



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

1220 Tamara Lane  
Warsaw, MO 65355  
www.burking.com  
(660)438-8998 • 800-621-2748  
Fax (660)438-8991

# MODEL 960-272 INSTRUCTION MANUAL



Model 99730  
Shown

# BURR KING MODEL 960-272 TWO WHEEL GRINDER



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

1220 TAMARA LANE

WARSAW MO 65355

WWW.BURRKING.COM

**(660) 438-8998 ♦ (800) 621-2748**

**FAX (660) 438-8991**

June, 2007

**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** or **MAIL** 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?

Trade show \_\_\_ 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**



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

1220 TAMARA LANE

WARSAW MO 65355

WWW.BURRKING.COM

**(660) 438-8998 • (800) 621-2748**

**FAX (660) 438-8991**

April 2, 2009

## 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 Mac Carthy".

Don Mac Carthy

President

See our catalog at [www.burrking.com](http://www.burrking.com)

contact us at [info@burrking.com](mailto:info@burrking.com)



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

1220 TAMARA LANE

WARSAW MO 65355

WWW.BURRKING.COM

**(660) 438-8998 • (800) 621-2748**

**FAX (660) 438-8991**

**960-272 Important Safety Instructions  
OPERATOR, and OPERATING AREA SAFETY**



**WARNING!**

WHEN USING ELECTRIC TOOLS, BASIC SAFETY PRECAUTIONS  
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. AVOID CONTACT WITH THE BELT**

- The abrasive belt when running is an aggressive cutting tool.  
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.

## **12. SECURE THE GRINDER**

- Bolt the grinder securely to the stand or other stable surface to avoid tipping when unit is in operation.

## **13. BEFORE SERVICING**

- Disconnect the grinder from the power source.

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

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

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

- Sparks from the grinder can cause fires.

## **16. 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.

## **17. DO NOT USE DAMAGED BELTS**

- Belts that show wear should be discarded.

## **18. AVOID USING DIRECTIONAL BELTS**

- Using belts with a butt joint will out perform belts that have a lap joint and also do not require directional installation.
- Lap joint style belts are prone to separation.

## 19. USE ABRASIVE BELTS FROM RESPECTED BELT MANUFACTURES

- Not all abrasive belts are created equal. Belts that are very inexpensive are usually manufactured cheaply.
- Use abrasive belts of proper size

## 20. 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.

## 21. KEEP GRINDER 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.

## 22. 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.

## 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 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.

<u>Stock code</u>	
<u>Contact Wheel</u>	<u>Maximum Safe RPM</u>
202, 302	10000
402, 502, 702 802	4400
902, 1002	3000
1202	2200

## 24. 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 1-800-621-2748. 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.**

## **25. TRAINING**

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



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

1220 TAMARA LANE

WARSAW MO 65355

WWW.BURRKING.COM

(660) 438-8998 ♦ (800) 621-2748

FAX (660) 438-8991

## 960-272 ASSEMBLY INSTRUCTIONS

Please note that your grinder has been partially disassembled to help prevent damage during shipping. We hope this will not cause you an inconvenience. If you have any questions or need assistance please contact the factory 800-621-2748.



Use caution when lifting grinder. Use two people when removing from shipping box.

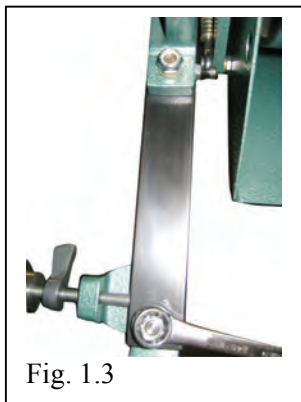


Fig. 1.3

### Installing the tracking assembly

1. Remove machine and contents from the carton leaving the machine fastened to the plywood-shipping base. Place machine on a secure workbench or the floor.
2. Unwrap the tracking and tensioning assembly.
3. Locate the 3/8" studs and elastic stop nuts and washers. See Figure 1.3
4. Using a 9/16" wrench or socket, remove the nuts and washers.
5. Place the tracking assembly over the studs and replace the nuts and washers tightening the nuts before letting go of the tracking assembly.
6. "SNUG" the nuts and do not over tighten because the tracking assembly must be able to pivot for the belt to track properly.

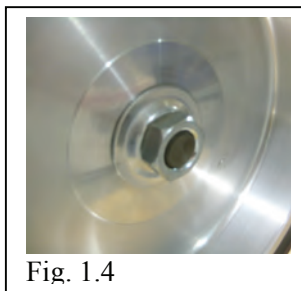


Fig. 1.4

### Installing contact wheel

1. Remove nut and washer from drive arbor. See figure 1.4
2. Slide contact wheel onto arbor.
3. Reinstall washer and nut and tighten with a 15/16" socket or crescent wrench.





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

1220 TAMARA LANE

WARSAW MO 65355

WWW.BURRKING.COM

**(660) 438-8998 ♦ (800) 621-2748**

**FAX (660) 438-8991**

## **Operating instructions for the Model 960-272 belt grinder**

**Over view:** The model 960-272 belt grinder is a two-wheel belt grinder that uses a 2 x 72-inch (50.8mm x 1.82m) continuous loop abrasive belt. For maximum efficiency and your safety we recommend you read and understand all operating instructions, manuals, labels, and other information provided with the equipment.

Various model 960-272 versions are available including models with fixed and variable abrasive belt speed, and various horse power options and models with 8 or 10 inch contact wheels (203mm and 254mm contact wheels). Several accessories are also available including small diameter contact wheels, combination platen and small contact wheel assemblies, full abrasive belt guards, dust collection apparatus, and other contact wheel options. Your Burr King distributor will assist you in selecting value adding options and accessories to meet your needs.

### **Receipt and initial machine set-up**

1. Insure that you have received all of the items that you ordered. Compare the packing slip with your purchase order, and of course with the physical items received.
2. Verify that there is no obvious shipping damage. If shipping damage is discovered notify the freight carrier of your intention to file a freight damage claim. They will assist you.
3. Verify that the AC power that is identified on the machine as received matches the AC power that you intend to operate the machine with. Do not modify the machine's wiring without first contacting your distributor or Burr King Manufacturing.
4. Do not modify or defeat any electrical wiring safety feature. For example, do not remove the grounding pin on the AC electrical plug.
5. Verify that you have received a warranty card, parts lists, catalog, and **Operator, and Operating Area Safety Instructions**.
6. Complete the warranty card and return it to Burr King Manufacturing via FAX or mail.
7. Verify that the safety guards for the machine are in place and functional. See the parts list and schematic for the below indicated part numbers.
  - a. The contact wheel guard (903K or 913) and backup platen (964-01) are mounted and adjusted such that the platen lightly touches the back of the abrasive belt.
  - b. The rear idler wheel guard (912) is mounted.
8. Prior to operating the model 960-272 read the **Operator, and Operating Area Safety Instructions** carefully. Insure that all persons who will operate the machine or who will work in the vicinity of the machine read, understand, and comply with these safety instructions.
9. Insure that the grinder is located in an area that provides operators with clear and unobstructed access to the machine. The work place should be free from floor obstructions, trip points, and other faults that could reduce operator safety.
10. Bolt the machine to a structurally sound surface or pedestal. If a pedestal is used bolt the pedestal securely to the floor.
11. Insure that your AC electrical power source is properly sized and properly fused for the machine you purchased. Consult with a competent electrician to determine the proper specifications for your electrical service prior to connecting your model 960-272 belt grinder.

## **Functional machine operating instructions**

Perform the following steps before each use of your model 960-272 belt grinder:

1. Insure that the gap (nip point) between the face of the abrasive belt and the work rest is adjusted so that your work piece will not pass through this gap. See Figure 2.1



**Warning: Failure to properly adjust the nip point may cause your part to become lodge, ejected and may lead to bodily harm .**

2. Locate the two 9/16 inch hex nuts and studs that secure the motor adapter (P/N 908) to the electric motor. The machine can be adjusted to positions between vertical to horizontal by loosening these nuts, pivoting the machine and securing the nuts. See Figure 2.2
3. Check the nut that secures the contact wheel (P/N 902 or 1002) to its mount. Insure this nut is tightened to 10 to 15 foot pounds of torque. (1.4 - 2 kg force metres) See Figure 2.3
4. Insure that the abrasive belt is tensioned properly. To do this raise the tensioning handle (P/N 937G). You will hear mechanical clicks as the tensioning ratchet pawl (737F) moves. Generally, the belt will be adequately tensioned when you hear three to eight clicks. To reduce or release the belt tension slightly raise the tensioning handle (P/N 737A) then press the button (P/N 737B) in the center of the tensioning handle. Move the tensioning handle down slightly to reduce belt tension or all the way down to release belt tension. See Figure 2.4
5. Insure that your hands and other body parts and electrical cords are completely clear of the grinding belt, and pinch points.
6. Protect your face and eyes and other body tissue from grinding debris.

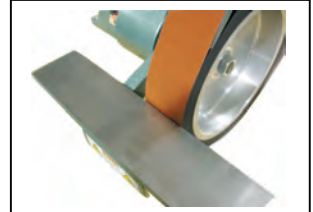


Fig. 2.1

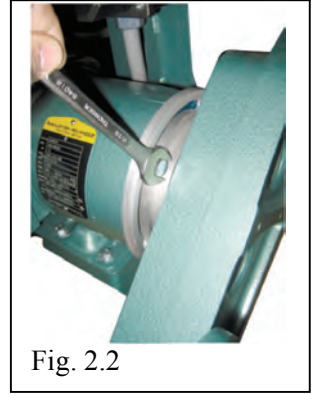


Fig. 2.2

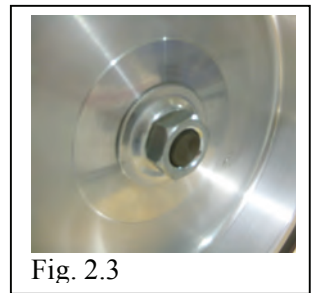


Fig. 2.3

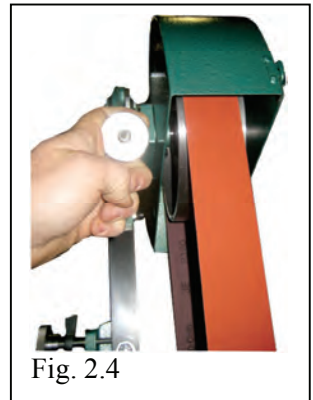


Fig. 2.4



**Wear proper clothing and personal protection equipment we operating**



Fig. 3.1 -Correct



Fig. 3.2 - Tracked Left



Fig. 3.3 - Tracked Right



Fig. 3.4 - Tracking Assembly

7. Engage the motor by placing the Start/Stop switch to Start. The belt must rotate smoothly in a counter-clockwise (CCW) direction about the machine wheel belt path. If either of these conditions are not met immediately turn the machine OFF.

a. If the abrasive belt does not remain centered on the contact wheel (P/N 902 or 1002) while the belt is moving use the tracking adjustment (P/N 921) on the upper left side of the machine to track the belt to the center of the contact wheel. Turning this control clockwise CW will cause the belt to track to the right, conversely turn the control CCW will cause the belt to track to the left.

b. If the belt runs in reverse (up from the floor, or CW) correct this by changing the main drive motor rotation direction.

Disconnect the machine from its AC electrical power and have a competent electrician:

1) Reverse the motor direction of a three-phase motor by reversing any two legs of the input power lines.

2) Reverse the motor direction of a fixed speed single phase motor by reversing leads 5 and 8 found within the metal wiring box located on the motor, or as otherwise instructed on the actual motor label.

3) To reverse variable speed models consult the documentation that was supplied with the motor controller, or call the Burr King factory for assistance.

If the abrasive belt tensions, and tracks properly, but the machine has excessive vibration, turn the machine OFF and call the Burr King factory for assistance.

8. Your machine may also come equipped with a braking system. This brake has been preset from the factory and should stop your grinder within 5 seconds.

9. About your controller. Your Burr King Grinder uses a controller from KB Electronics. The complete manual for the controller is included with your machine. For an additional copy of the manual please visit [www.kbelectronics.com](http://www.kbelectronics.com). Figure 3.5 shows your controller and settings. The variable speed control is based on a percentage of spindle speed. The spindle is set at the factory to approximately 3,000 RPM. Figure 3.6 shows the conversion to surface feet (and meters) per minute.



Fig 3.5

Your controller may have the following options depending on your models installed options.

1. Forward – Stop – Reverse: This option allows your belt to run in a Counter-Clockwise or Clockwise direction. Normal operation of the machine is to run in a Forward or Clockwise direction. If you wish to run your machine in a reverse or counter-clockwise direction please make sure your machine is fitted with part number 701-2, Anti-Rotate Bearing. If you have a controller with the reverse switch installed you already have the Anti-Rotate bearing. When reversing direction, make sure the belt comes to a complete stop. Then engage in the reverse direction.

2. Stop – Start: To start your machine make sure the red mushroom switch is pulled out and then move the toggle switch all the way to the start position. The switch will return to the middle position. To turn the machine off, lower the switch to the stop position.

3. Red Mushroom Stop Switch: This switch is installed in case of emergency. Push the switch in to stop the grinder. To reset pull the switch



NOTE: Controller box and motor still will contain voltage even when unit is in the off position, and even if the mushroom push stop is depressed. Disconnect the unit from the electrical outlet for service work or when needed!

<b>Model 960-272 6200 SFPM</b>			<i>Meters</i>	<b>Model 960-272 7000 SFPM</b>			<i>Meters</i>
<b>Percent</b>	<b>SFPM</b>	<b>Spindle RPM</b>	<b>SMPM</b>	<b>Percent</b>	<b>SFPM</b>	<b>Spindle RPM</b>	<b>SMPM</b>
100.00%	6200	2962	1889.76	100.00%	7000	2962	2133.6
90.00%	5580	2665.8	1700.784	90.00%	6300	2665.8	1920.24
80.00%	4960	3312	1511.808	80.00%	5600	3312	1706.88
70.00%	4340	2898	1322.832	70.00%	4900	2898	1493.52
60.00%	3720	2484	1133.856	60.00%	4200	2484	1280.16
50.00%	3100	2070	944.88	50.00%	3500	2070	1066.8
40.00%	2480	1656	755.904	40.00%	2800	1656	853.44
30.00%	1860	1242	566.928	30.00%	2100	1242	640.08
20.00%	1240	592.4	377.952	20.00%	1400	592.4	426.72
10.00%	620	437	188.976	10.00%	700	437	213.36
0.00%	620	437	188.976	0.00%	700	437	213.36

**Fig 3.6**

### **Maintenance of the model 960-272**

- Every thirty days apply light machine oil to the rear wheel support to rear wheel handle interface. Two drops of oil is sufficient.
- Every thirty days check the drive belt tension. If you can hear the belt “slap” the frame when the drive motor starts, the belt may require re-tensioning. Do this by loosening the two nuts that secure the motor to the belt guard and slide the guard forward. Do not over tighten the belt. Doing so will shorten the life of the machine bearings. Tighten the two nuts.
- Routinely inspect the machine for loose hardware. Tighten as required.
- Daily vacuum or otherwise remove dust and debris build-up from the machine and the machine belt track.

There are no other maintenance actions required. All bearings are sealed for life and require no additional lubrication.

Burr King Manufacturing can help you with problem solutions, and/or answers to your questions. Please call your Burr King distributor first; if you can not reach satisfactory conclusion please call the Burr King factory.

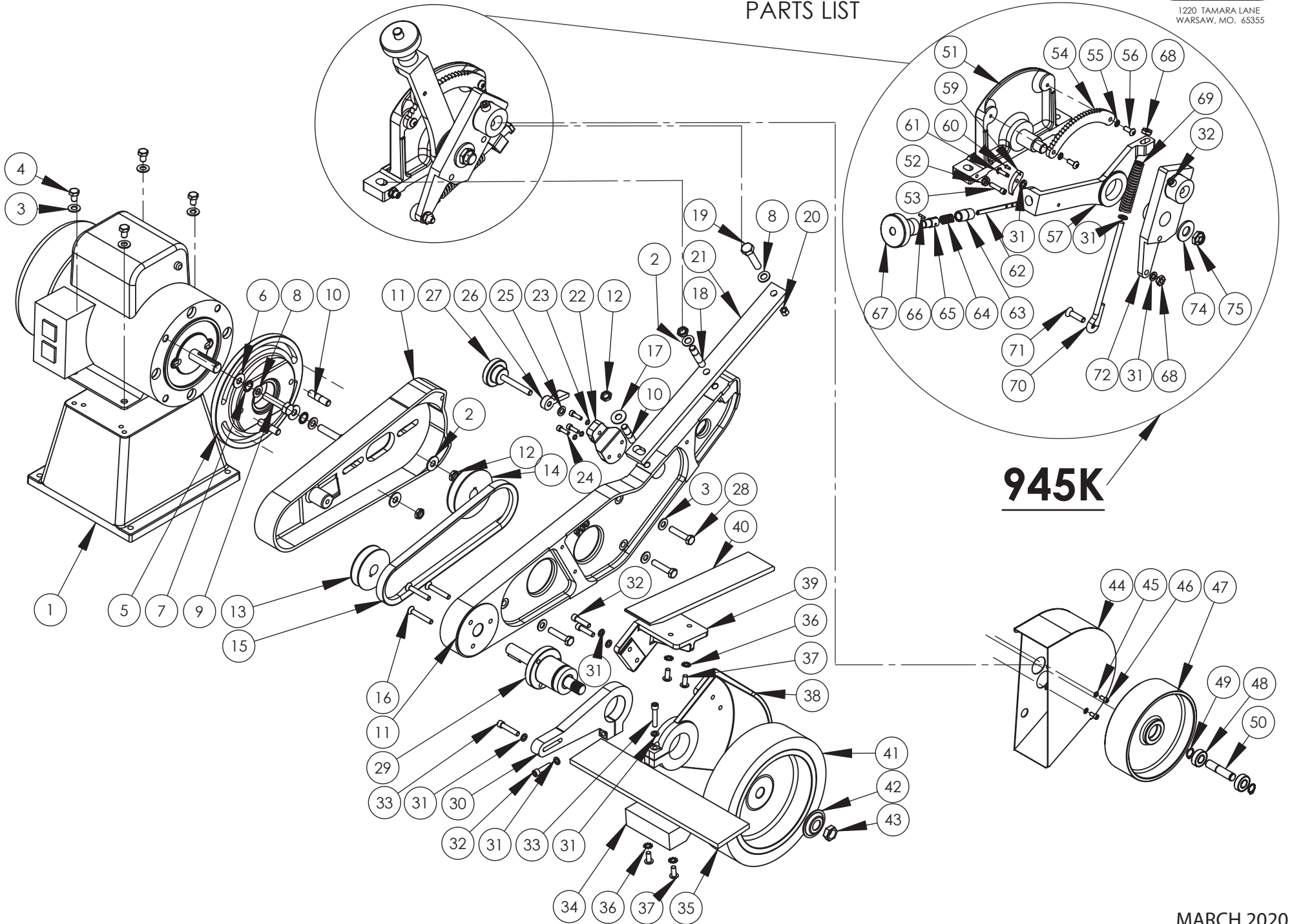
# MODEL 960-272

## 8" CONTACT WHEEL

### PARTS LIST

BURR KING

1220 TAMARA LANE  
WARSAW, MO. 65355



**945K**

## 960-272

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	941	BASE	1
2	7-0058	WASHER, 3/8 x 7/8	4
3	4	WASHER, 5/16 SAE ZINC PLTD	7
4	2	BOLT, 5/16-18x1 1/2 HEX HEAD	4
5	908	ADAPTER, C-FACE MOTOR	1
6	42	WASHER, SAE, 3/8	4
7	5-0014	WASHER, LOCK 3/8, INTERNAL STAR	2
8	17	WASHER, 960-616, AN	7
9	1-0003	BOLT 3/8-16 x 1 1/4 HEX HEAD	2
10	920	STUD 3/8"x1 1/2", DOUBLE	3
11	900A	FRAME/GUARD ASSEMB	1
12	22	NUT, 3/8-24, NYLON INSERT	4
13	725	PULLEY, 2 1/2	1
14	730	PULLEY, 3	1
15	429K	BELT, V DRIVE	1
16	6	SCREW 1/4-20 x 1 1/2 FH SOC	3
17	40	WASHER, SAE, 3/8	1
18	920K	STUD 3/8"x1 1/2", DOUBLE	1
19	1-0004	BOLT 3/8-16 x 1 1/4 HEX HEAD	1
20	4-0007	NUT, 3/8-16, ELASTIC LOCK GD 2	1
21	943	BAR, EXTENSION	1
22	923	BRACKET, TRACKING	1
23	5-0035	WASHER, #10, LOCK, HIGH COLLAR	3
24	2-0023	SCREW, 10-24 X .625 ALLEN HEAD	3
25	18	WASHER, 960-516, AN	1
26	922	LOCK, KNOB, TRACKING	1
27	921	KNOB, TRACKING ASSY	1
28	1-0019	BOLT, 5/16-18x1 1/2 HEX HEAD	3
29	701	HOUSING, BEARING, w/keyway	1
30	916-1	ARM, WORKREST SUPPORT	1
31	5	WASHER, 1/4 AN	8
32	30	SCREW 1/4-20x1 SHCS	4
33	31	SCREW 1/4-20x1 1/4 SHCS	2
34	917	WORKREST	1
35	966-01	REST EXTENDER	1
36	5-0008	WASHER, 1/4, LOCK, EXTERNAL	4
37	2-0046	SCREW, 1/4-28x1/2 BH, BLK OX	4
38	903K	GUARD, CONTACT WHEEL	1
39	904BK	BRACKEN, PLATEN	1
40	964-01	PLATEN, MAIN 272	1
41	902	WHEEL, CONTACT	1
42	726	FLANGE, OUTER WHEEL	1
43	727	NUT, 5/8-18 RH, JAM, BRT PLT	1
44	912	GUARD, IDLER WHEEL	1
45	5-0032	WASHER, 1/4, LOCK, SPLIT, PLTD	2
46	1431	SCREW, 1/4-20 x 1/2 ALLEN HEAD	2
47	907K	WHEEL, IDLER, w/Brg. & Shaff	1
48	701B	BEARING	1
49	701F	RING, RETAINING 5/8 EXT.	2
50	707c	SHAFT, BEARING	1

## 945K

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
51	934	SUPPORT, REAR WHL, w/STUD	1
52	14	NUT, 10-24, KEP	1
53	13	SCREW, 10-24 x 3/4, SOC, HD, CAP	1
54	736	SECTOR	1
55	15	WASHER, 5/16 LOCK, SPLIT	2
56	9	SCREW, 10-24x1/2 BH, BLK OXIDE	2
57	937G	HANDLE	1
59	737F	PAWL	1
60	28	SCREW, DRIVE, #2 x 1/4	1
61	27	SCREW, DRIVE, #8 X 5/8	1
62	937C	STRIP, HANDLE	1
63	737E	NIPPLE, PIPE	1
64	737D	SPRING, BUTTON	1
65	737B-1	BUTTON	1
66	26	PIN, 3/32 x 3/8, ROLL PLTED	1
67	737A	KNOB, REAR TENSION ARM	1
68	3	NUT, 1/4-20 JAM, PLTD	2
69	738	SPRING, BELT TENSION	1
70	939	GUIDE, SPRING	1
71	34	SCREW, 1/4-20 X 1, FH PHILLIPS	1
72	935	SUPPORT, REAR WHEEL	1
74	21	WASHER, 1/2 ID	1
75	20	NUT, NYLOK JAM, 1/2-20	1

Burr King

1220 TAMARA LANE  
WARSAW, MO. 65355

MARCH 2020

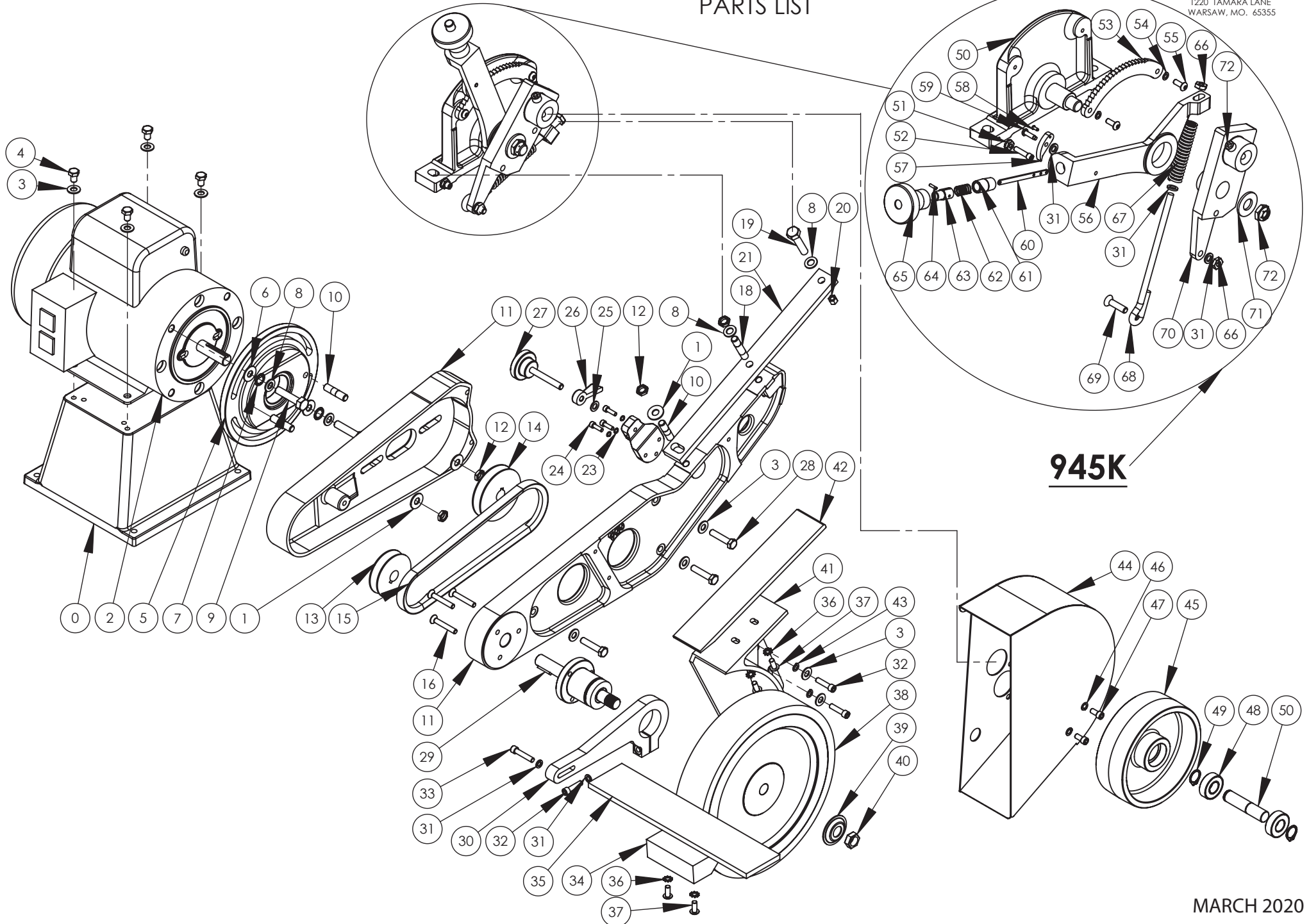
# MODEL 960-272

## 10" CONTACT WHEEL

### PARTS LIST

BURR KING

1220 TAMARA LANE  
WARSAW, MO. 65355



MARCH 2020

960-272			
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
0	941	BASE	1
1	7-0058	WASHER, 3/8 X 7/8	4
2	MOTOR	CALL FACTORY *	1
3	4	WASHER, 5/16 SAE ZINC PLTD	9
4	2	BOLT, 5/16-18x1 1/2 HEX HEAD	4
5	908	ADAPTER, C-FACE MOTOR	1
6	42	WASHER, SAE, 3/8	2
7	5-0014	WASHER, LOCK 3/8, INTERNAL STAR	2
8	17	WASHER, 960-616, AN	7
9	1-0003	BOLT 3/8-16 x 1 1/4 HEX HEAD	2
10	920	STUD 3/8"x1 1/2", DOUBLE	3
11	900A	FRAME/GUARD ASSEMB	1
12	22	NUT, 3/8-24, NYLON LOCK	4
13	725	PULLEY, 2 1/2	1
14	730	PULLEY, 3	1
15	429K	BELT, V DRIVE	1
16	6	SCREW 1/4-20 x 1 1/2 FH SOC	3
17	40	WASHER, SAE, 3/8	1
18	920K	STUD 3/8"x1 1/2", DOUBLE	1
19	1-0004	BOLT 3/8-16 x 1 1/4 HEX HEAD	1
20	4-0007	NUT, 3/8-16, ELASTIC LOCK GD 2	1
21	943	BAR, EXTENSION	1
22	923	BRACKET, TRACKING	1
23	5-0035	WASHER, #10, LOCK, HIGH COLLAR	3
24	2-0023	SCREW, 10-24 X .625 ALLEN HEAD	3
25	18	WASHER, 960-516, AN	1
26	922	LOCK, KNOB, TRACKING	1
27	921	KNOB, TRACKING ASSY	1
28	1-0019	BOLT, 5/16-18x1 1/2 HEX HEAD	3
29	701	BEARING, CONTACT WHEEL ASSY	1
30	948K	ARM, WORKREST SUPPORT	1
31	5	WASHER, 1/4 AN	5
32	30	SCREW 1/4-20x1 SHCS	3
33	31	SCREW 1/4-20x1 1/4 SHCS	1
34	706-1M	WORKREST	1
35	966-01	REST EXTENDER	1
36	5-0008	WASHER, 1/4, LOCK, EXTERNAL	4
37	2-0046	SCREW, 1/4-28x1/2 BH, BLK OX	4
38	1002	WHEEL, CONTACT	1
39	726	FLANGE, OUTER WHEEL	1
40	727	NUT, 5/8-18 RH, JAM, BRT PLT	1
41	913	GUARD, 10" DRIVE WHEEL	1
42	964-01	PLATEN, MAIN 272	1

960-272			
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
43	5-0032	WASHER, 1/4, LOCK, SPLIT, PLTD	4
44	912	GUARD, IDLER WHEEL	1
45	707	IDLER WHEEL 6 X 2, w/BRGS & SHAFT ALUM.	1
46	1431	SCREW, 1/4-20 X 1/2 ALLEN HEAD	2
47	701B	BEARING	2
48	701F	WHEEL, IDLER CIR-CLIP	2
49	707c	SHAFT, BEARING	1

945K			
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
50	934	SUPPORT, REAR WHL, w/STUD	1
51	14	NUT, 10-24, KEP	1
52	13	SCREW, 10-24 x 3/4, SOC, HD, CAP	1
53	736	SECTOR	1
54	15	WASHER, 5/16 LOCK, SPLIT	2
55	9	SCREW, 10-24x1/2 BH, BLK OXIDE	2
56	937G	HANDLE	1
57	737F	PAWL	1
58	28	SCREW, DRIVE, #2 x 1/4	1
59	27	SCREW, DRIVE, #8 X 5/8	1
60	937C	STRIP, HANDLE	1
61	737E	NIPPLE, PIPE	1
62	737D	SPRING, BUTTON	1
63	737B-1	BUTTON	1
64	26	PIN, 3/32 x 3/8, ROLL PLTD	1
65	737A	KNOB, REAR TENSION ARM	1
66	3	NUT, 1/4-20 JAM, PLTD	2
67	738	SPRING, BELT TENSION	1
68	939	GUIDE, SPRING	1
69	34	SCREW, 1/4-20 X 1, FH PHILLIPS	1
70	935	SUPPORT, REAR WHEEL	1
71	21	WASHER, 1/2 ID	1
72	20	NUT, NYLOK JAM, 1/2-20	1



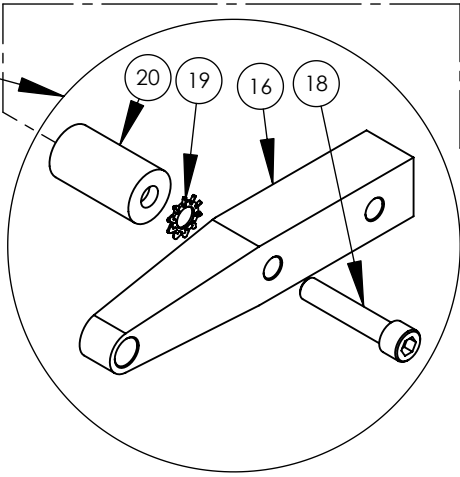
# OPTIONAL ATTACHMENTS

# 944 PARTS LIST

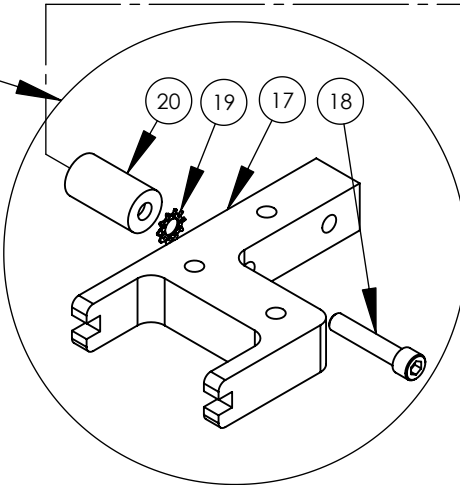
BURR KING

1220 TAMARA LANE  
WARSAW, MO. 65355

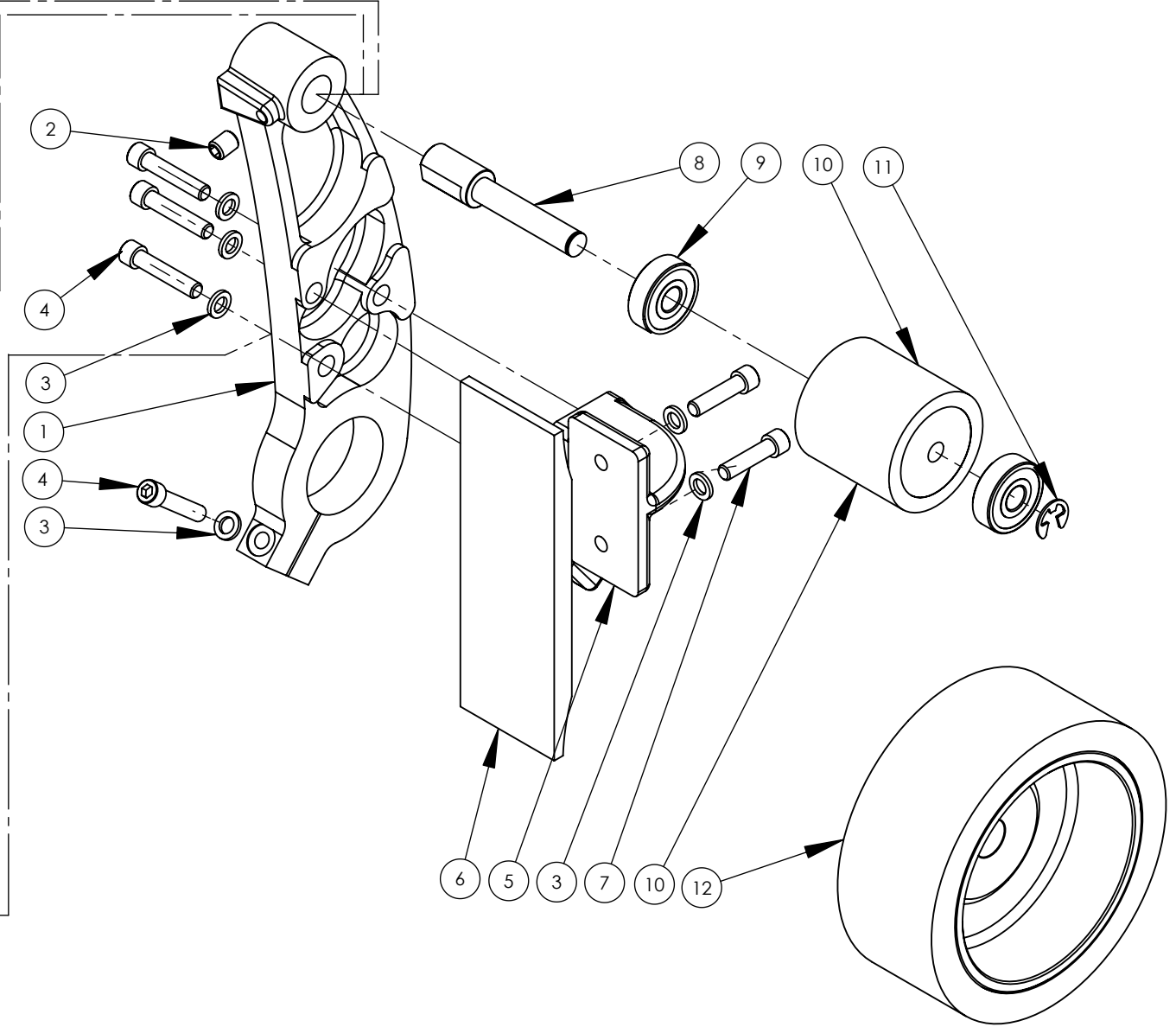
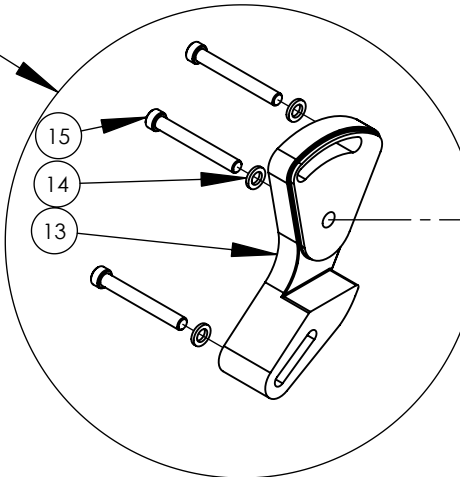
1276



1277



946K



<b>944</b>			
<b>ITEM NO.</b>	<b>PART NUMBER</b>	<b>DESCRIPTION</b>	<b>QTY.</b>
1	9066	ARM, MAIN ATTACHMENT	1
2	25	SCREW, SET, 5/16-18 X 3/8, ALLEN	1
3	5	WASHER, 1/4 AN	6
4	31	SCREW 1/4-20x1 1/4 SHCS	4
5	904B-5	BRACKET, PLATEN	1
6	904AKM	PLATEN	1
7	30	SCREW 1/4-20x1 SHCS	2
8	1444A	SHAFT, IDLER	1
9	202B	BEARING	2
10	202K	WHEEL, CONTACT 2x2 w/Brg. & Shaft	1
11	1454	RING, RETAINING, E STYLE	1
12	402	CONTACT WHL, 5x2	1

**NOTE**

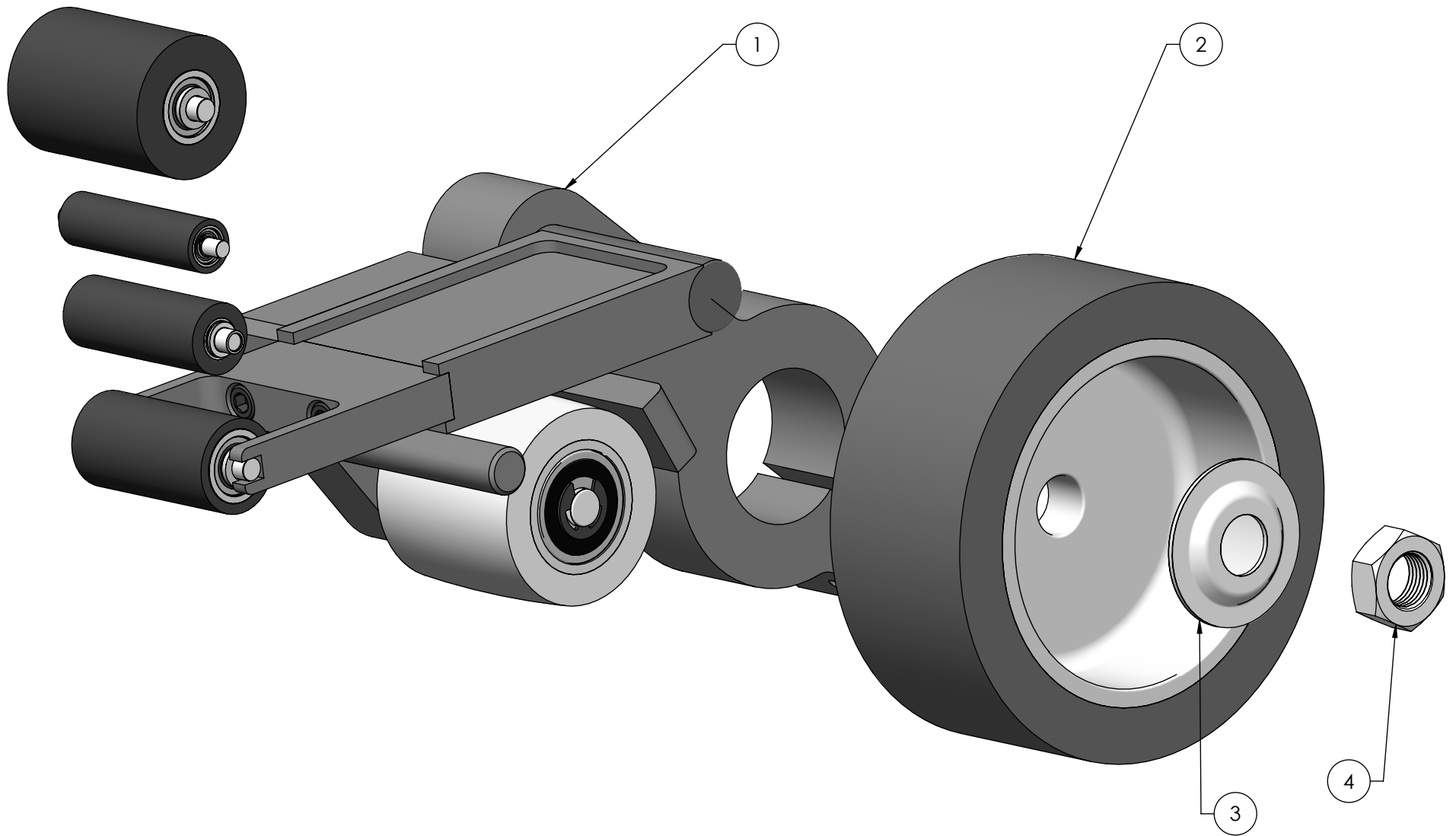
TO USE 944 MUST HAVE 907K IDLER WHEEL.

**OPTIONAL ATTACHMENTS**

<b>946K</b>			
<b>ITEM NO.</b>	<b>PART NUMBER</b>	<b>DESCRIPTION</b>	<b>QTY.</b>
13	946KM	ARM	1
14	5	WASHER, 1/4 AN	3
15	2-0062	SCREW, 1/4-20 X 1.5 ALLEN	3

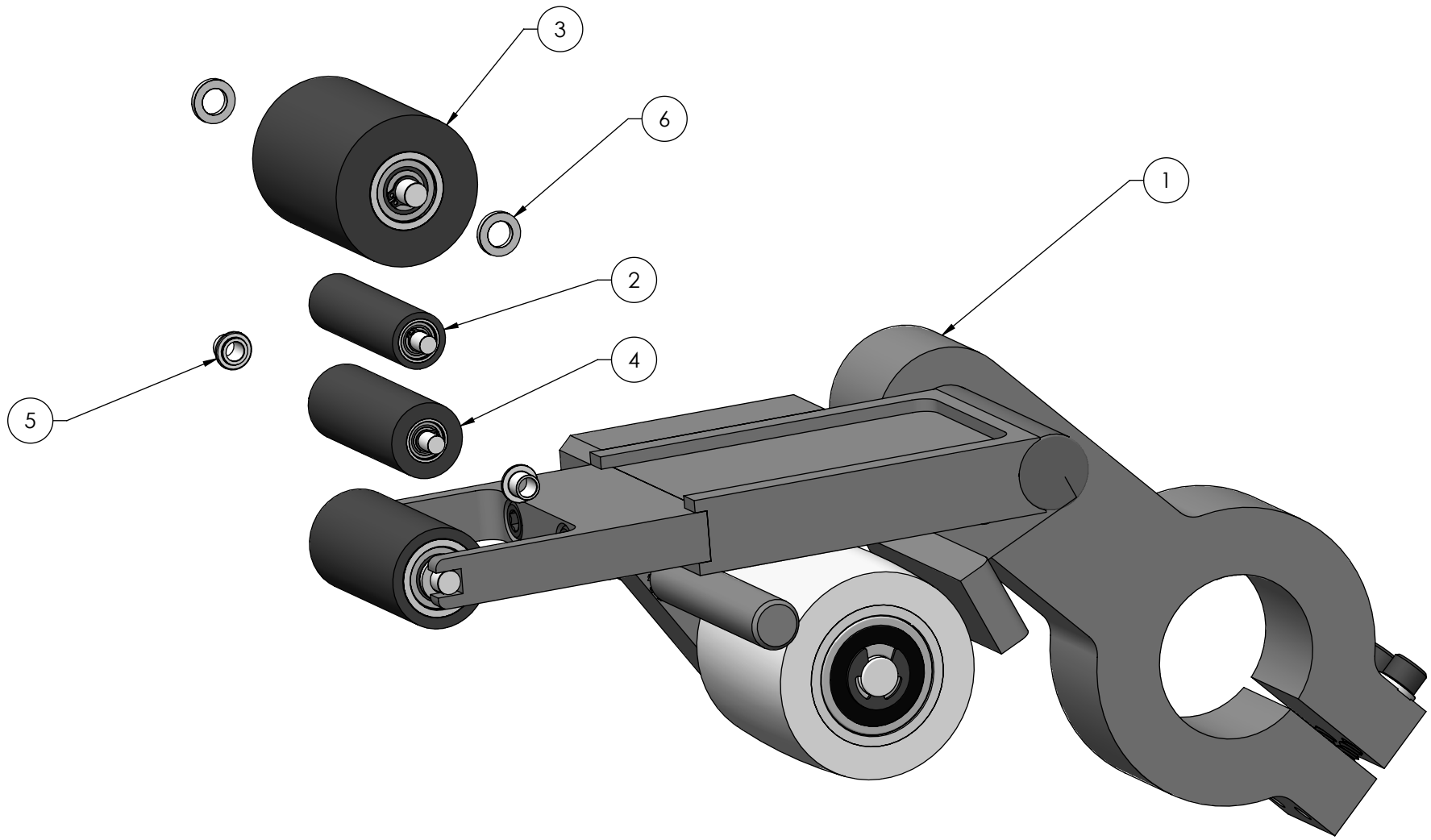
USE TO ATTACH WORKREST TO 944

<b>1276 &amp; 1277</b>			
<b>ITEM NO.</b>	<b>PART NUMBER</b>	<b>DESCRIPTION</b>	<b>QTY.</b>
16	1276B	ARM, UNI 1x1	1
17	1277B	ARM, FORK 1x2	1
18	31	SCREW 1/4-20x1 1/4 SHCS	2
19	5-0008	WASHER, 1/4, LOCK, EXTERNAL	2
20	1277A	STUD	2




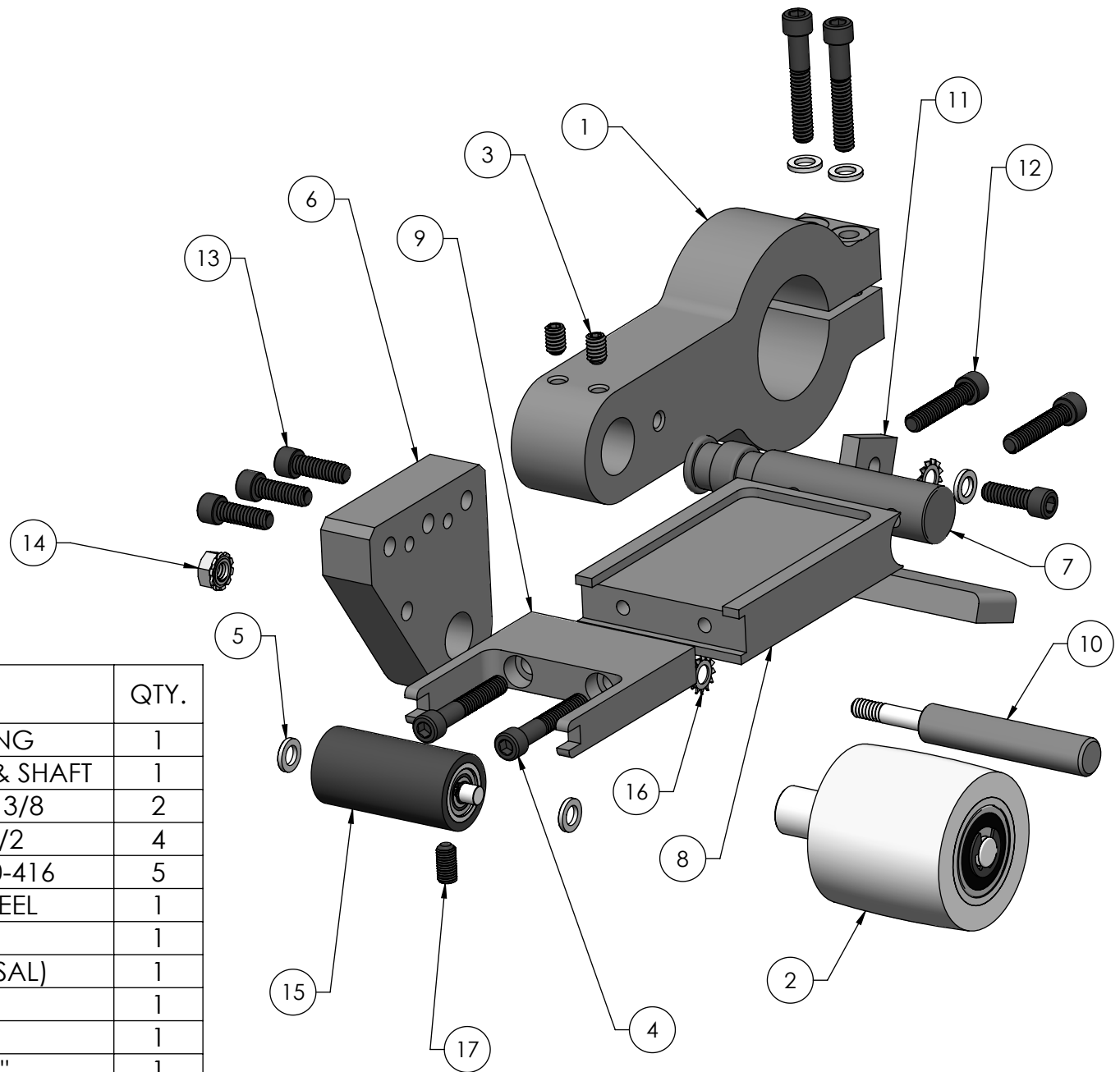
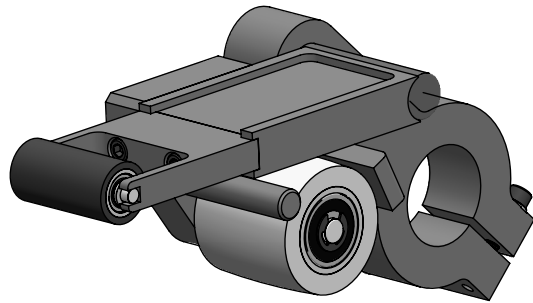
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	965-1	ATT. SM. WHL. INBOARD	1
2	402	WHEEL,CONT. 5 x 2 55D.	1
3	726	FLANGE, OUTER WHEEL	1
4	727	NUT, 5/8-18 JAM	1

<b>BURR KING</b>		1220 TAMARA LANE WARSAW, MO 65355	
		PH: 660-438-8998 800-621-2748 FAX: 660-438-8991 E-MAIL: info@burrking.com	
STANDARD TOLERANCES	TITLE:	ATT. SM. WHL. W/402 I.B.	
X.X = ±0.06	PART NO.	965	
X.X X = ±0.01	DRWN BY: KDE	DATE DRAWN: 12/21/2018	
X.X X X = ±0.005			
ANGLE = ±1/2°			
		SHEET	1 OF 1
		REV.	A



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	965-1M	ATTACH. SM. WHL.W/O 402	1
2	AP2311	WHEEL,CONT. 9/16x2 70D.	1
3	AQ2311	WHEEL,CONT. 1 1/2x2 70D.	1
4	AO2311	WHEEL,CONT. 3/4x2 70D.	1
5	1436	BUSHING,AXLE 3/16 x 1/4	2
6	5	WASHER, 1/4" AN960-416	2

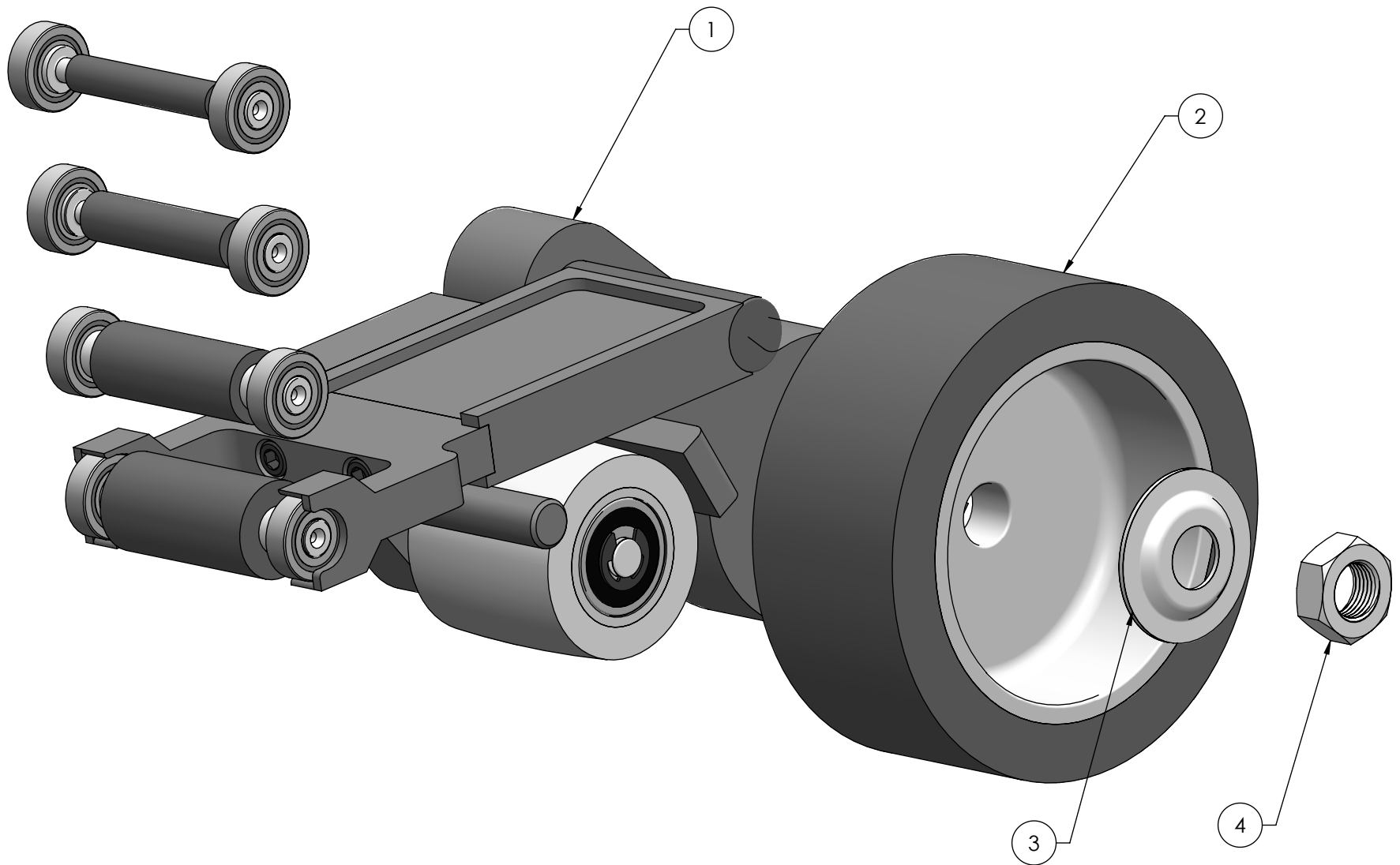
		1220 TAMARA LANE WARSAW, MO 65355 PH: 660-438-8998 800-621-2748 FAX: 660-438-8991 E-MAIL: info@burrking.com	
		STANDARD TOLERANCES X.X = ±0.06 X.X X = ±0.01 X.X X X = ±0.005 ANGLE = ±1/2°	TITLE: <b>ATT. SM. WHL. INBOARD</b>
PART NO. <b>965-1</b>		REV. <b>A</b>	
DRAWN BY: KDE		DATE DRAWN: 12/21/2018	



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	1425	BRACKET, MOUNTING	1
2	1444	WHEEL, IDLER W/BRGS. & SHAFT	1
3	1445	SETSCREW, 1/4-20 x 3/8	2
4	2-0011	SHCS, 1/4-20 x 1 1/2	4
5	5	WASHER, 1/4" AN960-416	5
6	9651	SUPPORT, IDLER WHEEL	1
7	1426	BAR, PIVOT	1
8	9655	BASE, ARM (UNIVERSAL)	1
9	9657	ARM ADAPTER	1
10	9652	GUARD, PINCH	1
11	9653	GUARD, PINCH "L"	1
12	31	SHCS 1/4-20 X 1 1/4	2
13	209	SHCS 1/4-20 X 3/4	4
14	4-0013	NUT, 1/4"-20 KEP	1
15	AR2311	WHEEL, CONTACT 1x2 70D.	1
16	5-0008	WASHER, LOCK, EXTERNAL 1/4	2
17	1441	SETSCREW, 1/4-28 x 1/2	1

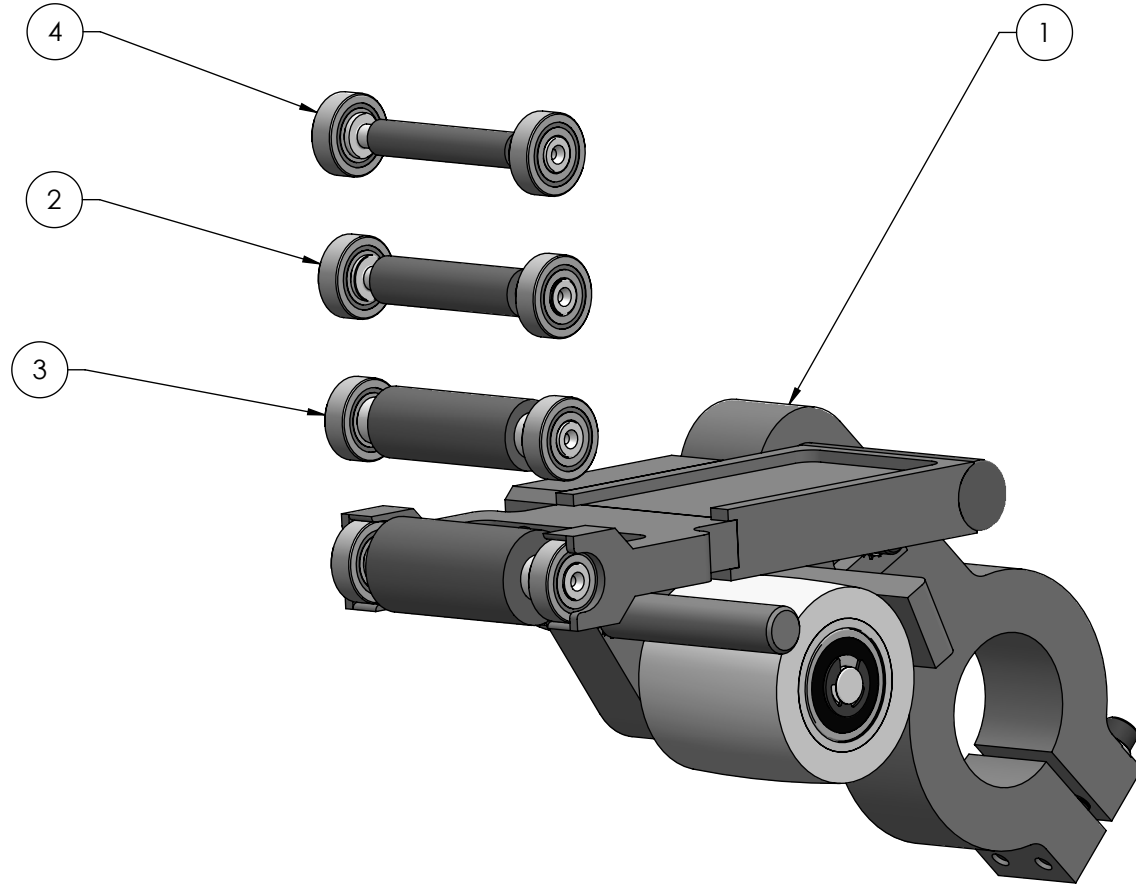
1220 TAMARA LANE  
 WARSAW, MO 65355  
 PH: 660-438-8998  
 800-621-2748  
 FAX: 660-438-8991  
 E-MAIL: info@burrking.com

STANDARD TOLERANCES	TITLE: ATTACH. SM. WHL.W/O 402	SHEET 1 OF 1
X.X = ±0.06	PART NO. 965-1M	REV. A
X.X X = ±0.01	DRAWN BY: KDE	DATE DRAWN: 12/21/2018
X.X X X = ±0.005		
ANGLE = ±1/2°		




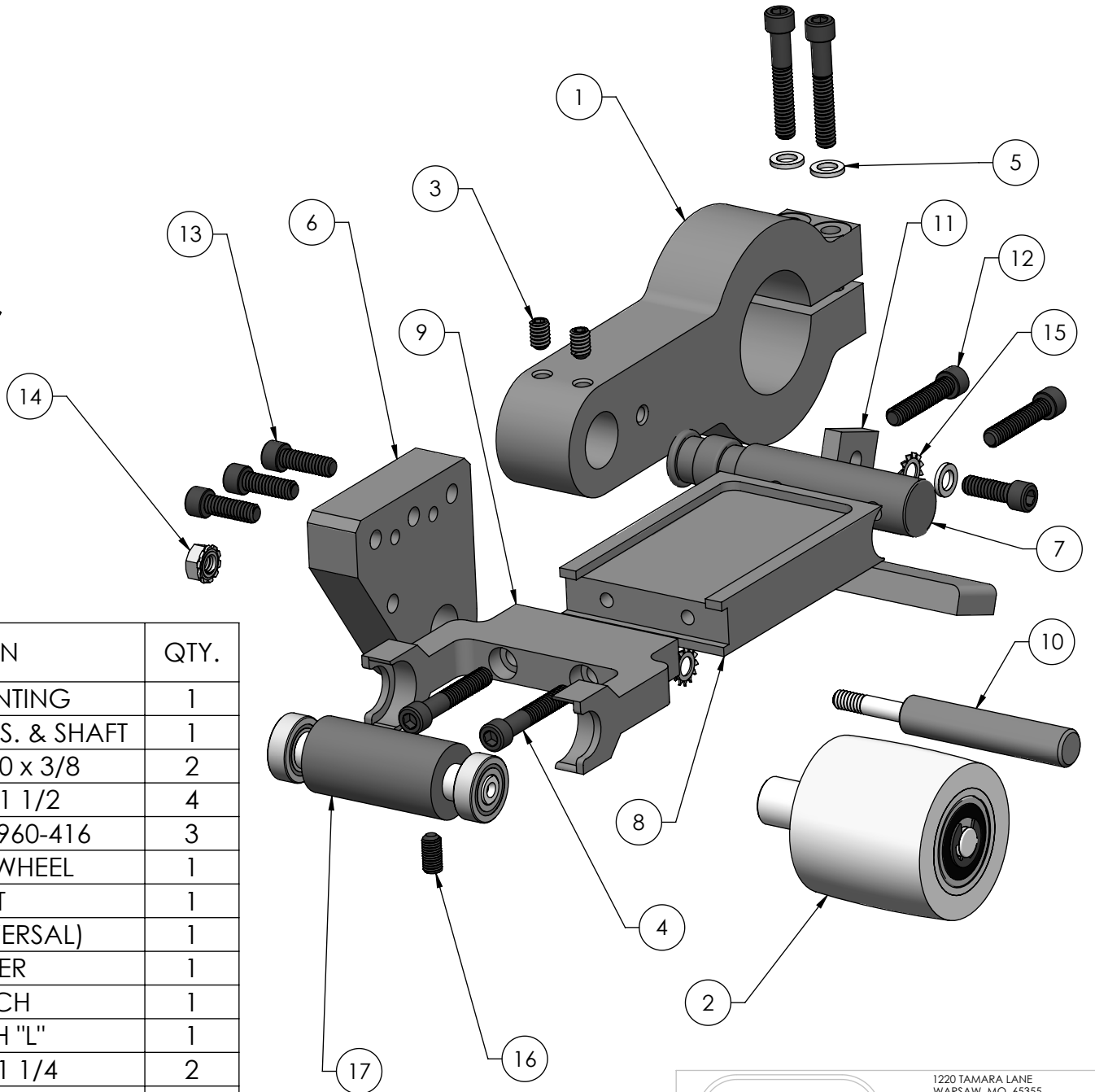
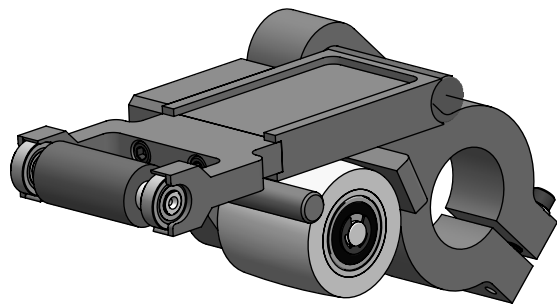
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	965-5	ATT. SM. WHL. OUTBOARD	1
2	402	WHEEL,CONT. 5 x 2 55D.	1
3	726	FLANGE, OUTER WHEEL	1
4	727	NUT, 5/8-18 JAM	1

		1220 TAMARA LANE WARSAW, MO 65355 PH: 660-438-8998 800-621-2748 FAX: 660-438-8991 E-MAIL: info@burrking.com	
		STANDARD TOLERANCES X.X = ±0.06 X.X X = ±0.01 X.X X X = ±0.005 ANGLE = ±1/2°	TITLE: <b>ATT. SM. WHL. W/402 O.B.</b> PART NO. <b>965-4</b> DRAWN BY: KDE



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	965-4M	ATTACH. SM. WHL.W/O 402	1
2	OB500	WHEEL CONT. 1/2 x 2 55D.	1
3	OB750	WHEEL,CONT. 3/4 x 2 55D.	1
4	OB375	WHEEL CONT. 3/8 x 2 55D.	1

		1220 TAMARA LANE WARSAW, MO 65355 PH: 660-438-8998 800-621-2748 FAX: 660-438-8991 E-MAIL: info@burrking.com	
		STANDARD TOLERANCES X.X = ±0.06 X.X X = ±0.01 X.X X X = ±0.005 ANGLE = ±1/2°	TITLE: <b>ATT. SM. WHL. OUTBOARD</b>
PART NO.		<b>965-5</b>	
DRAWN BY: KDE		DATE DRAWN: 12/21/2018	
		REV. <b>A</b>	



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	1425	BRACKET, MOUNTING	1
2	1444	WHEEL, IDLER W/BRGS. & SHAFT	1
3	1445	SETSCREW, 1/4-20 x 3/8	2
4	2-0011	SHCS, 1/4-20 x 1 1/2	4
5	5	WASHER, 1/4" AN960-416	3
6	9651	SUPPORT, IDLER WHEEL	1
7	1426	BAR, PIVOT	1
8	9655	BASE, ARM (UNIVERSAL)	1
9	9660	ARM ADAPTER	1
10	9652	GUARD, PINCH	1
11	9653	GUARD, PINCH "L"	1
12	31	SHCS 1/4-20 X 1 1/4	2
13	209	SHCS 1/4-20 X 3/4	4
14	4-0013	NUT, 1/4"-20 KEP	1
15	5-0008	WASHER, LOCK, EXTERNAL 1/4	2
16	1441	SETSCREW, 1/4-28 x 1/2	1
17	OB1000	WHEEL, CONT. 1 x 2 55D.	1

**BURR KING**

1220 TAMARA LANE  
WARSAW, MO 65355  
PH: 660-438-8998  
800-621-2748  
FAX: 660-438-8991  
E-MAIL: info@burrking.com

STANDARD TOLERANCES	TITLE: ATTACH. SM. WHL.W/O 402	SHEET 1 OF 1
X.X = ±0.06	PART NO. 965-4M	REV. A
X.X X = ±0.01		
X.X X X = ±0.005		
ANGLE = ±1/2°	DRAWN BY: KDE	DATE DRAWN: 12/21/2018

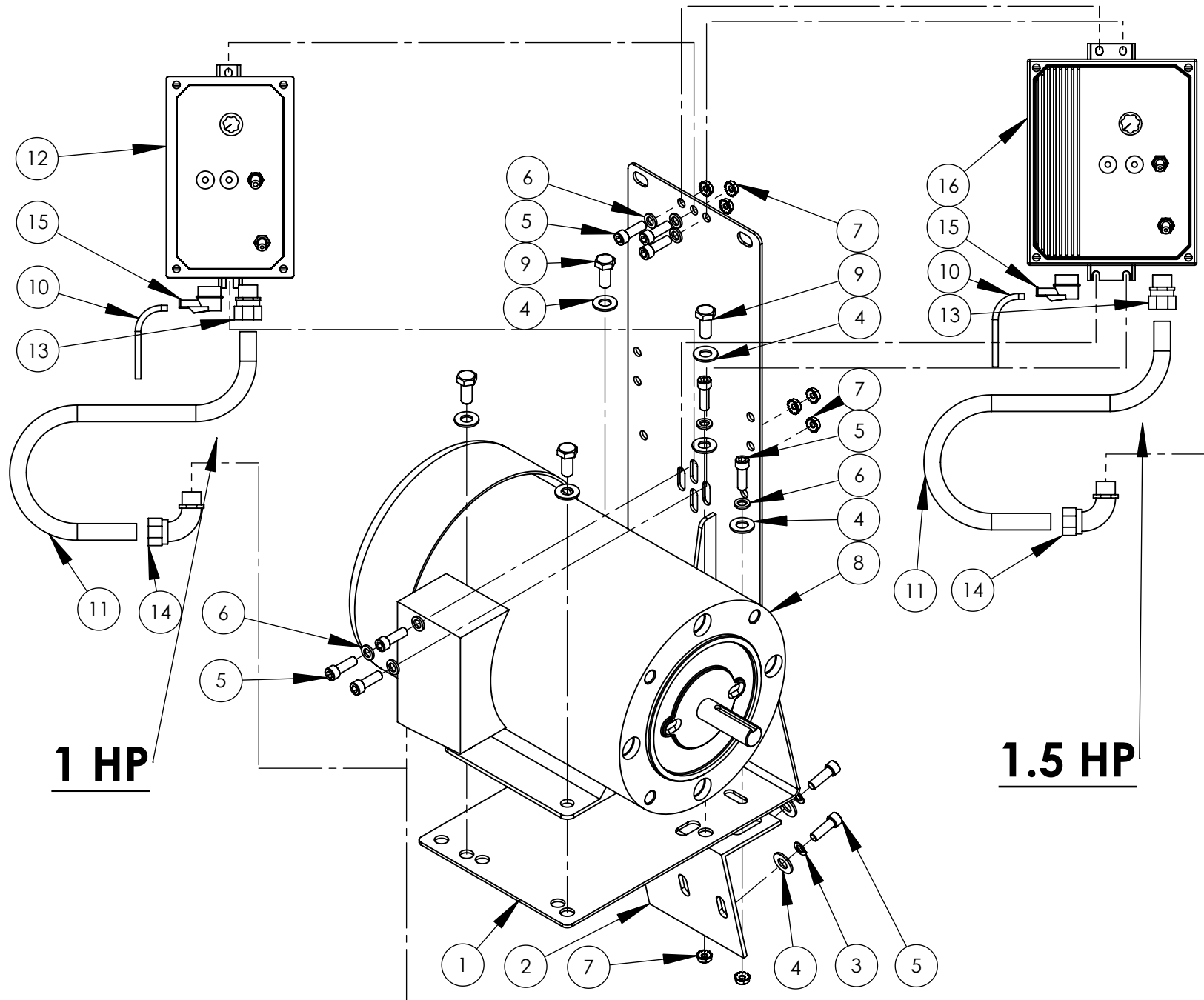


# 272 VARI SPEED

## PARTS LIST

BURR KING

1220 TAMARA LANE  
WARSAW, MO. 65355



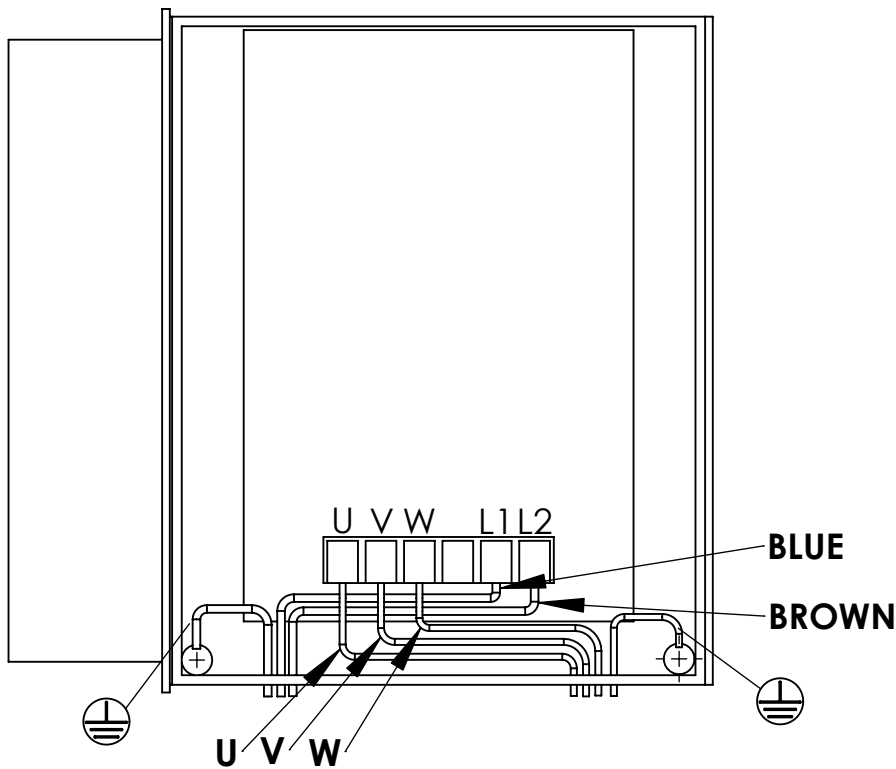
## 272 VARI SPEED

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	MB-4C	BRACKET, MOUNTING, STARTER	1
2	941-3	BRACE, MB4 SUPPORT	1
3	5-0032	WASHER, 1/4, LOCK, SPLIT, PLTD	2
4	4	WASHER, 5/16 SAE ZINC PLTD	8
5	209	SCREW, 1/4-20 X 3/4 ALLEN HEAD	10
6	5	WASHER, 1/4 AN	8
7	4-0013	NUT, KEP, 1/4-20	8
8	100B-1725C 150B-1725C	1 HP MOTOR 1.5 HP MOTOR	1
9	37	BOLT, 5/16-18x3/4 HEX HEAD	4
10	015-1 017	120V CORD 220V CORD	1
11	020	CONDUIT 3/8" LIQUIDTIGHT	1
12	864-1	CONTROLLER, 115/220V/1PH INPUT	1
13	775	CONNECTOR, 3/8" STR, LIQ. TIGHT	1
14	776	CONNECTOR, 3/8", 90 DEG, LIQ. TIGHT	1
15	643	RELIEF, STRAIN 3/8" 90 DEG	1
16	862-3	CONT. 220/120V/1PH IN, 3PH OUT	1

# WIRING DIAGRAM

BURR KING

1220 TAMARA LANE  
WARSAW, MO. 65355



TWIST TOGETHER  
T4, T5, T6

TWIST TOGETHER  
U, T7, T1

TWIST TOGETHER  
V, T2, T8

TWIST TOGETHER  
W, T3, T9

**NOTE:**  
LEESON- ALPH. & NUM.  
BALDOR- NUM.

DETAIL A  
SCALE 2 : 2.5

