

## Safety – Operation – Maintenance

Keep this document in a safe place

Read and understand this manual before operating your air tool



# Clear Revolution Flap Wheel



1-1/2" Shroud Models with Prefix: 674-A2432, 674-A2532, 674-A2632, 674-A2732, 774-A2432, 774-A2532, 774-A2632, 774-A2732

Designed for 1-1/2" flap wheels on a right angle or straight grinder

Maximum Speed: 25,000 RPM, Recommended Speed: 12,000 RPM, Maximum Abrasive size: 1-1/2"

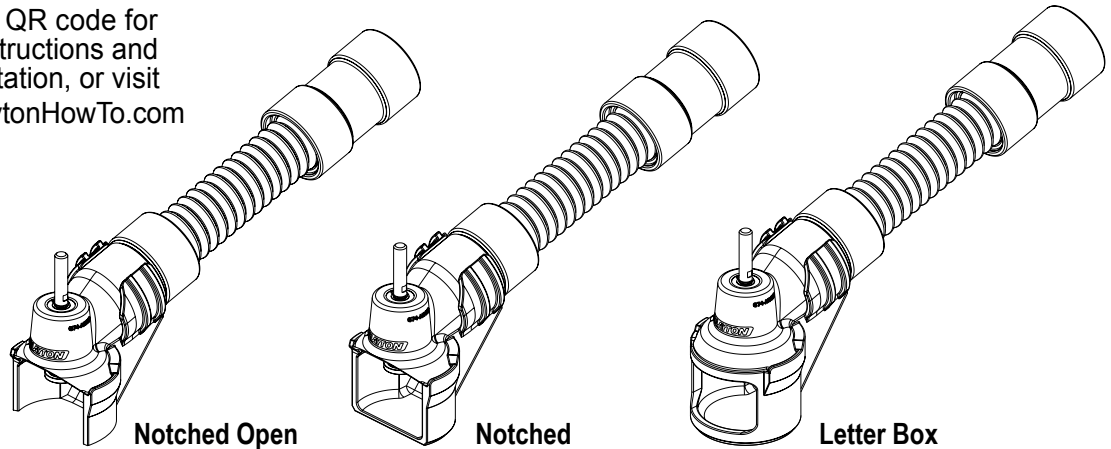
2-1/2" Shroud Models with Prefix: 674-A2448, 674-A2548, 674-A2648, 674-A2748, 674-A2948, 774-A2448, 774-A2548, 774-A2648, 774-A2748, 774-A2948

Designed for 2-1/2" flap wheels on a right angle or straight grinder

Maximum Speed: 25,000 RPM, Recommended Speed: 12,000 RPM, Maximum Abrasive size: 2-1/2"



Scan this QR code for  
online instructions and  
documentation, or visit  
[www.ClaytonHowTo.com](http://www.ClaytonHowTo.com)



## ⚠ WARNING

Follow all safety rules for the protection of operating personnel as well as adjacent areas. Always inspect and maintain this tool before use. Clayton Dust Collection Shrouds are designed for use with a variety of air tools. Please refer to the Air Tool Manufacturer's Documentation for Safety, Operations and Maintenance of all air tools used in conjunction with Clayton Dust Collection Shrouds.

### SAFETY LEGEND



#### ⚠ WARNING

Read and understand operator's manual before using this equipment.



#### ⚠ WARNING

Eye protection is required when operating this equipment.



#### ⚠ WARNING

Hearing protection is required when applicable PEL (permissible exposure limit) is exceeded.



#### ⚠ WARNING

Respiratory protection is required when applicable PEL (permissible exposure limit) is exceeded.

### ⚠ WARNING

Some dust created by sanding, grinding, drilling, and other construction activities contain chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints
- Crystalline silica from bricks and cement and other masonry products
- Chromium and other heavy metals from paint and primers

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.

Clayton Dust Collection Shrouds aid in the collection of airborne dust and debris, but the level of collection is dependent upon the performance of the vacuum to which it is connected, the speed of the air tool used, and the way in which a tool is handled by the user. Do not assume that the Dust Collection Shroud is collecting 100% of the dust.

# SAFETY INSTRUCTIONS

Please refer to the Air Tool Manufacturer's Documentation for Safety, Operations, and Maintenance of all air tools in conjunction with Clayton Dust Collection Shrouds.

Carefully read all instructions before operating any Clayton Dust Collection Shroud.

Products offered by Clayton should not be modified, converted or otherwise altered from the original design without express written consent from Clayton Associates, Inc.

## Tool Intent

Clayton Dust Collection Shrouds are designed for use with a variety of air tools and provide dust collection during operations such as grinding, deburring, blending and polishing operations on materials such as metal, plastic, fiberglass, composites, rubber, glass and stone. Please refer to the air tool manufacturer's documentation for Tool Intent of all air tools used in conjunction with Clayton Dust Collection Shrouds.

**Do not use this tool for anything other than its intended applications.**

**This tool is not intended for use in potentially explosive atmospheres and is not insulated against contact with electrical power.**

**Clayton Dust Collection Shrouds are not designed to replace manufacturer installed safety guards and shields.**

**Never remove the factory installed safety devices from air tools used in conjunction with Clayton Dust Collection Shrouds.**

## Accessories

- Do not use abrasives, or other accessories that exceed the speed rating of this Dust Collection Shroud
- Do not use an air tool that exceeds the speed rating of this Dust Collection Shroud
- Do not use abrasives that exceed the size rating of this Dust Collection Shroud
- Never replace the mandrels on Clayton Dust Collection Shrouds with other commercially available mandrels. Mandrels included with the shrouds have been engineered and balanced specifically for this application
- Before mounting accessories, visually inspect for defects. Do not use defective accessories
- Follow tool specifications before choosing size and type of accessory

## WARNING

- Always wear eye protection. Operator of tool is responsible for following: eye, face, respiratory, hearing and body protection.

## CAUTION

- Hand, wrist and arm injury may result from repetitive work, motion and overexposure to vibration.
- Keep hand and clothing away from working end of the tool
- Be sure that any loose clothing, hair and all jewelry is properly restrained

## CAUTION

- Never exceed the RPM rating of the shroud or abrasive.
- Disconnect air hose from tool when changing abrasives, removing the shroud, or otherwise handling the working end of the tool

## CAUTION

**DO NOT USE** if tool vibration is excessive. Correct cause, and retest to ensure safe operation

- Make sure that work area is uncluttered, and others are at a safe range from the tools and debris
- Use a vise or clamping device to hold work piece firmly in place
- Do not apply excessive force on tool or apply "rough" treatment to it
- Potentially explosive atmospheres can be caused by dust and fumes resulting from sanding or grinding. Always use dust extraction or suppression systems which are suitable for the material being processed
- Use only the proper size and style abrasive for the shroud, flap wheel, and mandrel
- Oversized or improper abrasives may contact the shroud and cause premature wear or failure

## GETTING STARTED

### Hose Length

The vacuum hose included with the tool may be shortened to suit your particular needs. The hose can be easily cut to the desired length with a knife or hose cutting tools. Follow all safety instructions provided with cutting tools to prevent injury.

### Connecting the Shroud

**Always disconnect the tool from power before connecting or disconnecting the Dust Collection Shroud.**

- The mandrel is integral to the shroud and should not be removed. Connect the mandrel and shroud to the air tool as a single unit
- This tool is designed to work with air tools that use a collet. See illustrated parts breakdown to identify the collet size that matches your mandrel
- Loosen the tool collet
- Slide the end of the shroud mandrel into the tool collet
- Tighten the collet, maintaining a small space (1-2 mm) between the end of the collet and the shroud
- The shroud should rotate freely around the mandrel when properly connected
- Hold the vacuum hose firmly when activating the tool to prevent the shroud from rotating
- If excessive vibration occurs, stop using the tool immediately, find, and correct the cause

### Replacing the Flap Wheel

**Always disconnect the tool from power before changing abrasives.**

- Remove the shroud skirt
- Hold the collet to prevent rotation or hold the shaft of the shroud with the supplied wrench
- Unthread the existing flap wheel by turning counter clockwise.
- Thread on the new flap wheel by turning clockwise
- Replace the Shroud Skirt

## MAINTENANCE INSTRUCTIONS

### Important

A Preventative Maintenance Program is recommended whenever portable power tools are used.

### Routine Maintenance

- Use only genuine Clayton replacement parts to ensure quality
- Clean the tool with a damp cloth. Do not use petroleum based cleaners
- Visually inspect shafts, bearings, and abrasives for frays, visible damage and signs of deterioration. Replace damaged or worn components before use

## TROUBLE SHOOTING

### Excessive vibration is felt during tool use

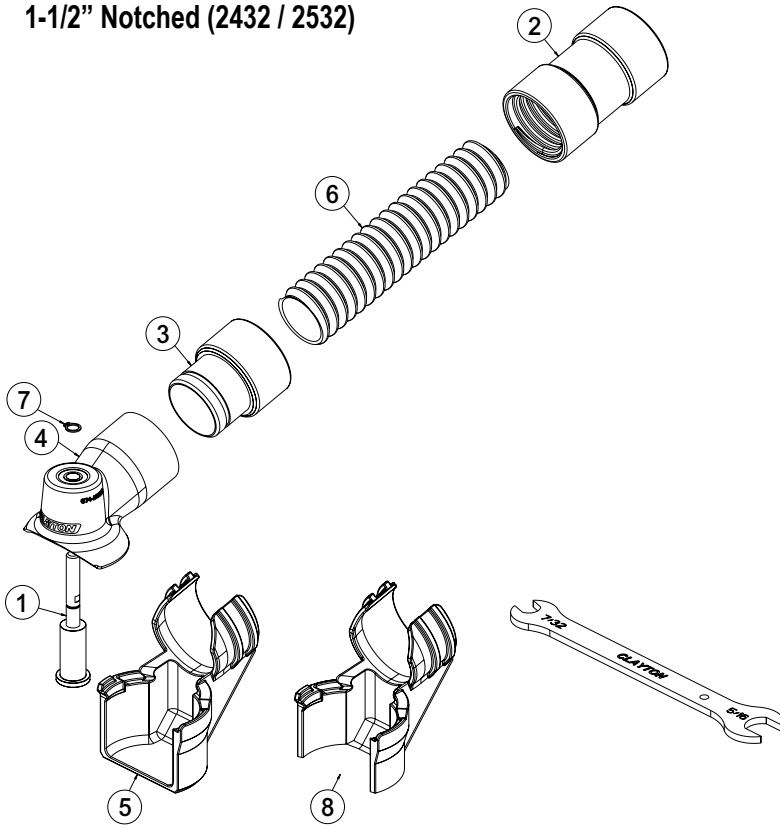
- Shroud mandrel may be damaged or bent – stop using tool immediately, identify cause and correct
- Flap Wheel may be worn or damaged – replace flap wheel

### Excessive dust is evident during operation

- Clayton Dust Collection Shrouds reduce airborne (respirable) dust. You may see some larger debris not being collected that may require vacuuming at the end of grinding operations. This is normal
- Vacuum may be turned off, or vacuum filters may be clogged – check vacuum to ensure that it is operating properly, and that filters are clean
- Hose or shroud may be blocked – disconnect all hose fittings, and ensure that the pathway from shroud to vacuum port is clear
- Abrasive grit may be too coarse. On softer materials, coarse abrasives may generate overwhelming amounts of dust – switch to a finer grit abrasive, and or use a slower speed tool

## ILLUSTRATED PARTS BREAKDOWN

### 1-1/2" Notched (2432 / 2532)



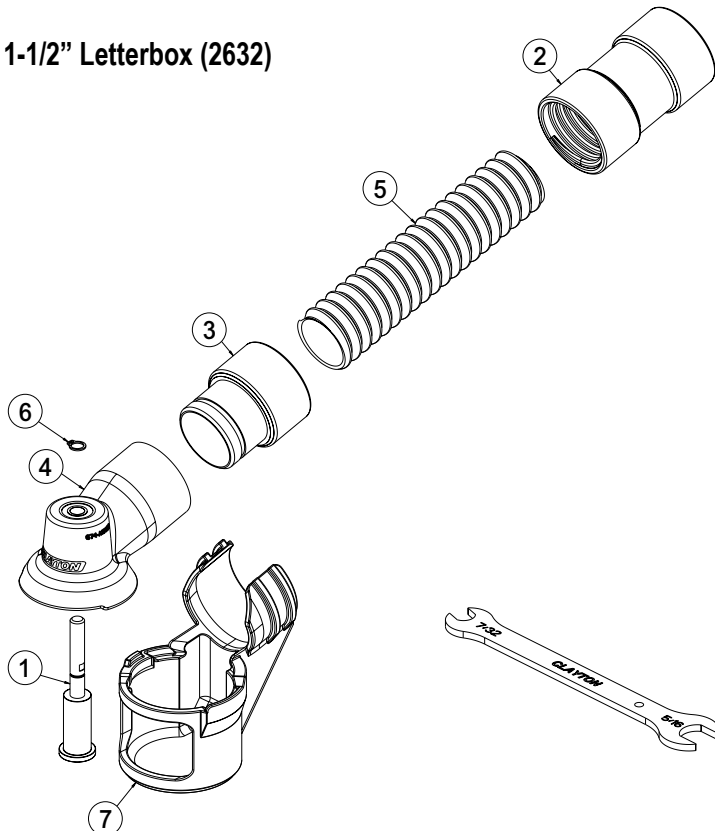
#	ITEM NO	DESCRIPTION
1	672-023	Clear Rev Flap Wheel Mandrel, .250"
2	673-M16C16	Swivel Coupler, 1" To 1" Hose
3	673-M16M	Swivel Connector, 1" Male
4	674-A25320	2" Clear Rev Notched Throat Raw Part
5	674-SS-211	Carbon Fiber Skirt 2 X 1" Notched Throat Bottom
6	921-1000WBKSC	1" Vac Hose Wire Supported Static Conductive
7	929-RR.250EX	Retaining Ring 1/4" External
8	674-SS-210	Carbon Fiber Skirt 2 X 1" Notched Throat
*	672-0WR	Wrench For Shrouds

#### MANDREL OPTIONS

Shrouds with a 674- prefix are supplied with a 1/4inch mandrel to fit a 1/4inch collet. Shrouds with a 774- prefix are supplied metric mandrels per the table below

ITEM NO SUFFIX	REPLACEMENT MANDREL	MANDREL SIZE	COLLET SIZE
-600L	672-021-600L	6MM LONG	6MM

### 1-1/2" Letterbox (2632)



SEQ	ITEM NO	DESCRIPTION
1	672-023	Clear Rev Flap Wheel Mandrel, .250"
2	673-M16C16	Swivel Coupler, 1" To 1" Hose
3	673-M16M	Swivel Connector, 1" Male
4	674-A26320	Clear Rev 2" Throat Raw Part
5	921-1000WBKSC	1" Vac Hose Wire Supported Static Conductive
6	929-RR.250EX	Retaining Ring 1/4" External
7	674-SS-201	Carbon Fiber Skirt 2 X 1" Letterbox Throat Bottom
*	672-0WR	Wrench For Shrouds

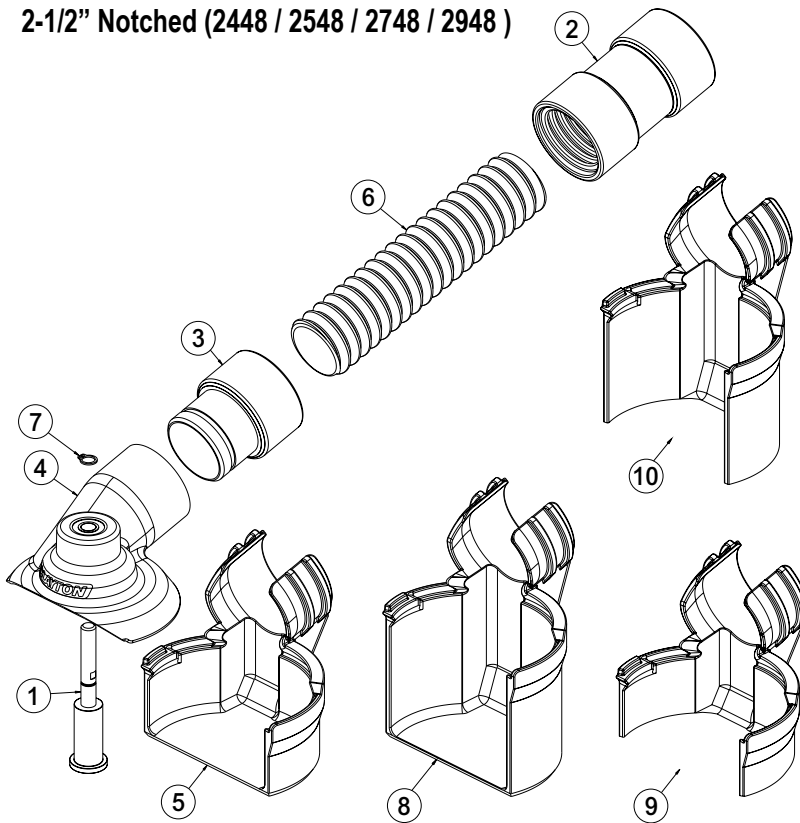
#### MANDREL OPTIONS

Shrouds with a 674- prefix are supplied with a 1/4inch mandrel to fit a 1/4inch collet. Shrouds with a 774- prefix are supplied metric mandrels per the table below

ITEM NO SUFFIX	REPLACEMENT MANDREL	MANDREL SIZE	COLLET SIZE
-600L	672-021-600L	6MM LONG	6MM

## ILLUSTRATED PARTS BREAKDOWN

### 2-1/2" Notched (2448 / 2548 / 2748 / 2948 )



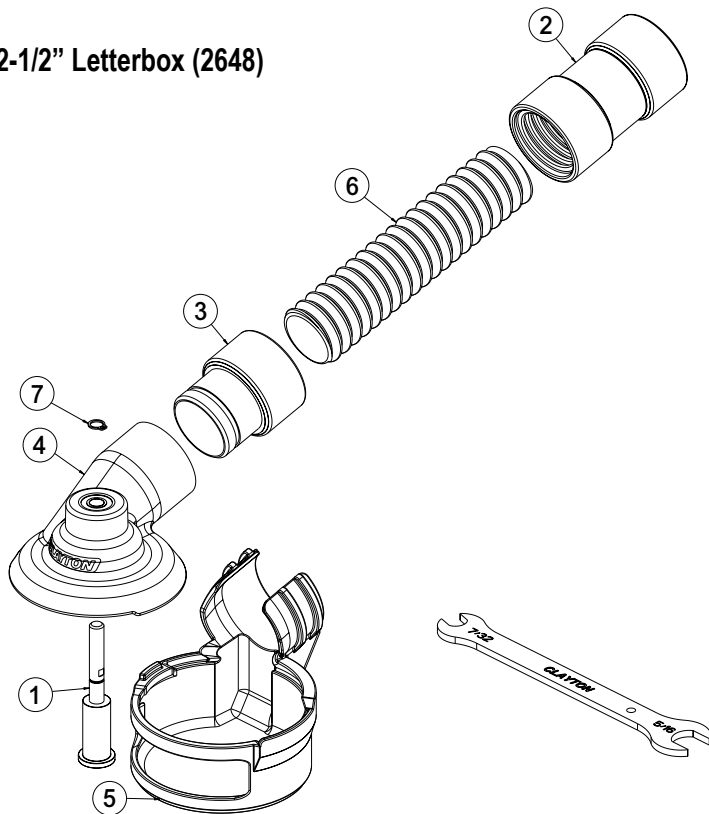
SEQ	ITEM NO	DESCRIPTION
1	672-023	Clear Rev Flap Wheel Mandrel, .250"
2	673-M16C16	Swivel Coupler, 1" To 1" Hose
3	673-M16M	Swivel Connector, 1" Male
4	674-A25480	Clear Rev 3" Notched Throat Raw Part
5	674-SS-311	Carbon Fiber Skirt 3 x 1" Notched Throat Bottom
6	921-1000WBKSC	1" Vac Hose Wire Supported Static Conductive
7	929-RR.250EX	Retaining Ring 1/4" External
8	674-SS-321	Carbon Fiber Skirt 3 X 2" Notched Throat Bottom
9	674-SS-310	Carbon Fiber Skirt 3 x 1in Notched Throat Open Bottom
10	674-SS-320	Carbon Fiber Skirt 3 x 2in Notched Throat Open Bottom
*	672-0WR	Wrench For Shrouds

#### MANDREL OPTIONS

Shrouds with a 674- prefix are supplied with a 1/4inch mandrel to fit a 1/4inch collet. Shrouds with a 774- prefix are supplied metric mandrels per the table below

ITEM NO SUFFIX	REPLACEMENT MANDREL	MANDREL SIZE	COLLET SIZE
-600L	672-021-600L	6MM LONG	6MM

### 2-1/2" Letterbox (2648)



SEQ	ITEM NO	DESCRIPTION
1	672-023	Clear Rev Flap Wheel Mandrel, .250"
2	673-M16C16	Swivel Coupler, 1" To 1" Hose
3	673-M16M	Swivel Connector, 1" Male
4	674-A26480	3" Clear Rev Throat Raw Part
5	674-SS-301	Carbon Fiber Skirt 2 X 1" Letterbox Throat Bottom
6	921-1000WBKSC	1" Vac Hose Wire Supported Static Conductive
7	929-RR.250EX	Retaining Ring 1/4" External
*	672-0WR	Wrench For Shrouds

#### MANDREL OPTIONS

Shrouds with a 674- prefix are supplied with a 1/4inch mandrel to fit a 1/4inch collet. Shrouds with a 774- prefix are supplied metric mandrels per the table below

ITEM NO SUFFIX	REPLACEMENT MANDREL	MANDREL SIZE	COLLET SIZE
-600L	672-021-600L	6MM LONG	6MM

## ILLUSTRATED PARTS BREAKDOWN

The following Clayton ventilated abrasives are recommended for maximum dust collection. Additional grits and minerals are available.

**FLAP WHEEL 1-1/2IN X 1IN**

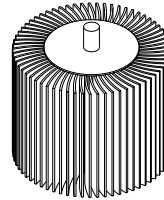
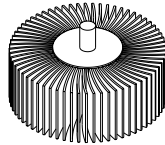
ITEM NO	DESC
807-24F16-003	COARSE
807-24F16-006	MEDIUM
807-24F16-009	FINE
807-24F16-060	60
807-24F16-080	80
807-24F16-120	120

**FLAP WHEEL 2-1/2IN X 1IN**

ITEM NO	DESC
807-40F16-003	COARSE
807-40F16-006	MEDIUM
807-40F16-009	FINE
807-40F16-060	60
807-40F16-080	80
807-40F16-120	120

**FLAP WHEEL 2-1/2IN X 2IN**

ITEM NO	DESC
807-40F32-003	COARSE
807-40F32-006	MEDIUM
807-40F32-009	FINE
807-40F32-060	60
807-40F32-080	80
807-40F32-120	120



## LIMITED LIFETIME WARRANTY TERMS AND CONDITIONS

### Warranty Terms

Clayton Associates, Inc. guarantees its manufactured products against defects in materials or workmanship and will either repair or replace all parts that prove defective under normal use during the lifetime of the products. The warranty period shall commence from the date of paid invoice.

This warranty does not cover (a) repairs due to normal wear, accident, neglect, misuse, or use other than as indicated in the instruction booklet (b) products manufactured by third parties and distributed by Clayton (c) wear items such as bearings, rotor blades, regulators, valve stems, levers, shrouds, guards, O-rings, seals, gaskets, motor brushes, and other wearable parts.

### Repair within the Continental US

During the first 90 days of the warranty period, Clayton will provide parts and labor to the customer's site at no charge or pay freight costs associated with returning the products for repair to a Clayton selected service location and repair the product at no charge. Clayton personnel will determine the best way to repair the product.

Past 90 days, Clayton will provide parts to the customer's site at no charge or the customer may ship the product to a Clayton selected service location at customer's expense and Clayton will repair the product at no charge and provide return shipping.

### Repair Outside the Continental US

Clayton will provide parts to the customer's site at no charge or the customer may ship the product to a Clayton selected service location at customer's expense and Clayton will repair the product at no charge and provide return shipping.

### Limitation of Liability

Clayton shall not in any event be liable for any damages, loss of production time or profits, whether based on contract, warranty, negligence, strict liability or otherwise, including without limitation any consequential, incidental or special damages, arising with respect to the equipment or its failure to operate.

Clayton Associates, Inc. makes no other warranty or representation of any kind, except that of title, and all other warranties, express or implied, including warranties of merchantability or fitness for any particular purpose, are hereby expressly disclaimed.

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## EC DECLARATION OF CONFORMITY

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Clayton Associates, Inc. of 1650 Oak Street, Lakewood New Jersey 08701 U.S.A. declare on our own responsibility that the interchangeable equipment,

### Clear Revolution Flap Wheel Shrouds

- Shroud Models **674-A2432, 674-A2532, 674-A2448, 674-A2548, 674-A2632, 674-A2648, 674-A2732, 674-A2748 774-A2432-xxxx, 774-A2532-xxxx, 774-A2448-xxxx, 774-A2548-xxxx, 774-A2632-xxxx, 774-A2648-xxxx, 774-A2732-xxxx, 774-A2748-xxxx, 674-SS-201, 674-SS210, 674-SS-211, 674-SS-301, 674-SS-310, 674-SS-311, 674-SS-321**

- Where xxxx indicates the mandrel size
- When used in combination with a pneumatic hand-held power unit having a maximum rotation speed not exceeding 25,000 revolutions per minute having an adjustable chuck or otherwise capable of securely holding a mandrel 3.2 - 6.35mm in diameter

Are designed and manufactured in compliance with the essential requirements and other relevant provisions of the following applicable directives:

- **Machinery Directive 2006/42/EC**

Compliance has been obtained by application of the following standards:

- **EN ISO 12100:2010-11**

The legally authorized entity, established in the EU for retaining compiling the technical file is ExVeritas Limited, Unit 16-18, Abenbury Way, Wrexham Industrial Estate, Wrexham, LL13 9UZ, United Kingdom.

**File Number: 18FILE0423**

Subject to use for the purpose for which it was designed in accordance with relevant standards and with the manufacturer's recommendations. We hereby declare that the equipment specified above conforms to the listed Directives and Standards.

Brad Clayton  
President  
Clayton Associates, Inc.

Place of Issue: Lakewood, New Jersey, USA November 23, 2018







**Clayton products are proudly made in the USA**

