



BURR KING MFG. CO., INC

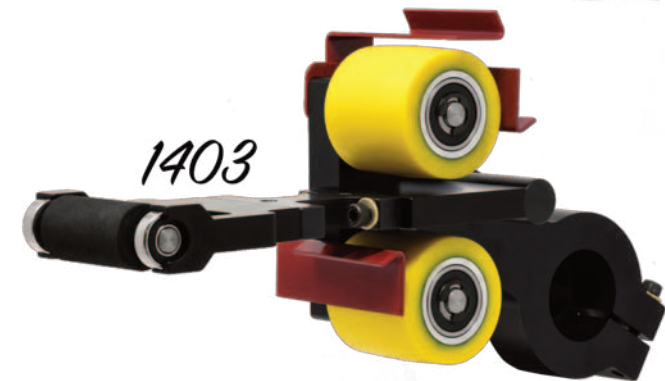
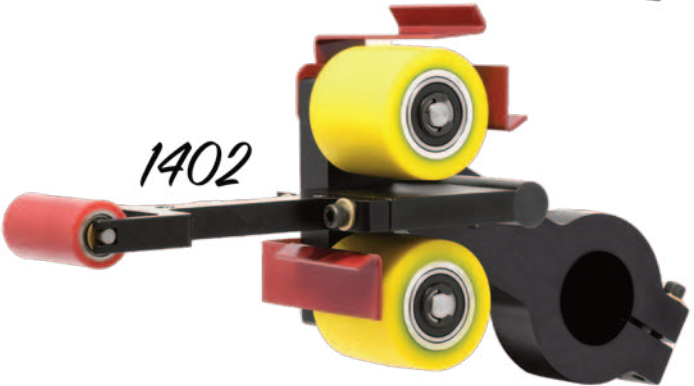
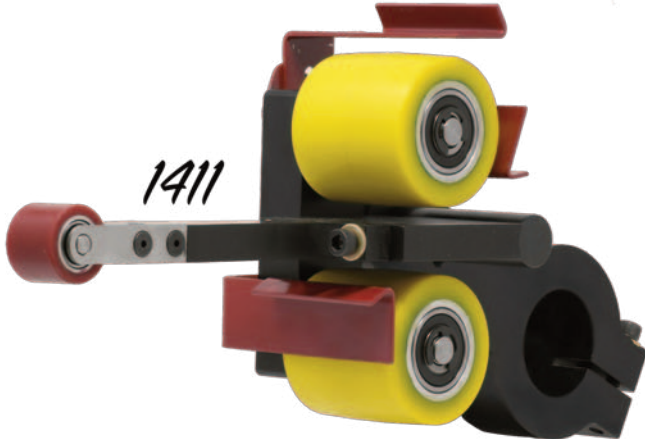
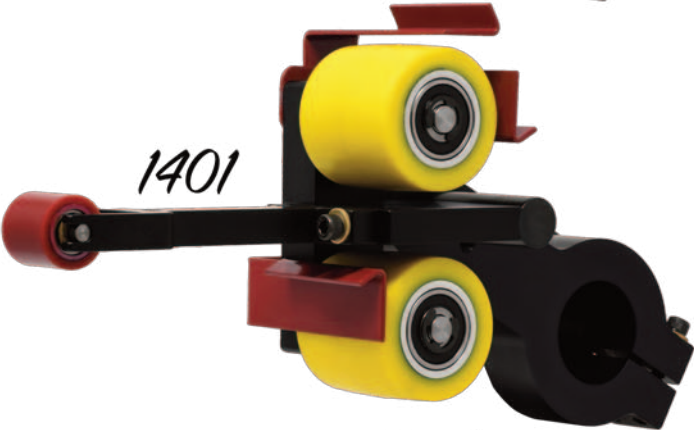
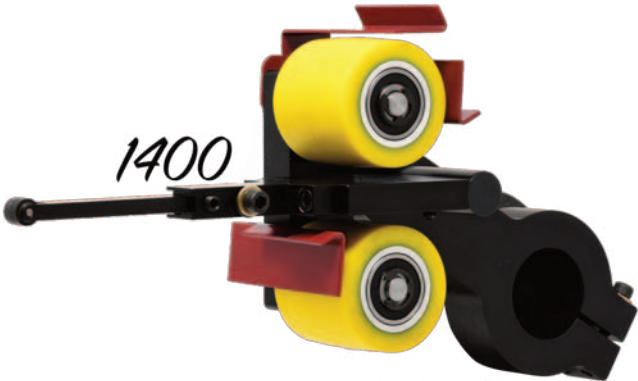
1220 Tamara Lane

Warsaw, MO 65355

www.burrking.com

(660)438-8998 • Fax (660)438-8991

# 14XX SMALL WHEEL ATTACHEMENT





**BURR KING MFG. CO., INC**

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October 2022

## **LETTER OF AUTHENTICITY**

This letter is to certify that all Burr King Belt grinders, Disc grinders, Polishing machines Vibra King Chambers and Bowls are manufactured and assembled in the United States of America.

*(Tariff number 847990 criterion A)*

A handwritten signature in black ink, appearing to read "Don MacCarthy".

**Don MacCarthy**

President



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**Burr King Manufacturing Company, Inc. warrants the below product to be free of defects in material and workmanship. The period of warranty is 1 year (90 days for vibratory bowls of 20 quart and lesser volume) from the date of purchase. No warranty is provided for products that have been modified, abused, handled carelessly, where repairs have been made or attempted by others, or for freight damage. No warranty is provided for three phase electric motors, controllers, etc. when the motors, controllers are not protected by magnetic starters that were supplied and installed by Burr King Manufacturing Company, Inc. No other warranty, written or verbal is authorized by Burr King Manufacturing Company, Inc.**

During the warranty period Burr King Manufacturing Company, Inc (or its authorized suppliers or agents) will replace or repair the below product without charge if the product is found by Burr King Manufacturing Company, Inc. to be defective. To receive warranty services you must contact Burr King Manufacturing Company, Inc. and receive authorization for warranty service. Unless otherwise authorized by Burr King Manufacturing Company, Inc. Products (see \* below) must be returned to the factory to receive warranty service.

*\*Motors, speed controllers, and certain other accessories are warranted by their respective manufacture. To receive warranty service on these items you must contact a brand label service center that supports the product in need of service. Burr King Manufacturing Company; Inc. will assist you in locating a service center.*

**For the first thirty days after purchase, and when Burr King Manufacturing Company, Inc. authorizes warranty service, we will pay normal and necessary surface freight charges both ways (except for items in \*). After thirty days the customer is responsible for all freight charges. Where possible Burr King Manufacturing Company, Inc. may elect to make on site service and/or repairs necessary to return the product to serviceable condition.**

To assure prompt warranty service it is necessary that you complete and return the below warranty information to Burr King Manufacturing Company, Inc. please **FAX, MAIL, email to info@burrking.com or Submit online** at your convenience.

Product model: \_\_\_\_\_ Serial number: \_\_\_\_\_  
Date Purchased: \_\_\_\_\_ Purchased from: \_\_\_\_\_  
Address: \_\_\_\_\_ City: \_\_\_\_\_ State/Prov: \_\_\_\_\_ Postal code \_\_\_\_\_

Your company name: \_\_\_\_\_  
Address: \_\_\_\_\_ City: \_\_\_\_\_ State/Prov: \_\_\_\_\_ Postal code \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_  
Your name: \_\_\_\_\_ Title: \_\_\_\_\_

How did you learn about Burr King products?  
Tradeshow \_\_\_ Web \_\_\_ Industrial Distributor \_\_\_ Advertisement \_\_\_ Other \_\_\_\_\_ Which one: \_\_\_\_\_  
What is the intended use of this product? \_\_\_\_\_

Please indicate the general work types performed at your company, check all that apply:  
Fabrication \_\_\_ Machining \_\_\_ Casting \_\_\_ Molding \_\_\_ Welding \_\_\_ Finishing \_\_\_ Assembly \_\_\_ Research \_\_\_ Other \_\_\_

Please indicate the primary product focus of your company; check all that apply,  
Aircraft/Missile \_\_\_ Automotive \_\_\_ Contract machine \_\_\_ Contract Fabrication \_\_\_ Agricultural \_\_\_ Maintenance \_\_\_ Recreational \_\_\_  
Job shop \_\_\_ Foundry \_\_\_ Construction \_\_\_ Arts \_\_\_ Orthopedic \_\_\_ Dental \_\_\_ Medical \_\_\_ Other \_\_\_\_\_

Please tell us what we can do to improve our products:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

May we contact you? Yes \_\_\_ No \_\_\_  
**Thank you for purchasing Burr King products!**

**REGISTER ONLINE @  
WWW.BURRKING.COM**

# Important Safety Instructions OPERATOR, and OPERATING AREA SAFETY



**WARNING!**

*WHEN USING ELECTRIC TOOLS, BASIC SAFETY PRECAUTION SHOULD ALWAYS BE FOLLOWED TO REDUCE RISK OF FIRE, ELECTRIC SHOCK AND PERSONAL INJURY.*

## **READ AND SAVE ALL INSTRUCTIONS FOR FUTURE REFERENCE**

Subject equipment includes Grinders, buffers, polishers, and other rotating equipment. Serious injury or death may occur if minimum safety precautions are not understood, and obeyed by operators and those other persons who may be in the immediate vicinity of the subject equipment. Persons who operate, or are in the immediate vicinity of the subject equipment must be properly trained in, and use, minimum safety precautions and procedures for such machinery.

### **1. READ ALL INSTRUCTIONS**

- Read and understand all operating instruction, manuals, labels, and other information provided with the equipment.

### **2. KEEP WORK AREA CLEAN**

- Cluttered areas and benches invite injuries.

### **3. CONSIDER WORK AREA ENVIRONMENT**

- Do Not expose power tools to rain
- Do Not use grinder in damp or wet locations.
- Keep work area well lit.
- Do Not use grinder in presence of flammable liquids or gases

### **4. GUARD AGAINST ELECTRICAL SHOCK**

- Prevent body contact with grounded surfaces. For example: pipes, radiators. Disconnect from power source when not in use. Never use if electrical cord is damaged or wet. Always keep electrical cords clear of rotating parts and belt while in motion. Electrical installation shall be in accordance with applicable codes and regulations.

### **5. KEEP CHILDREN AWAY**

- Do Not let visitors contact tool or cord
- All visitors should be kept away from work area

### **6. DRESS PROPERLY**

- Do Not wear loose clothing or jewelry.
- Non-Skid footwear is recommended when working with equipment.
- Wear protective hair coverings to contain long hair.
- Wear proper attire to protect eye, hand, face, arm, leg, feet and body that is adequate to protect against flying debris, forcibly ejected work pieces, broken abrasive belts, ect.

### **7. USE SAFETY GLASSES**

- Everyday eyewear does not feature impact resistance lenses, and they are NOT safety glasses

### **8. WEAR DUST MASK**

- Some dust created by grinding activities may contain chemicals known to cause cancer, birth defects or other harm. Provide adequate ventilation.

### **9. SPARK AND DEBRIS ARRESTING APPARATUS**

- To further reduce the exposure you may wish to connect an apparatus to the machine to contain dust and debris/spark arresting device to suppress sparks thereby limiting human inhalation risk, and risk of fire or explosion

## **10. KEEP ALL GUARDS IN PLACE AND PROPERLY ADJUSTED**

- Keep all guards in place and in working order.
- Do not reach inside the safety guards while the machine is running.
- Do not operate this machine if the gap (nip point) between a moving belt, wheel or disc and the work support surface exceeds 1/8 inch or 3.175 mm
- Never position the work rest table at an acute angle between the top of the work rest table and the moving belt or wheel. Doing so will create “nip point” that can cause serious injury should an operators body part become entangled (pulled into) the nip point created by this acute angle.
- Do not operate this machine if the gap between the moving abrasive belt, disc or wheel and the adjacent face of the work rest (or table) will permit passage of the work piece through the gap (nip point). Note, however, that certain alloys such as titanium may create conditions where grinding debris can accumulate in a tight gap creating a potential fire hazard. When in doubt consult with your safety officer. Failure to observe this warning may result in the work piece or other item being caught in this gap. And/or being forcibly ejected. Failure to heed this warning may cause serious bodily harm to the operator and/or bystanders. Never use this equipment if you are not properly trained in its operation and/or safe use. If in doubt stop and ask for guidance.

## **11. SECURE THE MACHINE**

- Bolt the machine securely to the stand or other stable surface to avoid tipping when unit is in operation. If mounted on stand make sure the stand is secured to the floor.

## **12. BEFORE SERVICING**

- Disconnect the grinder from the power source.

## **13. NEVER LEAVE TOOL RUNNING UNATTENDED**

- Turn power off. Don't leave until the grinder comes to a complete stop.

## **14. DO NOT USE NEAR FLAMMABLE MATERIALS**

- Sparks from the grinder can cause fires.

## **15. HOLD MATERIAL TIGHTLY**

- Always hold the work piece firmly when grinding and apply steady pressure.
- Use work piece holding devices when ever possible that diminish the possibility that persons will come in contact with moving machine pieces, or spark/debris output from the machine.

## **16. DO NOT USE DAMAGED WHEELS OR ABRASIVES**

- Wheels that show wear should be replaced.

## **17. USE BELTS FROM RESPECTED WHEEL MANUFACTURES**

- Not all belts are created equal. Belts that are very inexpensive are usually manufactured cheaply.

## **18. KNOW WHAT YOUR GRINDING**

- Avoid mixing different metals, alloys, and materials. To mix such materials might create a fire or explosion hazard
- Exotic materials such as titanium, magnesium, and other chemically active materials will present fire and explosion hazards that if ignored can result in grave personal injury and/or property damage.
- Consult with your material supplier or other qualified expert regarding the materials on which you wish to work.

## **19. KEEP MACHINE MAINTAINED**

- Ensure contact wheels and idler wheels are in good condition and are free from cuts or splits. If damaged parts are found, immediately discontinue use of the grinder and order replacement parts.
- Never perform maintenance on the grinder with its electrical power source connected.

## **20. DO NOT USE STONE WHEELS**

- The use of stone or vitreous wheels on any Burr King grinder is prohibited. The machine guarding is not suitable for these types of wheels. To do so will create an operator safety hazard.

All Burr King products are warranted for various time periods to be free of material and/or workmanship defects. Burr King Manufacturing Companies standard warranty policy is summarized as follows for contact wheels. 1 year from date of purchase if mounted on a Burr King machine purchased on the same date or 90 days if purchased as a spare or replacement part. Our warranty does not apply to wheels that are mounted on products not manufactured by Burr King Manufacturing Company, Inc. Users who mount Burr King manufactured contact wheels on product not manufactured by Burr

King Manufacturing Company, Inc. do so at their own risk and assume all liability for having so mounted the contact wheel(s).

Remember good safety practice demands guarding to protect operators and bystanders from wheel failure and/or debris. Never use the subject wheel without proper guarding that meets commonly accepted safe practice. See OSHA, U/L, CSA, CE, ISO and other respected safety standards.

## 21. OCCUPATIONAL NOISE EXPOSURE

Burr King products produce levels of noise consistent with their intended purposes. The level and spectral content of noise produced is dependent on the product type, the degree that the product is maintained in proper operating condition, the abrasive/media and accessories used, the specific application, and the surrounding environment. Noise levels produced by various Burr King grinders and polishers, as measured at the Burr King factory, range from 80 to 93 decibels. Product operators and persons in the immediate product vicinity should be protected from excessive noise levels as prescribed in OSHA regulation 29, piece 1910.95 titled "Occupational Noise Exposure".

**ROTATING EQUIPMENT CAN BE DANGEROUS TO OPERATORS AND THOSE WHO MAY BE IN ITS IMMEDIATE OPERATING VICINITY. IT IS THE ABSOLUTE AND DIRECT RESPONSIBILITY OF PURCHASERS, MANAGERS, AND OPERATORS OF THIS EQUIPMENT TO UNDERSTAND AND OBEY THE FOREGOING MINIMUM OPERATING SAFETY REQUIREMENTS. IF YOU HAVE QUESTIONS OR SAFETY CONCERNS REGARDING OPERATING THE SUBJECT EQUIPMENT PLEASE CALL YOUR AUTHORIZED BURR KING DISTRIBUTOR, OR BURR KING MANUFACTURING AT 660-438-8998. YOUR SAFETY IS OUR FOREMOST CONCERN!**

Burr King Manufacturing disclaims any and all responsibility for injuries, damage, loss of income, or other adverse consequence as might be incurred by purchasers, managers, and operators of this equipment.

## 22. TRAINING

- Do train operators and others in safe operating practices
- Post these instructions so they are available for future reference and new operators.

## 23. ROTATIONAL SPEED WARNING, CONTACT WHEELS

Scope: Contact wheels manufactured by Burr King Manufacturing Company, Inc., which have rubber or urethane tires. Examples include but are not limited to stock codes 202, 302, 402, 502, 702, 802, 902, 1002, 1202, 2220 and variants. Variants have stock codes that begin with the base number; i.e. 802-S-55 is an 802 variant.

Users are warned not to exceed the below listed revolutions per minute (RPM) on the subject wheels. Failure to heed this warning may lead to tire de-bonding, fragmentation, or other mechanical failure. Such failures may cause serious personal injury to operators or bystanders, and/or cause property damage. All Burr King products are warranted for various time periods to be free of material and/or workmanship defects. Burr King Manufacturing Companies standard warranty policy is summarized as follows for contact wheels. 1 year from date of purchase if mounted on a Burr King machine purchased on the same date or 90 days if purchased as a spare or replacement part. Our warranty does not apply to wheels that are mounted on products not manufactured by Burr King Manufacturing Company, Inc. Users who mount Burr King manufactured contact wheels on product not manufactured by Burr King Manufacturing Company, Inc. do so at their own risk and assume all liability for having so mounted the contact wheel(s).

Remember good safety practice demands guarding to protect operators and bystanders from wheel failure and/or debris. Never use the subject contact wheels without proper guarding that meets commonly accepted safe practice. See OSHA, U/L, CSA, CE, ISO and other respected safety standards.

Contact Wheel	Stock code	Maximum Safe RPM
202, 302		10000
402, 502, 702 802		4400
902, 1002		3000
1202		2200
2220		150



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## Mounting Instructions for 14xx series internal grinding attachments

14xx internal grinding attachments provide valuable functional additions to Burr King belt grinders such as:

- extension of the belt track outward approximately 6 inches
- small diameter nose wheels for tight radii grinding
- belt tracks from ½ inch wide up to the standard belt track width of the machine
- close access to corners, radii, cavities, tubes and other part features that may be otherwise inaccessible
- reduced belt speeds for better grinding characteristics on many materials
- flexibility to mount many different Burr King nose extensions on the base attachment
- belt track and tension control via the mounted machine functions.

14xx internal grinding attachments may be mounted on the Burr King Model 760. The belt length required for each machine is increased by 12 inches from standard when the 14xx attachment is mounted on the machine. In example, the belt length for the model 760 is increased from 60 to 72 inches. Additionally, mounting 14xx attachment results in a reduction of belt speed to approximately 42% of the pre-mount speed. In example, mounting a 14xx attachment on a model 760 normally operating at 8000 surface feet per minute (SFPM) reduces the belt speed to approximately 3360 SFPM. If you require faster belt speed ask Burr King for the optional 4-inch diameter drive wheel. Drive wheel (P/N 412) will increase belt speed to approximately 125% of that provided by the standard 3-inch diameter drive wheel (P/N 302).

Mounting a 14xx attachment on a Burr King belt grinder requires the removal of the machine's standard contact wheel, contact wheel guard, work rest and work rest support arm, back-up platen and platen support assembly. Correctly installing the 14xx attachment provides for pinch point protection and other safety features otherwise provided by the standard machine items removed.

**Caution: Failure to mount the 14xx properly may create a safety hazard. Observe the safety instructions attached and those provided with the mounted machine.**

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### **Mounting a 14xx attachment:**

Locate the parts list for the machine on which you wish to mount the 14xx. For purposes of this instruction the Burr King model 760 belt grinder is used for explanation. Do not discard any part that you remove from the grinder as it will be require should you desire to return the machine to its standard configuration.

1. Disconnect the machine from its main power source. Assure that no one is able to turn the power back on without your approval.
2. Slack the abrasive belt and remove it from the machine.
3. Clean the machine thoroughly (it's just a good time to do it!).
4. Remove contact wheel retaining nut and washer (P/N 727 and 726).
5. Remove the contact wheel (P/N 702).
6. Loosen the contact wheel clamping screw (P/N 10).
7. Remove the contact wheel guard and platen assembly (P/N 703, 704b, 704a and hardware).
8. Loosen the work support clamping screw (P/N 10).
9. Remove the work support arm and work support
10. Carefully clean and lightly oil the outer diameter of the contact wheel bearing assembly (P/N 701).
11. Assure the clamping screws of the mounting bracket (P/N 1425) are loose then slide the support arm over the contact wheel bearing assembly until it stops.
12. Position the mounting bracket approximately horizontal and tighten the clamping screws.
13. Install the small drive wheel (P/N 302) on the 5/8 inch contact wheel arbor and secure it using the flange washer (P/N 1426) and the original contact wheel nut (P/N 727), tighten securely.

14. Install the belt style of your choice (must be 12 inches longer than the standard belt) as follows:
  - a. route the belt according to figure 1.
  - b. assure the belt is routed such that the red pinch guards (P/N 1429) protect the pinch points (see figure 1)
  - c. tension the belt using the rear wheel handle assembly.

#### **Other 14xx installation instructions:**

It may be necessary to adjust the position, angle, or extension length of the 14xx arm assembly. This may be necessary because of the belt you chose, the condition of your machine, or the angle that you wish the arm to be at. Do this by:

1. loosening two set screws (P/N 1445) that secure the main pivot bar (P/N 1426) to the mounting bracket (P/N 1425)
2. rotate the forward portion of the 14xx until it is in a position suitable for your work and, such that the abrasive belt can be tensioned. Note: It may be necessary to position the pivot bar (see step 12 above)
3. securely tighten the two set screws (P/N 1445) to fix the position of the forward portion of the 14xx attachment.

Tracking the abrasive belt on the nose wheel is done by using the standard belt-tracking knob of the left side of the mounted machine. Note: The ½-inch wide small diameter extensions (P/N 1438/1439) has an additional tracking adjustment located on the left side of P/N 1438. Rotate the adjusting screw CW or CCW as required to make small tracking adjustments on this assembly. Usually once this adjustment is performed it is not often again required.

#### **Tips for obtaining the best service from your 14xx attachment**

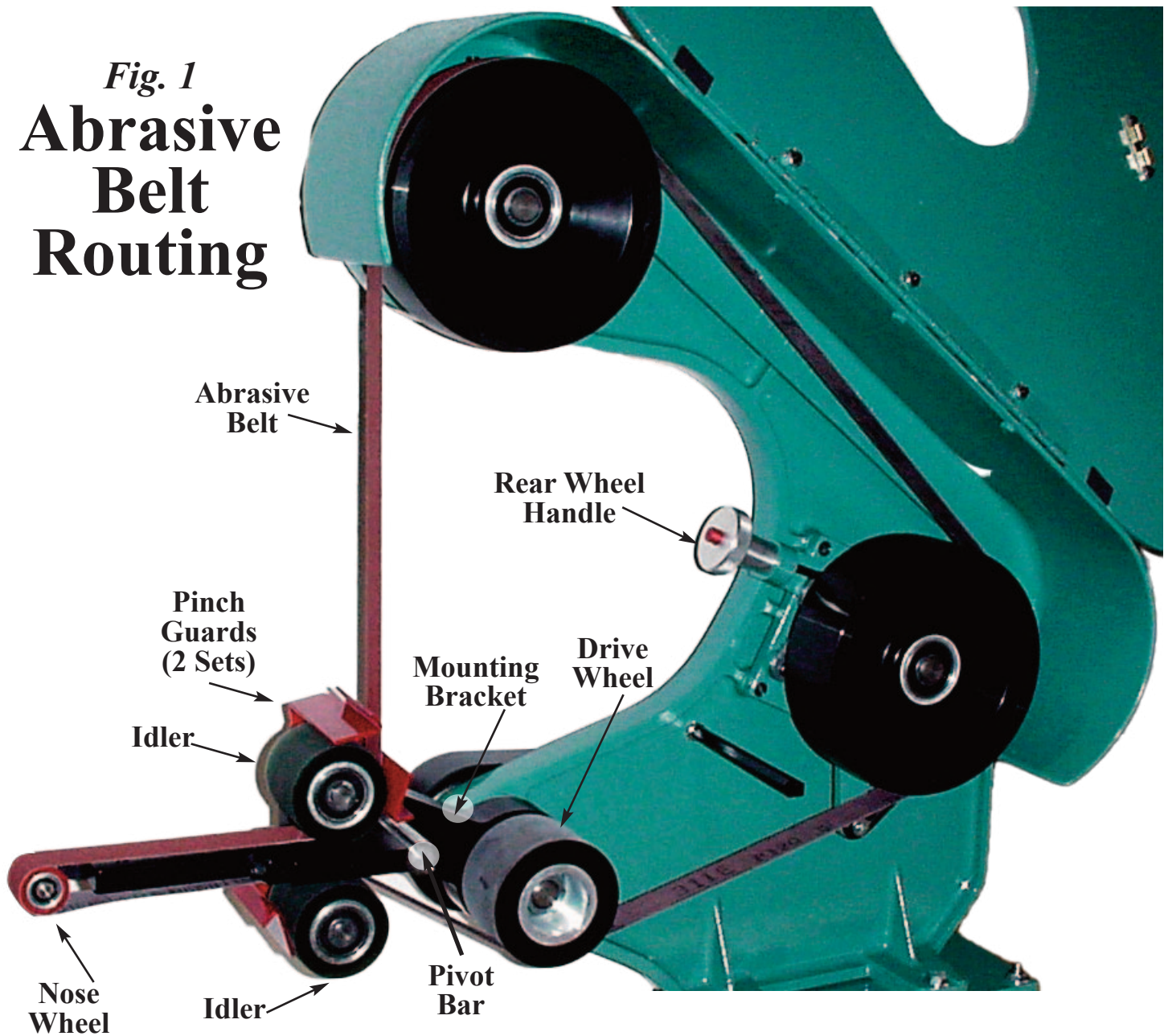
1. Use good quality abrasive belts.
2. Whenever possible use pliant, flex back belts. Doing so will help in blending, particularly in tight radii, cavities, etc.
3. Use the nose wheel whenever possible as the preferred grinding site.
4. Maintain sufficient but not extreme abrasive belt tension. Normally the mounted machine rear wheel arm should be pushed back about 4 ratchet clicks past initial belt contact. Note: belts of different composition behave differently, i.e. a nylon belt will tend to stretch more than a cloth backed belt.
5. When using thick belts such as nylon web types it may be necessary to adjust the pinch guards for sufficient but not excessive clearance. CAUTION: There should be no more than 1/8 inch clearance between the moving belt (or wheel) surface and the pinch guard.
6. Assure that the 14xx idlers (P/N 1444) remain serviceable. The idler wheels are made of very tough urethane (or steel optional) and will provide good service life. They will, however, wear progressively. If they wear to the point that they are severely coned, tapered, out of round, or simply too small they need to be replaced. Continued use of badly worn idlers will result in excessive wear to the mounted machine's wheels since the mounted machine will override the worn idlers and wear excessively.
7. Small diameter nose wheels turn at high revolutions per minute (RPM). In example, a 9/16-inch wheel will revolve at over 20000 RPM. The nose wheel bearings are designed to operate at this speed, however, applying high radial or axial loads to the nose wheel will shorten its service life. In general, keep applied force below 5 pounds for very small wheels. Larger wheels have larger bearings, turn slower and will tolerate higher applied loads.
8. Where heavier grinding is desired use harder and/or serrated nose wheels. Burr King can help you with the best wheel selection. Burr King can supply nose wheels from 3/8 inch to 3 inches in diameter and from 1.2 to 2 inches wide. Nose wheels require the use of the proper support extension.
9. Use different front extensions for access to close corners, cavities, or special grinding needs. Burr King can help you select the best front section for your 14xx attachment.
10. Maintain the 14xx attachment, and the mounted machine in clean, serviceable condition. Assure all pinch guards, and other guards on the attachment and mounted machine are serviceable and used.

Burr King Manufacturing will help you with all of your finishing needs. If you have an application problem, or need other assistance please contact us at any of the indicated phone numbers or at [WWW.burrking.com](http://WWW.burrking.com) . Thank you for choosing Burr King products!

Figure 1: SAFETY GUARD SHOWN OPEN FOR CLARITY. DO NOT OPERATE WITH SAFETY GUARD OPEN



*Fig. 1*  
**Abrasive  
Belt  
Routing**



Video install guide



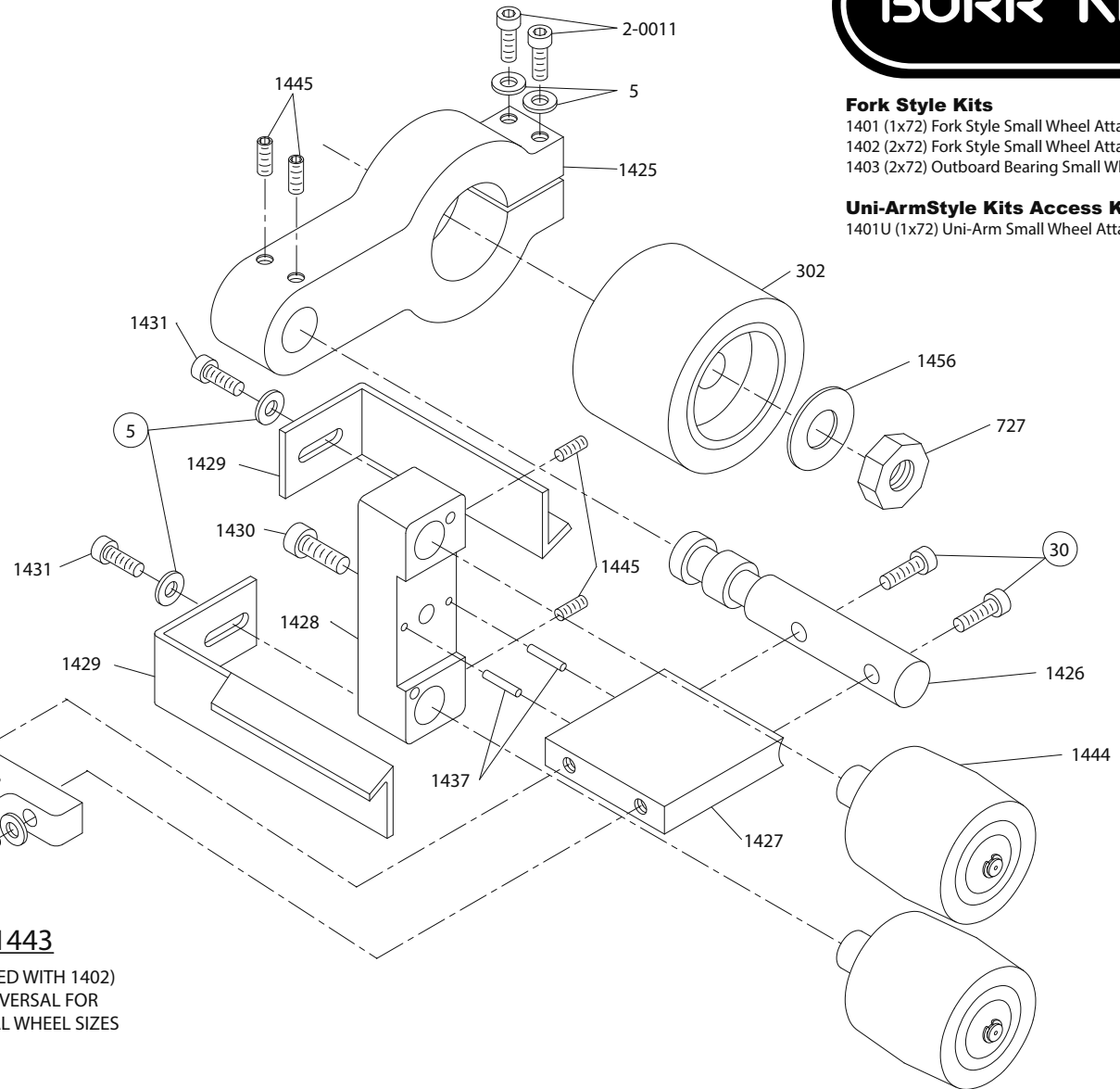
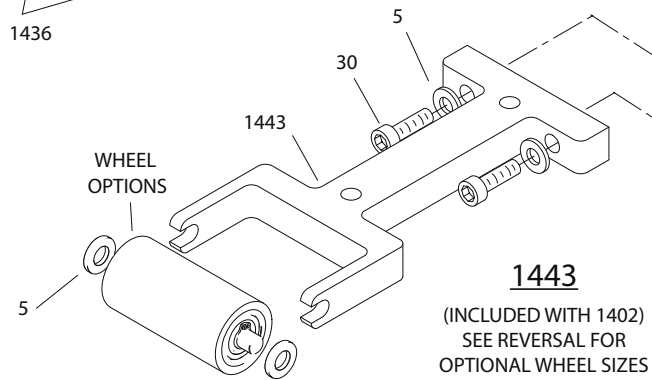
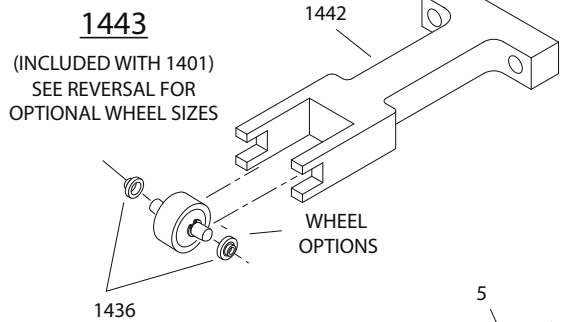
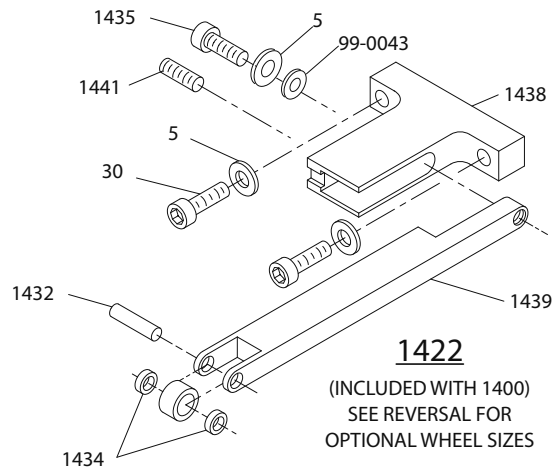


**Fork Style Kits**

- 1401 (1x72) Fork Style Small Wheel Attachment
- 1402 (2x72) Fork Style Small Wheel Attachment
- 1403 (2x72) Outboard Bearing Small Wheel Attachment

**Uni-ArmStyle Kits Access Kits**

- 1401U (1x72) Uni-Arm Small Wheel Attachment



**1400 SERIES ATTACHMENTS USE COMMON PARTS LISTED BELOW**



**1400 SERIES COMMON PARTS**

P/N	DESCRIPTION	QTY
5	WASHER AN916-416	8
30	SCREW-ALLEN CAP 1/4-20 x 1	2
2-0011	SCREW-ALLEN CAP 1/4-20 x 1 1/2	2
302	DRIVE WHEEL 3" DIA	1
202B	IDLER WHEEL BEARING	2
1425	MOUNTING BRACKET	1
1426	PIVOT BAR	1
1427	ARM SUPPORT	1
1428	IDLER WHEEL BACKET	1
1429	PINCH GAURD	3
1430	SCREW-ALLEN CAP 5/16-18 x 1	1
1431	SCREW-ALLEN CAP 1/4-20 x 1/2	2
30	SCREW-ALLEN CAP 1/4-20 x 3/4	2
1437	ROLL PIN 1/8 x 3/8	2
1444	IDLER WHEEL	2
1445	SET SCREW 1/4-20 x 5/8	4
1456	5/8 WASHER-DRIVE WHEEL	1
727	NUT, HEX, 5/8-18, JAM	1

**NON-COMMON OR SPECIFIC BY PART NO.**

**1400 1/2" PARTS**

1432	ARBOR PIN .1245	1
1434	BEARING - 1/8 x 1/4	1
1435	SCREW-ALLEN CAP 1/4-28 x 3/4	2
1438	CONTACT ARM SUPPORT	1
1439	ARM-CONTACT WHEEL 3/8" & 1/2"	1
1441	SET SCREW 1/4-28 x 1/2	1
99-0043	O-RING	1
△ WHEELS		
DA2212	CONTACT WHEEL RUBBER 7/16 x 3/8 DIA	1
DB2003	CONTACT WHEEL STEEL 5/16 x 3/8 DIA	1
DA2003	CONTACT WHEEL STEEL 7/16 x 3/8 DIA	1
DC2212	CONTACT WHEEL RUBBER 5/8 x 3/8 DIA	1

**1402 2" PARTS**

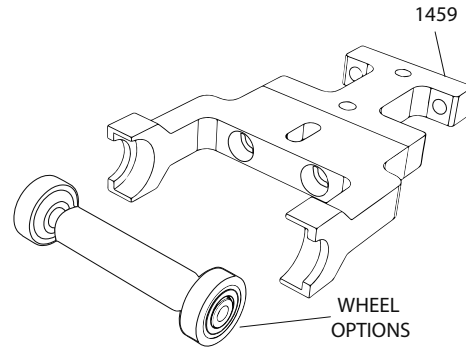
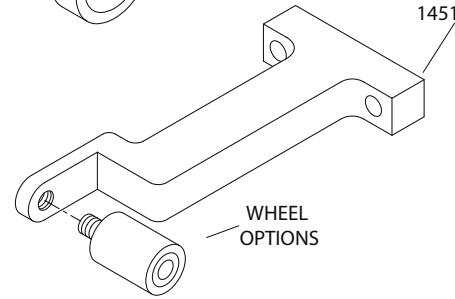
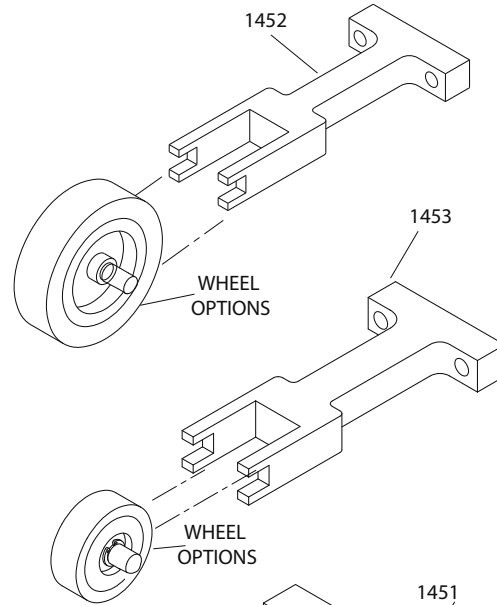
1436	BUSHING 9/16 & 3/4 WHEELS ONLY	2
1443	ARM-CONTACT WHEEL w/ AR2311	1
△ WHEELS		
AP2311	CONTACT WHEEL URETHANE 9/16 DIA	1
AQ2311	CONTACT WHEEL URETHANE 3/4 DIA	1
AR2311	CONTACT WHEEL URETHANE 1 DIA	1
AQ2311	CONTACT WHEEL URETHANE 1-1/2 DIA	1
AP2312	CONTACT WHEEL RUBBER 9/16 DIA	1
AQ2312	CONTACT WHEEL RUBBER 3/4 DIA	1
AR2312	CONTACT WHEEL RUBBER 1 DIA	1
AQ2312	CONTACT WHEEL RUBBER 1-1/2 DIA	1

**1401 1" PARTS**

1436	BUSHING 9/16 & 3/4 WHEELS ONLY	2
1442	ARM-CONTACT WHEEL w/ AK2311	1
△ WHEELS		
AL2311	CONTACT WHEEL URETHANE 9/16 DIA	1
AN2311	CONTACT WHEEL URETHANE 3/4 DIA	1
AK2311	CONTACT WHEEL URETHANE 1 DIA	1
AE2311	CONTACT WHEEL URETHANE 1 1/2 DIA	1
AL2312	CONTACT WHEEL RUBBER 9/16 DIA	1
AN2312	CONTACT WHEEL RUBBER 3/4 DIA	1
AK2312	CONTACT WHEEL RUBBER 1 DIA	1
AE2312	CONTACT WHEEL RUBBER 1-1/2 DIA	1

**1403 2" PARTS**

1459	ARM-CONTACT WHEEL COMPLETE	
9660	OUTBOARD BEARING NOSE	
1455	ARM ADAPTER	
11-0007	BEARING	
△ WHEELS		
OB250	STEEL CONTACT WHEEL 1/4x2	1
OB500	RUBBER CONTACT WHEEL 1/2x2	1
OB375	RUBBER CONTACT WHEEL 3/8x2	1
OB500	RUBBER CONTACT WHEEL 1/2x2	1
OB562	RUBBER CONTACT WHEEL 9/16x2	1
OB625	RUBBER CONTACT WHEEL 5/8x2	1
OB750	RUBBER CONTACT WHEEL 3/4x2	1
OB1000	RUBBER CONTACT WHEEL 1x2	1
OB2000	RUBBER CONTACT WHEEL 2x2	1



**3" DIA ARMS**

1452	ARM-CONTACT WHEEL w/BD2322
BY2322	CONTACT WHEEL 3x1/2
BD2322	CONTACT WHEEL SERRATED 3x1
BD2312	CONTACT WHEEL 3x1

**2" ARM PARTS**

1498-5	ARBOR SHAFT
1453	ARM-CONTACT WHEEL w/AV2321
10-0002	CIR-CLIP
AV2311	CONTACT WHEEL 2x1
AV2321	CONTACT WHEEL SERRATED 2x1

**UNI-ARM PARTS**

1451	ARM-CONTACT WHEEL w/AK1311
AL1311	URETHANE CONTACT WHEEL 9/16x1
AN1311	URETHANE CONTACT WHEEL 3/4x1
AK1311	URETHANE CONTACT WHEEL 1x1
AE1311	URETHANE CONTACT WHEEL 1 1/2x1
AL1312	RUBBER CONTACT WHEEL 9/16x1
AN1312	RUBBER CONTACT WHEEL 3/4x1
AK1312	RUBBER CONTACT WHEEL 1x1
AE1312	RUBBER CONTACT WHEEL 1 1/2x1

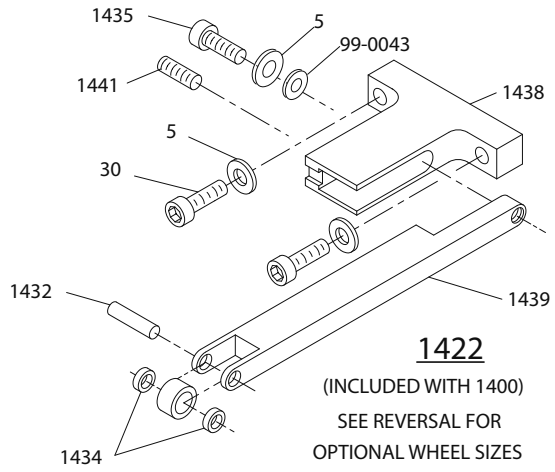
**OUTBOARD BEARING ARM PARTS**

1459	ARM-CONTACT WHEEL
11-0007	BEARING
OB250	STEEL CONTACT WHEEL 1/4x2
OB500	RUBBER CONTACT WHEEL 1/2x2
OB375	RUBBER CONTACT WHEEL 3/8x2
OB500	RUBBER CONTACT WHEEL 1/2x2
OB562	RUBBER CONTACT WHEEL 9/16x2
OB625	RUBBER CONTACT WHEEL 5/8x2
OB750	RUBBER CONTACT WHEEL 3/4x2
OB1000	RUBBER CONTACT WHEEL 1x2
OB2000	RUBBER CONTACT WHEEL 2x2



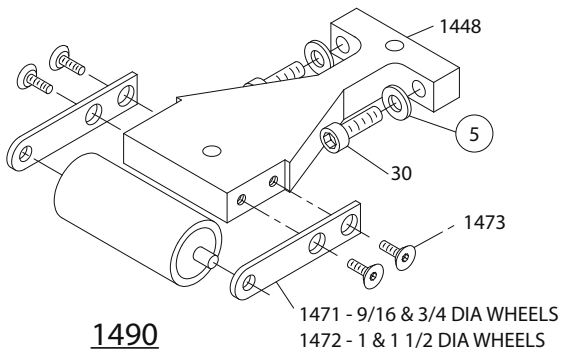
**Full/Close Access Kits**

- 1400 (1/2x72) Full Access Small Wheel Attachment
- 1411 (1x72) Full Access Small Wheel Attachment
- 1412 (2x72) Full Access Small Wheel Attachment



**1422**

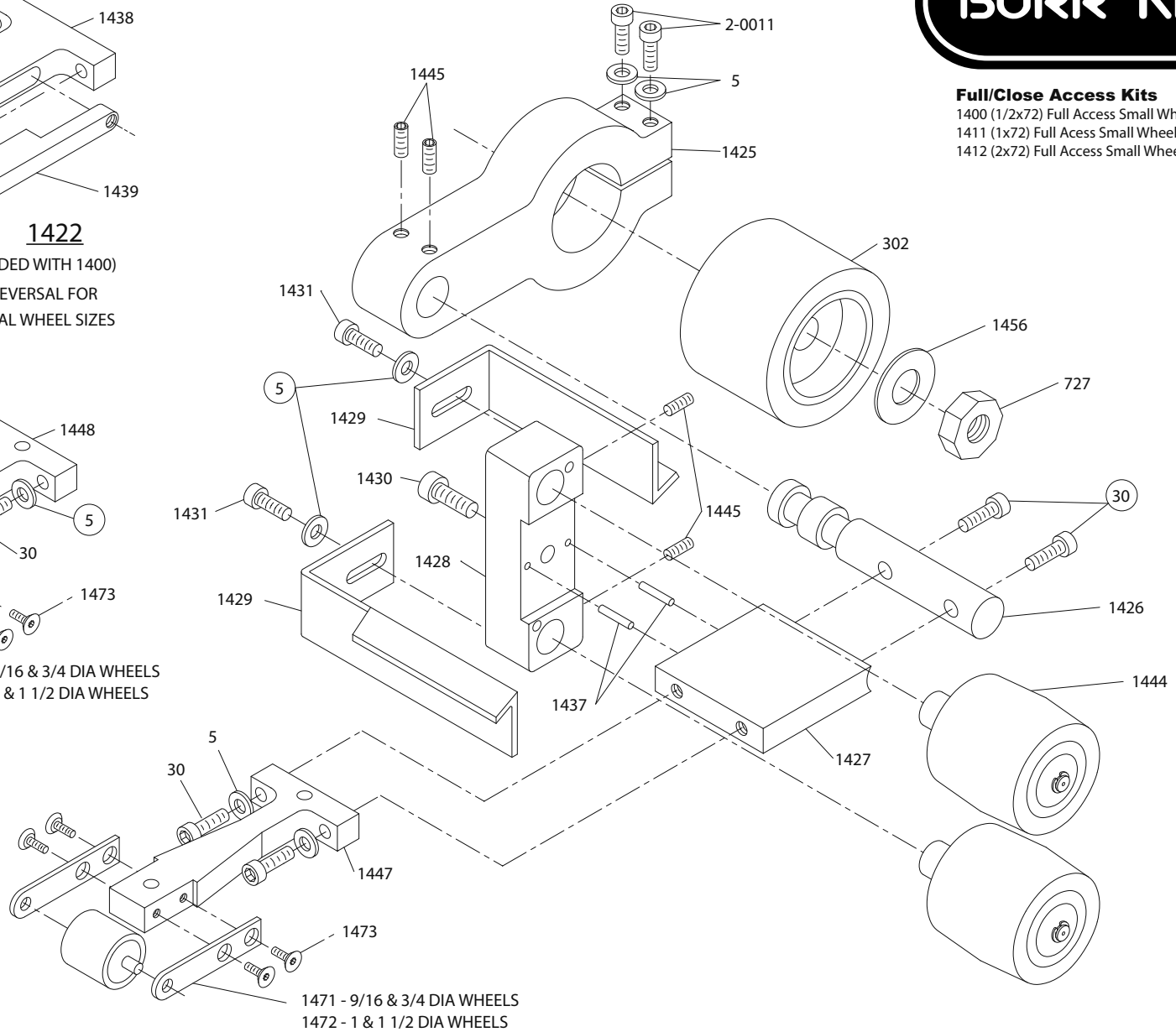
(INCLUDED WITH 1400)  
SEE REVERSAL FOR  
OPTIONAL WHEEL SIZES



**1490**

(INCLUDED WITH 1412  
WITH AH5311)  
SEE REVERSAL FOR  
OPTIONAL WHEEL SIZES

1471 - 9/16 & 3/4 DIA WHEELS  
1472 - 1 & 1 1/2 DIA WHEELS



**1470**

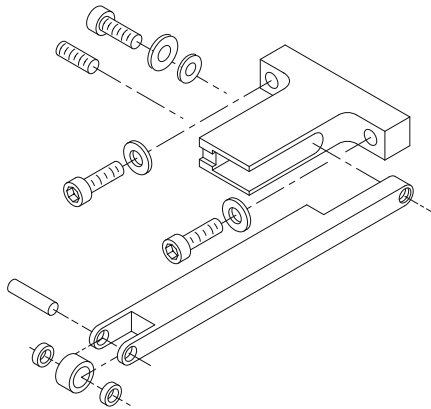
(INCLUDED WITH 1411  
WITH AJ5311)  
SEE REVERSAL FOR  
OPTIONAL WHEEL SIZES

1471 - 9/16 & 3/4 DIA WHEELS  
1472 - 1 & 1 1/2 DIA WHEELS

14XX SERIES ATTACHMENTS USE  
COMMON PARTS LISTED BELOW

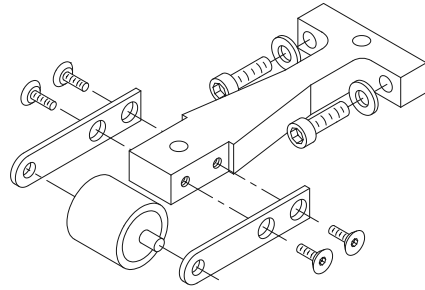
1400 SERIES COMMON PARTS

P/N	DESCRIPTION	QTY
5	WASHER AN916-416	8
30	SCREW-ALLEN CAP 1/4-20 x 1	2
2-0011	SCREW-ALLEN CAP 1/4-20 x 1 1/2	2
302	DRIVE WHEEL 3" DIA	1
202B	IDLER WHEEL BEARING	2
1425	MOUNTING BRACKET	1
1426	PIVOT BAR	1
1427	ARM SUPPORT	1
1428	IDLER WHEEL BACKET	1
1429	PINCH GAURD	3
1430	SCREW-ALLEN CAP 5/16-18 x 1	1
1431	SCREW-ALLEN CAP 1/4-20 x 1/2	2
30	SCREW-ALLEN CAP 1/4-20 x 3/4	2
1437	ROLL PIN 1/8 x 3/8	2
1444	IDLER WHEEL	2
1445	SET SCREW 1/4-20 x 5/8	4
1456	5/8 WASHER-DRIVE WHEEL	1
727	NUT, HEX, 5/8-18, JAM	1



1422 ASSEMBLY FOR 1400 ATTACHMENT

1432	ARBOR PIN .1245	1
1434	BEARING - 1/8 x 1/4	1
1435	SCREW-ALLEN CAP 1/4-28 x 3/4	2
1438	CONTACT ARM SUPPORT	1
1439	ARM-CONTACT WHEEL 3/8" & 1/2"	1
1441	SET SCREW 1/4-28 x 1/2	1
99-0043	O-RING	1
△ WHEELS		
DA2212	CONTACT WHEEL RUBBER 7/16 x 3/8 DIA	1
DB2003	CONTACT WHEEL STEEL 5/16 x 3/8 DIA	1
DA2003	CONTACT WHEEL STEEL 7/16 x 3/8 DIA	1
DC2212	CONTACT WHEEL RUBBER 5/8 x 3/8 DIA	1



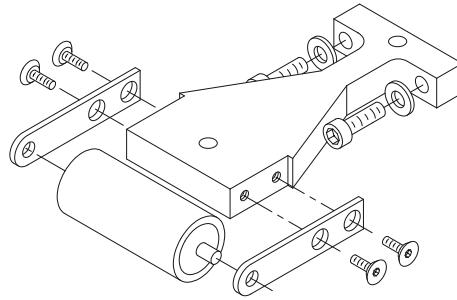
1470 ASSEMBLY FOR 1411 ATTACHMENT

5	WASHER AN916-416	
1433	SCREW-ALLEN CAP 1/4-20 x 3/4	1
1447	ARM-CONTACT WHEEL w/AJ5311	1
1471	RAIL SIDE FOR 9/16 & 3/4 DIA	2
1472	RAIL SIDE FOR 1 & 1 1/2 DIA	2

△ WHEELS

AA5312	NEOPRENE CONTACT WHEEL 5/6 (.83) x 9/16	1
AB5312	NEOPRENE CONTACT WHEEL 5/6 x 3/4	1
AJ5311	URETHANE CONTACT WHEEL 5/6 x 1*	1
AD5312	NEOPRENE CONTACT WHEEL 5/6 x 1-1/2*	1

\* REQUIRES 1472 SIDE RAILS



1490 ASSEMBLY FOR 1412 ATTACHMENT

5	WASHER AN916-416	
1433	SCREW-ALLEN CAP 1/4-20 x 3/4	1
1448	ARM-CONTACT WHEEL w/AH5311	1
1471	RAIL SIDE FOR 9/16 & 3/4 DIA	2
1472	RAIL SIDE FOR 1 & 1 1/2 DIA	2

△ WHEELS

AG5312	NEOPRENE CONTACT WHEEL 1-5/16 x 9/16	1
AF5312	NEOPRENE CONTACT WHEEL 1-5/16 x 3/4	1
AH5311	URETHANE CONTACT WHEEL 1-5/16 x 1*	1
AC5312	NEOPRENE CONTACT WHEEL 1-5/16 x 1-1/2*	1

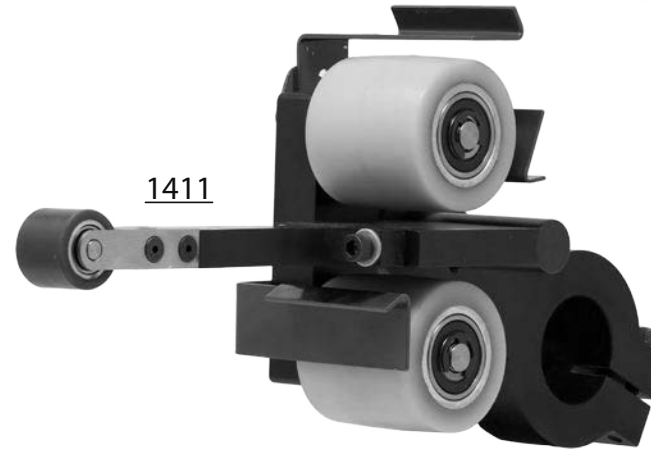
\* REQUIRES 1472 SIDE RAILS



1400



1411



1412

