

824 WT-4e Machine Specifications and Dimensions:

Force Range	Adjustable 1000 lbs. (4.46kN) to 16000 lbs. (72kN) - Optional 20000 lbs. (90kN) modification available
Throat Depth	24" (610mm)
Stroke Length	Adjustable 0 to 8.5" (0 to 220mm)
Electrical	208 to 575V 3 phase - 50 or 60 Hz
Motor	5 HP
Oil Tank Reservoir	22 gallons (83 liters)
Speed	up to 1400 insertions per hour
Repeatability	+/- 2% of force setting
Footprint	(LxWxh) 59" x 38" x 94" (1499mm x 966mm x 2388mm)
Fastener Range	.256 to 1/2" (M2 to M10)
Clinching Capability	22 gage to 11 gage Steel (1mm to 6mm) combined thickness

For more information on the 824 WT-4e and other Haeger products, visit our website at www.haeger.com or contact your authorized Haeger distributor.

Always the most cost effective solution
for your fastener insertion challenge!



Versatility and Ease of Setup ...
Haeger's all new:

824

WindowTouch 4e

Fastener
Insertion
System



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Introduction: Creating Hardware Insertion Profit Centers

The new 824 WindowTouch-4e brings you:

- 1. Easier and faster tooling setup combined with the most reliable fastener feeding
- 2. Best workpiece accessibility
- 3. Easier and faster programming
- 4. Best Operator Ergonomics
- 5. Energy Saving

Learn how Haeger’s mission can become your profitability

- Are you still handling your parts multiple times?
- Are you still manually feeding the majority of your fasteners?
- Are you still experiencing substantial setup times on both new and repeat jobs?
- Are you still under the assumption that setting up automatic tooling is too complicated or too time consuming?

Are you still experiencing:

- Missing fasteners?
- Fasteners inserted in the wrong location?
- Fasteners inserting on the wrong side of the part?
- Wrong length stud or standoff inserted?
- Parts scratched due to manual feeding in combination with multiple handlings?

We have taken your feedback seriously over the last years and have developed multiple solutions to address the challenges you are facing. The integration of all these solutions are found in the new 824 WindowTouch-4e.



Easier and Faster Tooling Setup

A: MAS 350 – New Modular Autofeed System.

A unique new drive system in combination with a complete new bowl design incorporating all the latest bowl feeding technologies.

A long list of advantages, but what does this mean to you?

- Tool Change reduced from 3 minutes to 3 seconds through a one piece tool module.
- No more manual bowl settings required. Software automatically sets the proper vibration rate, air eject time and required air pressure to allow for failure free fastener feed. ‘From a full bowl down to the last one out.’ Reliable Feeding. Faster Changeover. No Training Required.
- Larger bowl design in combination with new drive allowing for fastener sizes M2 through M10 all to be fed in the same bowl.
- Deeper Bowl design in combination with new bowl tooling design allowing for fastener lengths up to 40mm all to be fed in the same bowl.
- New drive design allows for a 1 single tool piece, resulting in faster and easier tool changes.
- Change in bowl material resulting in fasteners becoming less dirty from ‘air-dust’ or individual rubbing
- Lower mounting position allowing for easier filling and emptying.

B1: New T-Bracket and Shuttle with integrated Connectors eliminating alignment challenges.

Fastest and easiest setup in the industry. Reduced from 2 minutes to 10 seconds without having to think about which connector goes where. On traditional machines, an operator had to change multiple air-lines and sensor cables, unnecessarily delaying changeover times. In addition, operators required training for alignment of the T-Bracket and shuttle, which has been eliminated with this new system.

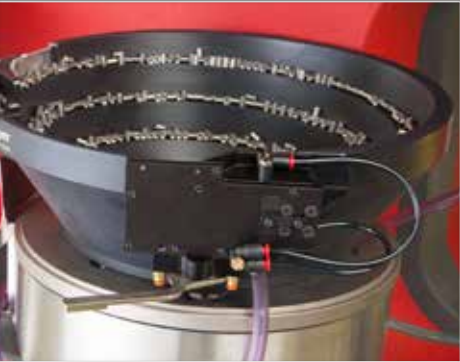
New re-designed Shuttle Plate Jaw Pins, eliminating breakage and saving cost for replacement and downtime.

B2: Pre-aligned Base Plate

A pre-aligned base plate allows for easy tool holder changeover. No alignment of tools required. Where a tooling re-alignment after tool holder replacement used to take up to 5 minutes, this setup time has now been completely eliminated.

C: Integrated Tooling Storage

Easy and transparent storage of Multi-Modules for the MAS-350 autofeed in combination with separate storage for the Shuttle Modules and upper and lower tools. Both storage positions located where you need the tooling, eliminating unnecessary searching and walking around, allowing for faster and easier tooling changeovers.



A: MAS 350 – NEW MODULAR AUTOFEED SYSTEM



B1: NEW T-BRACKET AND SHUTTLE with integrated Connectors eliminating alignment challenges



B2: PRE-ALIGNED LOWER TOOL HOLDERS Alignment pins allow for changeover to any other standard Haeger tool holder without alignment verification



C: INTEGRATED TOOLING STORAGE

Best Workpiece Accessibility

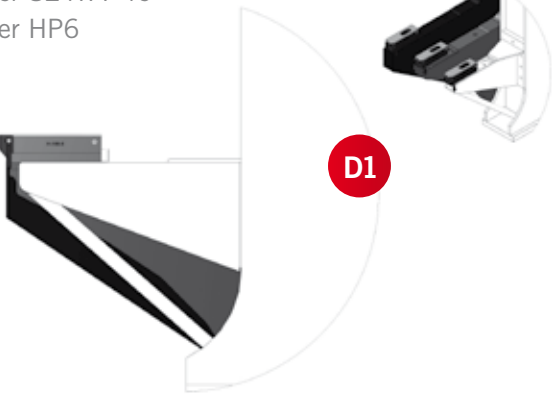
D1. Lower Support Arm
200mm more access on lower support arm – matching the HP 6 model.

Through the use of built-in reinforcements and a change in frame design, the 824 WindowTouch-4e now offers more accessibility on the lower support arm compared to the ‘Legendary HP 6’.

D2. The ‘Star Design’ Turret Insertion System (TIS) allows for access in ‘U-Shaped profiles’. Compared to a round Turret Design, the Star Design offers maximum accessibility for a variety of pre-formed workpieces. The Turret Insertion System clamps the tools in position while providing Position Feedback, eliminating the famous ‘missing fastener’ error.

D3. The turret arms are individually removable, allowing for even more access while the position feedback (and process control) remains present.

- Haeger 824 Plus, 824WT-1, 824WT-2, 824WT-3
- Haeger 824WT-4e
- Haeger HP6



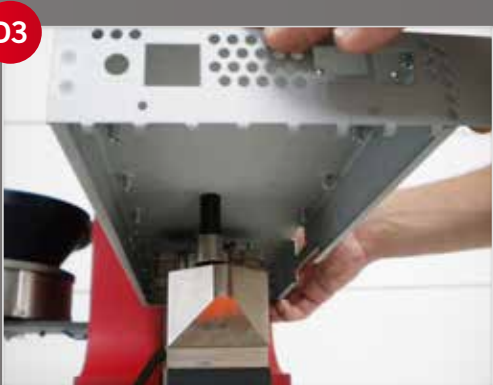
E1. Manual J-Frame in combination with 24" (610mm) throat depth. Changeover from Automatic Top Feeding to using a J-Frame is now done within seconds. This makes it a more attractive to use feature for a variety of pre-formed workpieces. The Haeger J-Frame solution allows for insertion under flanges up to 1mm from the bending line.



E2. J-Frame in combination with ABFT (Automatic Bottom Feed Tool) Unique in the industry is the Automatic Bottom Feeding of Nuts in combination with a J-Frame to maximize productivity and increase ergonomics for those workpieces requiring installation under return flanges.



D2 The ‘Star Design’ Turret Insertion System (TIS) allows for access in ‘U-Shaped profiles’. Compared to a round Turret Design, the Star Design offers maximum accessibility for a variety of pre-formed workpieces



D3 The Turret arms are individually removable, allowing for even more access while the position feedback (and process control) remains present

Best Operator Ergonomics:

F. Operator control pendant can be adjusted in 6 directions, allowing for easy access and a great view of screen instructions while standing up or sitting down.

Energy Saving:

G. New variable speed hydraulics reduce energy consumption up to 30% compared to conventional hydraulic systems.

Easier and Faster Programming:

H1: The ALL NEW intuitive Version 11 Insertion Logic® Software with Insertion Graphics and Integrated Statistic Process Control allows for more functionality while reducing programming time.

H2: V 11 Insertion Logic® provides you with the recommended operating time for the part programmed and monitors and stores any corrected errors during the insertion process, allowing you to provide this data with your deliveries to your customers.

I. Automatic Tooling:

Upper Tools, Lower Tools and Shuttle Plates are compatible with previous Haeger machine models. The One-Piece Multi-module for the MAS-350 Autofeed System reduces total components per set from 5 to 4.

I1: Shuttle Standoff Set

I2: Shuttle Nut Set

I3: ABFT (Automatic Bottom Feed) Set



Shuttle Standoff Set



Shuttle Nut Set

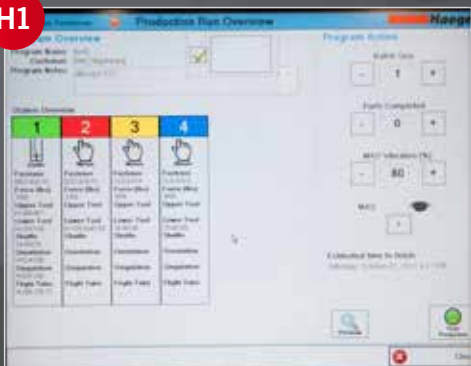
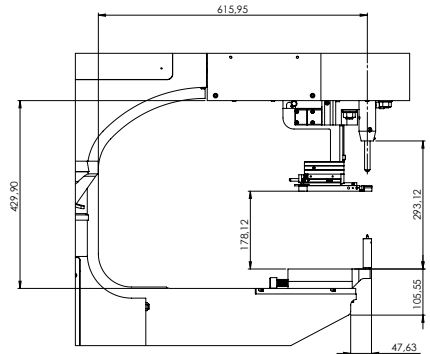
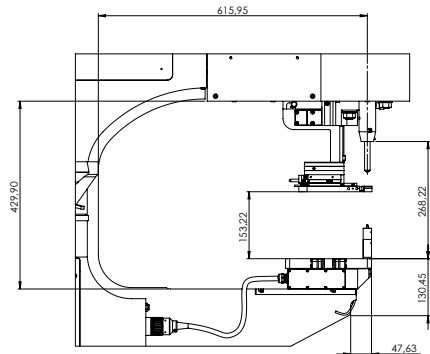


ABFT Set
(Auto Bottom Feed)

59" 1499 mm

Dimensions:
Length 59" x 1499 mm
Wide 38" x 966mm
Tall 94" x 2388mm

94" 2388 mm



824 OneTouch-4e XYZ-R
Machine Specifications and Dimensions:

Force Range	Adjustable 1000 lbs. (4.46k) to 16000 lbs. (72kN) - Optional 20000 lbs. (90kN) modification available
Throat Depth	24" (610mm)
Stroke Length	adjustable 0 to 8.5" (0 to 220mm)
Electrical	208 to 575V 3 phase - 50 or 60 Hz
Motor	5 HP
Oil Tank Reservoir	22 gallons (83 liters)
Speed	up to 1400 insertions per hour
Repeatability	+/- 2% of force setting
Footprint	(LxWxH) 4900mm x 4500mm x 2388mm (16ft x 14ft x 7.8ft)
Fastener Range	256 to 3/8" (M2 to M10)
Workpiece Range	24" x 48" (600mm x 1200mm)
Workpeace Weight	30 lbs (13.5 kg)

For more information on the 824 OneTouch-4e XYZ-R and other Haeger products, visit our website at www.haeger.com or contact your authorized Haeger distributor.

Always the most cost effective solution
for your fastener insertion challenge!



4 Axis Fully Robotic System:
Combining the Highest Productivity
with Total Process Control...

824

OneTouch 4^e XYZ-R

Fastener Insertion System



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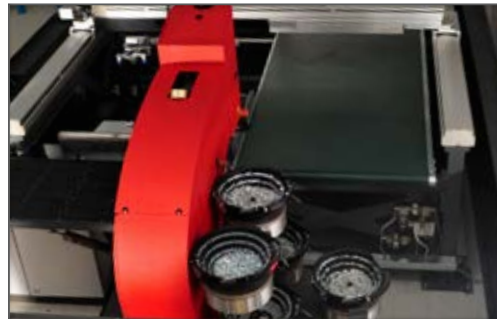
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A Up to 6 MAS-350 Modular Autofeed Systems can be installed



B Programming of the next workpiece during a production run



Creating Hardware Insertion Profit Centers

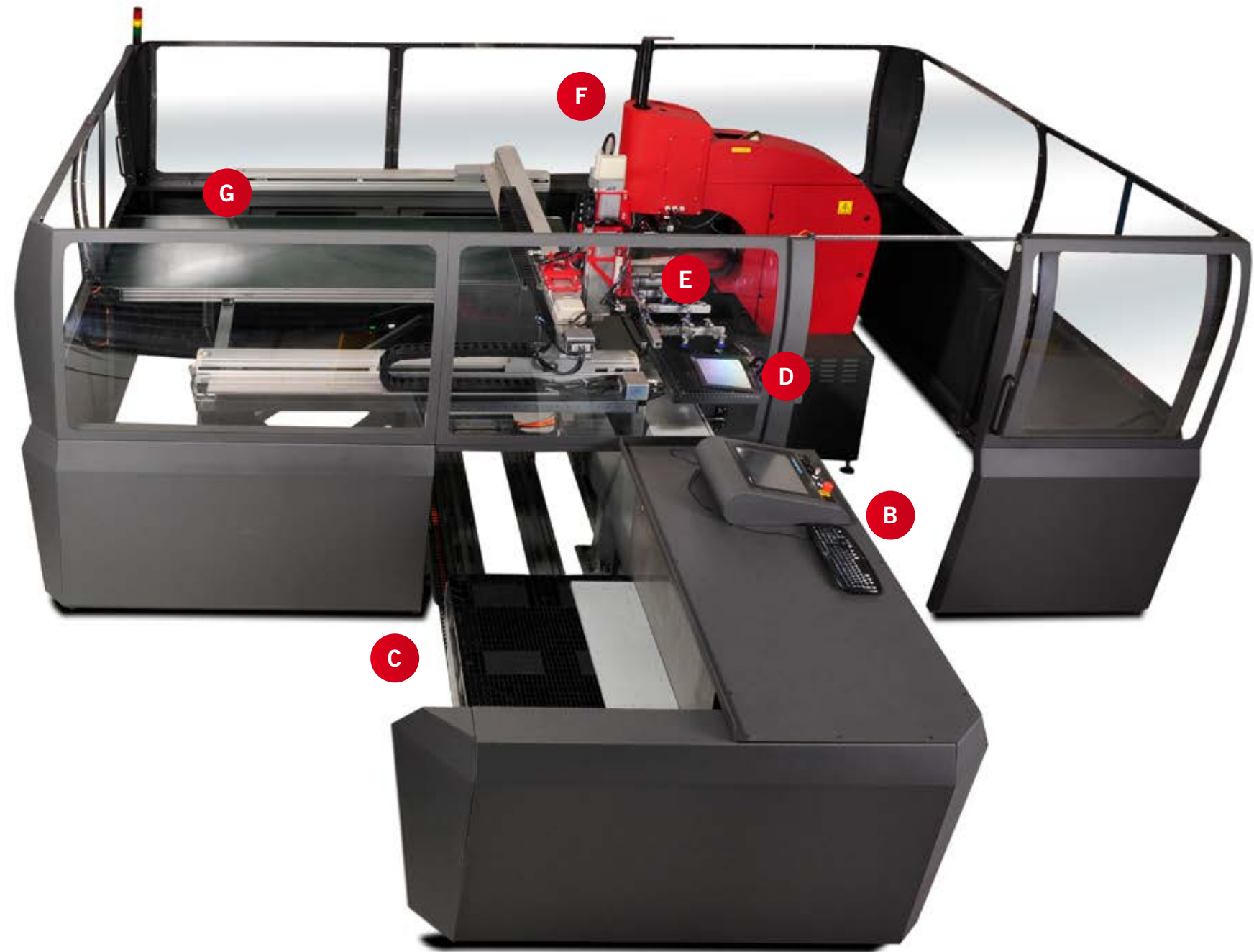
The new 824 OneTouch-4e XYZ-R offers:

1. Zero errors in your hardware insertion process
2. Easy setup and programming in less than 15 minutes per new setup
3. Insertion into sheets up to 24" x 48" (600mm x 1200mm) from 2 sides
4. Unmanned production time of up to 8 hours depending on workpiece sizes

All the advantages of the Haeger 824OneTouch-4e machine combined with an easy to program and easy to set up Robotic Sheet Handling System.

The 824 OneTouch-4e XYZ-R is ideal for:

- Flat, single, large workpieces with fasteners required in both sides of the workpiece.
- Multiple, flat workpiece with a variety of up to 6 different fasteners
- Cell environment setup to work simultaneously with 1 operator in combination with a manual insertion machine or press brake



C Automatic loading of a pallet of workpieces.



D Inserting up to 6 different pieces of hardware in 1 single pass in both sides of the workpiece.



E Alignment of the work piece on the Auto-Load table.



F Fastener Removal System will detect and automatically remove the wrong length studs or standoffs.



G Stacking parts on the transport belt.



618 MSP *e* Machine Specifications and Dimensions:

Force Range	900 lbs. (4Kn) to 12,000lbs. (53Kn)
Repeatability	+/- 2% of force setting
Throat Depth	18" (457mm)
Stroke Length	0 to 8.0" (0 to 200mm)
Adjustable up stroke	3/8" – 6" (10 – 150mm)
Oil Tank Reservoir	10 gallons (39 liters)
Motor	2 HP
Electrical	200v to 575v 3 phase 50 or 60hz.
Foot print dimensions	(LxWxH) 1143mm x 467mm x 2336mm (44" x 34" x 92")
Fastener Range	M2 to M10
Clinching Capability	1mm to 6mm combined thickness

For more information on the 618MSPe and other Haeger products, visit our website at www.haeger.com or contact your authorized Haeger distributor.

Always the most cost effective solution
for your fastener insertion challenge!



Safe, Dependable, Versatile,
Affordable ... Haeger !

618

MSP *e*

Fastener
Insertion
System



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A: 618MSP *e*

6 ton (53Kn) ram force and 18 inch (457mm) throat depth with adjustable ram retract position. Reliability/energy efficiency of a fully hydraulic machine. Equipped with Haeger's patented safety system. **NEW** features added to the standard equipment: Tooling Protection System and Batch Counter.

B: Positive Stop System (Optional)

The Positive Stop System provides an easily adjustable method of precisely maintaining the stopping point of the machine cylinder. The system is particularly well suited for improving uniformity on soft, delicate work pieces. It is also effective when inserting small hardware. In addition to aluminum, the system also provides excellent insertion results on a wide variety of softer materials such as fiberglass, printed circuit boards, and many plastic or composite materials.

C: MAS 350 Modular Autofeed System (Optional)

The Modular Autofeed System can feed nuts, studs and standoffs in the size M2 till M10. The maximum length of the studs and standoffs is 30mm.

D: Built-in TPS Controls

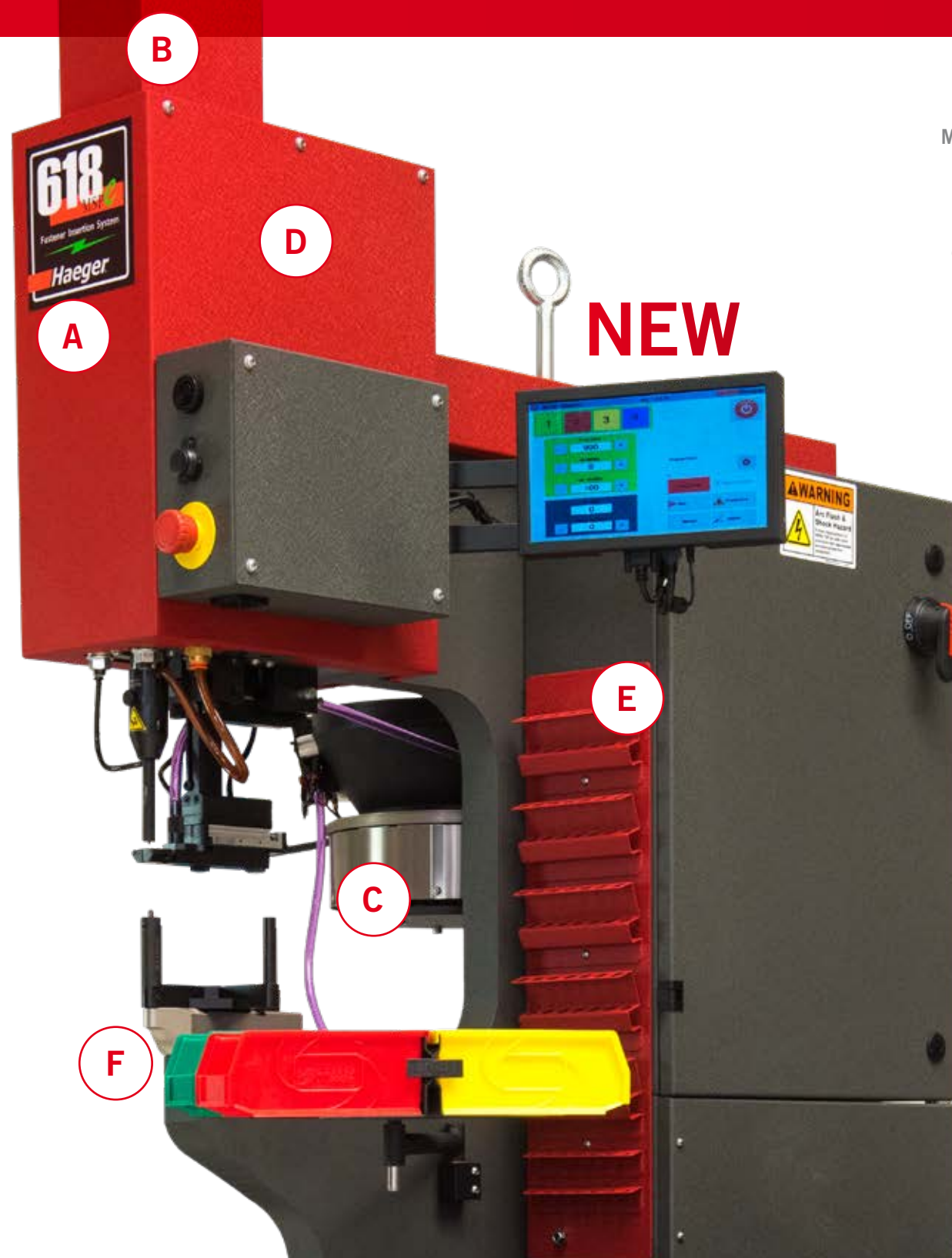
The Tooling Protection System (TPS) is designed to protect both the tooling and the workpiece from damage.

E: Tooling rack

Quick and easy access to tooling.

F: Turret Insertion System (Optional)

Install up to 4 different fasteners in 1 Single Part Handling. (Option includes required Software for Single Part Handling Programming)



Multi-Shuttle Tooling Platform for Nuts, Studs and Standoffs.

The Multi-Shuttle Platform provides a universal quick and easy tool change over between nuts, studs and standoffs – enabling 2-minute total tool changes without realignment. Changeover between Manual and Automatic Tooling setup is faster and easier.

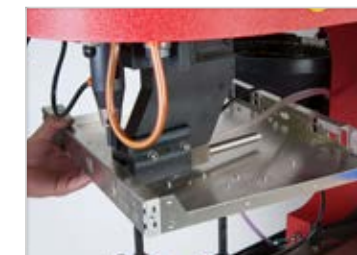


AUTOMATIC BOTTOM FEED TOOLING (ABFT)

for inserting nuts into flat parts as well as into hard-to-reach holes. Such as those on the underside of a flange.



Automatic Bottom Feed J-Frame is used for those difficult to reach flanges



Manual Tooling J-Frame is used for small boxes and short reverse flanges



C

NEW



Single Station settings:

Operators can set the Force, Dwell and Up Travel from this single station screen.



Multi-Station:

Multi-Station is an option that allows the operator to insert more than one fastener in a program. Each station can be configured to have its own individual Force, Dwell Time and Up Travel.



Programs:

Up to 999 programs can be stored



MAS Control Screen:

Operators can turn on and off the auto feed and set eject time and vibration from this screen.