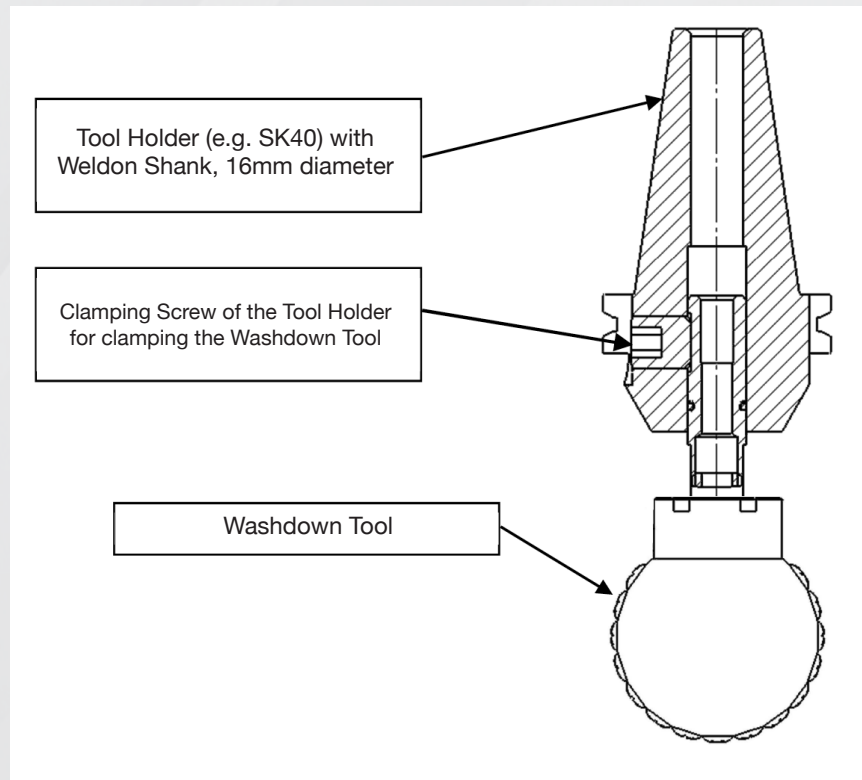
**Observe the installation manual for the machine tool.**

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## 3.2 Installation Examples



## 3.3 Safety Precautions

### CAUTION:



Observe the following instructions prior to commissioning.

- Before you insert the washdown tool into the machine, check that the nozzle lock screws are correctly seated.
- Before you insert the washdown tool into the machine, check that the sealing ring is undamaged.
- All machine doors must be closed while the washdown tool is in use.
- Observe the recommended spindle speed.
- Observe the specified operating pressure.

### CAUTION:



Risk of injury from ejected nozzle lock screws.



## 3.4 Programming Instructions

Move the spindle into a position at which the medium will clean every location and enter this cleaning sequence as a sub-program.

Program the tool progression appropriate for the machine enclosure and the dirt or chip deposits. As especially critical positions, you can work with tool positioning and dwell times. We recommend 40 to 800 in/min. as traversing speed.

## 4. MAINTENANCE

### 4.1 Introduction

Appropriate maintenance is important for a long service life of the system and its components under flawless functional and operating conditions and additionally guarantees the required operating safety over the long term.

### 4.2 Safety Standards During Maintenance

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#### CAUTION:



#### Jergens Washdown Tool are Maintenance Free

For your own safety, however, you should carry out the following steps and defined intervals. Chips or dirt can be blown off using compressed air.

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### 4.3 Daily Maintenance

Visual inspection for damage

Nozzle lock screws firmly seated

### 4.4 Monthly Maintenance

None



## 5. POSSIBLE PROBLEMS AND HOW TO REMEDY THEM

The information contained in this section supports the user in identification of malfunctions that can occur during operation of the system.

Malfunction	Cause	Remedy
Excessive discharge of cooling lubrication or air at the shank	Sealing ring damage or not fitted	Change or insert sealing ring
Cooling lubricant jet or air too gentle	Filter system constricted or clogged	Clean filter system
Inadequate cleaning effect	Program sequence not optimal	Optimize program sequence
	Extreme contamination	Remove contamination by other means
	Extreme accumulation of chips	Remove chips by other means

## 6. DECOMMISSIONING AND DISPOSAL

### 6.1 Decommissioning

If the system is no longer to be used, it must be removed from the production machine.

### 6.2 Placing into Storage

Store this system in a dry environment at +10°C (50°F) to 55°C (131°F). Protect the nozzle openings and the shank opening against the ingress of dirt and chips.

### 6.1 Disposal

If the system is to be scrapped, any residues of cooling lubricant must be completely removed and disposed of in accordance with the legal regulations applicable in the country concerned.

The remaining system parts should be separated according to materials and also disposed of in accordance with legal regulations.

