

**Aeroquip®**  
S1416B Hose Assembly Machine



**EATON**

*Powering Business Worldwide*

# S1416B Hose Assembly Machine

Eaton's Aeroquip product line includes the S1416B Hose Assembly Machine, specifically designed to simplify and speed the assembly of Aeroquip rubber hoses with standard screw together reusable fittings.

The S1416B machine can quickly assemble either straight or elbow-type reusable fittings on Aeroquip medium pressure hoses in sizes -3 (3/16") through -32 (2") and high pressure hoses in sizes -4 (1/4") through -16 (1").

The machine features a durable 3 hp electric brake motor operating at 1725 rpm. The motor is "C" face mounted to a speed reducer which provides a working spindle at 58.3 rpm.

The S1416B is simple to operate, with a Carriage Vise for accurate fitting assembly, and easily adjusted Spindle Lock for changing bayonet-style mandrels, and Hex Drivers to ease elbow assembly.

When ordered as an S1416K-1-No. (kit), the machine comes with five sets of hex jaw drivers, a hex nut stop assembly, an operators manual, and a 30" x 38" top with legs.

## Features

- 601/AE701 (-3 through -32)
- 303/302A (-3 through -32)
- Suitable for PTFE hose assemblies
- Easy to use for double-elbow assemblies
- Rugged and durable for long life

## Machine Specifications

- Width** — 48 inches  
**Depth** — 36 inches  
**Height** — 54 inches  
**Weight (shipping)** — 995 lbs



## Electrical Options

Hose Assembly Machine Kit Number	Electrical Option			HP Rating
S1416K-1-1	220 Volt	3 Phase	50 Hz	3
S1416K-1-2	220 Volt	3 Phase	60 Hz	3
S1416K-1-3	440 Volt	3 Phase	60 Hz	3
S1416K-1-4	380 Volt	3 Phase	50 Hz	3

## Ordering Instructions

Order by kit number S1416K-1-No. for machine with hex jaw drivers as listed below to assemble/disassemble 601/AE701 assemblies from -3 through -16.

Part Number	Item	Description
S1416K-1-No.	Kit	
S1416B-1-No.	Basic Machine	Includes hose assembly machine mounted on a 30" x 48" wood top with metal legs
SC4422A	Hex Driver Jaws	For hex sizes 1/2, 9/16, 5/8, 13/16
SC4422B	Hex Driver Jaws	For hex sizes 15/16, 1, 1-1/16, 1-1/4
SC4422C	Hex Driver Jaws	For hex sizes 3/8, 11/16, 7/8, 1-1/2
SC4422-12	Hex Driver Jaws	For hex sizes 13/16 and 15/16
SC4422-13	Hex Driver Jaws	For hex sizes 7/16, 3/4, 1-1/8, 1-3/8
S1416-4	Hex Nut Stop Assembly	For straight nipple assemblies

## Assembly Tooling

For 601/AE701 type hose.

Use the following table to order additional hex drivers and hex drivers with backer plates for elbow assemblies.

Hose Style	Hex Driver Plates			
	Straight Fittings	Nipple Hex Size	Elbow Fittings	Elbow Hex Size
-3	SC4422A	1/2	SC4422-13	7/16
-4	AC4422A	9/16	SC4422A or SC4422-9**	1/2
-5	SC4422A	5/8	SC4422A	9/16
-6	SC4422C	11/16	SC4422A or SC4422-9**	5/8
-8	SC4422C	7/8	SC4422-12**	13/16
-10	SC4422B	1	SC4422-12**	15/16
-12	SC4422B	1-1/4	SC4422B or SC4422-6**	1-1/16
-16	SC4422C	1-1/2	SC4422B or SC4422-6**	1-1/4
-20	SC4422-5	1-13/16	SC4422-5**	1-9/16
-24	SC4422-10	2-1/8	SC4422-8**	1-3/4
-32	SC4422-4	2-3/4	SC4422-8**	2-5/16

\*\* These elbow hex drivers have backer plates



## Assembly Tooling

Vise pad for 601/AE701 type hose.

Use the following table to order the optional F1983-size vise pad with grip hose and socket to prevent hose push-out during assembly.

Hose	Vise Pad
601/AE701-3	F1983-7
601/AE701-4	F1983-8
601/AE701-5	F1983-9
601/AE701-6	F1983-10
601/AE701-8	F1983-3
601/AE701-10	F1983-4
601/AE701-12	F1983-2
601/AE701-16	F1986-1
601/AE701-20	F1983-5
601/AE701-24	F1983-6
601/AE701-32	F1983-11

## Assembly Tooling

For 303/302A (MIL-DTL-8794) type hose.

Use the following table to order straight mandrels and additional hex drivers and hex drivers with backer plates for elbow assemblies.

Hose	Straight Mandrel	Elbow Hex Driver	Hex Size
303-3	S1410-1-3	SC4422C	3/8
303-4	S1410-1-4	SC4422C	3/8
303-5	S1410-1-5	SC4422-13	7/16
303-6	S1410-1-6	SC4422A	1/2
303-8	S1410-1-8	SC4422A	5/8
303-10	S1410-1-10	SC4422-13	3/4
303-12	S1410-1-12	SC4422C	7/8
302A16	S1410-1-16	SC4422-13	1-1/8
302A20	S1410-1-20	SC4422-13	1-3/8
302A24	S1410-1-24	SC4422-8**	1-3/4
302A32	S1410-1-32	SC4422-11	2-1/4

NOTE: All Mandrels listed above are available as a kit (S1410K-1) with the exception of S1410-1-5. Mandrel S1410-1-5 is available for purchase as a separate item.

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