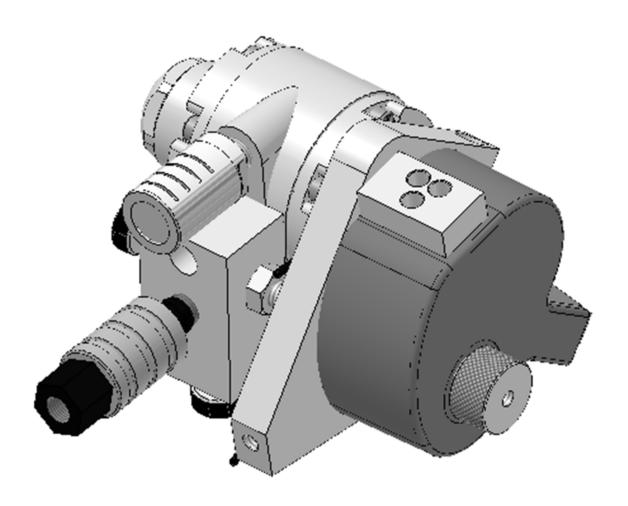
# **RC-1000 Roving Cutter**

# **Operations Manual**

This manual is applicable to the following models:

RC-1000





Revision: 0 Rev. December 2020



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Use of this product confirms that Magnum Venus Products, Inc.'s standard terms and conditions of sale apply.



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# Safety & Warning Information

# Warnings 4

Due to the vast number of chemicals that could be used and their varying chemical reactions, the buyer and user of this equipment should determine all factors relating to the fluids used, including any of the potential hazards involved. Particular inquiry and investigation should be made into potential dangers relating to toxic fumes, fires, explosions, reaction times, and exposure of human beings to the individual components or their resultant mixtures. MVP assumes no responsibility for loss, damage, expense or claims for bodily injury or property damage, direct or consequential, arising from the use of such chemical components.

The end user is responsible for ensuring that the end product or system complies with all the relevant laws in the country where it is to be used and that all documentation is adhered to.

#### Recommended Occupational Safety & Health Act (OSHA) Documentation:

1910.94 Pertaining to ventilation Pertaining to flammable liquids 1910.106 Pertaining to spray finishing operations, particularly paragraph (m), 1910.107 Organic Peroxides and Dual Component Coatings

For Additional information, contact the Occupational Safety and Health Administration (OSHA) at <a href="https://www.osha.gov/about.html">https://www.osha.gov/about.html</a>.

### **Recommended National Fire Protection Association (NFPA) Documentation:**

Organic Peroxides and Dual Component Materials NFPA No.33 Chapter 14 NFPA No. 63 **Dust Explosion Prevention** National Electrical Code NFPA No. 70 Static Electricity NFPA No. 77 Blower and Exhaust System NFPA No. 91 Plastics Industry Dust Hazards NFPA No. 654

**Fire Extinguisher** – code ABC, rating number 4a60bc using Extinguishing Media –Foam, Carbon Dioxide, Dry Chemical, Water Fog, is recommended for this product and applications.

The following general warnings and guidelines are for the setup, use, grounding, maintenance, and repair of equipment. Additional product-specific warnings may be found throughout this manual as applicable. Please contact your nearest MVP Technical Service Representative if additional information is needed.



#### **Safety Precautions**

- Avoid skin contact and inhalation of all chemicals.
- Review Material Safety Data Sheet (MSDS) to promote the safe handling of chemicals in
- Restrict the use of all chemicals to designated areas with good ventilation.
- Chemicals are flammable and reactive.
- Noxious fumes released when combusted.
- Operate equipment in a ventilated environment only.
- Uncured liquid resins are highly flammable unless specifically labeled otherwise.
- Cured laminate, accumulations of overspray, and laminate sandings are highly combustible.
- Do not operate or move electrical equipment when flammable fumes are present.
- Ground all equipment.
- If a spark is seen or felt, immediately halt operation. Do not operate the equipment until the issue has been identified and repaired.
- Contaminated catalyst may cause fire or explosion.
- Containers may explode if exposed to fire / heat.
- Use and store chemicals away from heat, flames, and sparks.
- Do not smoke in work areas or near stored chemicals.
- Do not mix Methyl Ethyl Ketone Peroxide (MEKP) with materials other than polyethylene.
- Do not dilute MEKP.
- Keep food and drink away from work area.



CORROSIVE



**FLAMMABLE** 



GROUNDING



**EXPLOSIVE** 



DANGER





#### **Physical Hazards**

- Never look directly into the spray gun fluid tip. Serious injury or death can result.
- Never aim the spray gun at or near another person. Serious injury or death can result.
- Chemical compounds can be severely irritating to the eyes and skin.
- Inhalation, ingestion, or injection may damage internal organs and lead to pulmonary disorders, cancers, lymphomas, and other diseases or health conditions.
- Other potential health effects include: irritation of the eyes and upper respiratory tract, headache, light-headedness, dizziness, confusion, drowsiness, nausea, vomiting, and occasionally abdominal pain.
- Eye contact: Immediately flush with water for at least 15 minutes and seek immediate medical attention.
- Skin Contact: Immediately wash with soap and water and seek immediate medical attention.
- Inhalation: Move the person to fresh air and seek immediate medical attention.
- Do not remove shields, covers, or safety features on equipment that is in use.
- Never place fingers, hands, or any body part near or directly in front of the spray gun fluid tip. The force of the liquid as it exits the spray tip can shoot liquid through the skin.
- Keep hands and body parts away from any moving equipment or components.
- Do not stand under plunger
- An improperly loaded drum may lead to an imbalance, causing a unit to tip over





#### **Personal Protective Equipment (PPE)**

- MVP recommends the use of personal safety equipment with all products in our catalog.
- Wear safety goggles, hearing protection, a respirator, and chemical resistant gloves.
- Wear long sleeve shirts or jackets and pants to minimize skin exposure.
- PPE should be worn by operators and service technicians to reduce the risk of injury.



For Additional information, contact the Occupational Safety and Health Administration (OSHA). <a href="https://www.osha.gov/about.html">https://www.osha.gov/about.html</a>



# Symbol Definitions



Indicates the risk of contact with chemicals that are hazardous, which may lead to injury or death.



Indicates the risk of contact with voltage / amperage that may lead to serious injury or death



Indicates that the materials being used are susceptible to combustion



Indicates the risk of contact with moving components that may lead to serious injury or death.



Indicates that the system or component should be grounded before proceeding with use or repair.



Indicates the use of lit cigarettes or cigars is prohibited, because the materials being used are susceptible to combustion.



Indicates that the materials and/or the process being performed can lead to ignition and explosion.



A recommendation for the use of Personal Protective Equipment (PPE) before using or repairing the product.



# Polymer Matrix Materials: Advanced Composites

Potential health hazards associated with the use of advanced composites can be controlled through the implementation of an effective industrial hygiene and safety program.

https://www.osha.gov/dts/osta/otm/otm\_iii/otm\_iii\_1.html#t iii:1\_1

Resins					
Composite Component	Organ System Target	Known (Possible) Health Effect			
	(Possible Target)				
Epoxy resins	Skin, lungs, eyes	Contact and allergic dermatitis,			
прохутесню	Orani, rango, oyoo	conjunctivitis			
Polyurethane resins	Lungs, skin, eyes	Respiratory sensitization, contact			
		dermatitis, conjunctivitis			
Phenol formaldehyde	Skin, lungs, eyes	As above (potential carcinogen)			
Bismaleimides (BMI)	Skin, lungs, eyes	As above (potential carcinogen)			
Polyamides	Skin, lungs, eyes	As above (potential carcinogen)			
Reinforcing materials					
Composite Component	Organ System Target	Known (Possible) Health Effect			
	(Possible Target)				
Aramid fibers	Skin (lungs)	Skin and respiratory irritation, contact			
Attained libero	_	dermatitis (chronic interstitial lung disease)			
Carbon/graphite fibers	Skin (lungs)	As noted for aramid fibers			
Glass fibers (continuous	Skin (lungs)	As noted for aramid fibers			
filament)	-				
Hardeners and curing agents					
Composite Component	Organ System Target	Known (Possible) Health Effect			
	(Possible Target)				
Diaminodiphenylsulfone	N/A	No known effects with workplace			
	-	exposure			
Methylenedianiline	Liver, skin	Hepatotoxicity, suspect human carcinogen			
Other aromatic amines					
Composite Component	Organ System Target	Known (Possible) Health Effect			
	(Possible Target)				
Meta-phenylenediamine (MPDA)	Liver, skin (kidney,	Hepatitis, contact dermatitis (kidney and			
Wieta prierryferiediamine (Wi BA)	bladder)	bladder cancer)			
Aliphatic andcyclo-aliphatic	Eyes, skin	Severe irritation, contact dermatitis			
amines					
Polyaminoamide	Eyes, skin	Irritation (sensitization)			
Anhydride	Eyes, lungs, skin	Severe eye and skin irritation, respiratory			
,	_, =, ==, ===, =====	sensitization, contact dermatitis			



## Catalyst - Methyl Ethyl Ketone Peroxide (MEKP)

MEKP is among the more hazardous materials found in commercial channels. The safe handling of the "unstable (reactive)" chemicals presents a definite challenge to the plastics industry. The highly reactive property which makes MEKP valuable to the plastics industry in producing the curing reaction of polyester resins also produces the hazards which require great care and caution in its storage, transportation, handling, processing and disposal. MEKP is a single chemical. Various polymeric forms may exist which are more or less hazardous with respect to each other. These differences may arise not only from different molecular structures (all are, nevertheless, called "MEKP") and from possible trace impurities left from the manufacture of the chemicals, but may also arise by contamination of MEKP with other materials in its storage or use. Even a small amount of contamination with acetone, for instance, may produce an extremely shock-sensitive and explosive compound.



#### **WARNING**

Contamination with promoters, materials containing promoters (such as laminate sandings), or with any readily oxidizing material (such as brass or iron) will cause exothermic redox reactions which can be explosive in nature. Heat applied to MEKP or heat buildup from contamination reactions can cause the material to reach its Self-Accelerating Decomposition Temperature (SADT).

Researchers have reported measuring pressure rates-of-rise well over 100,000 psi per second when certain MEKP's reach their SADT. For comparison, the highest-pressure rate-of-rise listed in NFPA Bulletin NO.68, "Explosion Venting", is 12,000 psi per second for an explosion of 12% acetylene and air. The maximum value listed for a hydrogen explosion is 10,000 psi per second. Some forms of MEKP, if allowed to reach their SADT, will burst even an open topped container. This suggests that it is not possible to design a relief valve to vent this order of magnitude of pressure rate-of-rise. The user should be aware that any closed container, be it a pressure vessel, surge chamber, or pressure accumulator, could explode under certain conditions. There is no engineering substitute for care by the user in handling organic peroxide catalysts. If, at any time, the pressure relieve valve on top of the catalyst tank should vent, the area should be evacuated at once and the fire department called. The venting could be the first indication of a heat, and therefore, pressure build-up that could eventually lead to an explosion. Moreover, if a catalyst tank is sufficiently full when the pressure relief valve vents, some catalyst may spray out, which could cause eye injury. For this reason, and many others, anyone whose job puts them in an area where this vented spray might go, should always wear full eye protection even when laminating operations are not taking place.

Safety in handling MEKP depends to a great extent on employee education, proper safety instructions, and safe use of the chemicals and equipment. Workers should be thoroughly informed of the hazards that may result from improper handling of MEKP, especially regarding contamination, heat, friction and impact. They should be thoroughly instructed regarding the proper action to be taken in the storage, use, and disposal of MEKP and other hazardous materials used in the laminating operation. In addition, users should make every effort to:

- Store MEKP in a cool, dry place in original containers away from direct sunlight and away from other chemicals.
- Keep MEKP away from heat, sparks, and open flames.



- Prevent contamination or MEKP with other materials, including polyester over spray and sandings, polymerization accelerators and promoters, brass, aluminum, and non-stainless steels
- Never add MEKP to anything that is hot, since explosive decomposition may result.
- Avoid contact with skin, eyes, and clothing. Protective equipment should be worn at all times. During clean-up of spilled MEKP, personal safety equipment, gloves, and eye protection must be worn. Firefighting equipment should be at hand and ready.
- Avoid spillage, which can heat up to the point of self-ignition.
- Repair any leaks discovered in the catalyst system immediately, and clean-up the leaked catalyst at once in accordance with the catalyst manufacturer's instructions.
- Use only original equipment or equivalent parts from Magnum Venus Products in the catalyst system (i.e.: hoses, fitting, etc.) because a dangerous chemical reaction may result between substituted parts and MEKP.
- Catalyst accumulated from the purging of hoses or the measurement of fluid output deliveries should never be returned to the supply tank, such catalyst should be diluted with copious quantities of clean water and disposed of in accordance with the catalyst manufacturer's instructions.

The extent to which the user is successful in accomplishing these ends and any additional recommendations by the catalyst manufacturer determines largely the safety that will be present in his operation.

## **Clean-Up Solvents and Resin Diluents**



#### **WARNING**

A hazardous situation may be present in your pressurized fluid system! Hydro carbon solvents can cause an explosion when used with aluminum or galvanized components in a closed (pressurized) fluid system (pump, heaters, filters, valves, spray guns, tanks, etc.). An explosion could cause serious injury, death, and/or substantial property damage. Cleaning agents, coatings, paints, etc. may contain Halogenated Hyrdrocarbon solvents. Some Magnum Venus Products spray equipment includes aluminum or galvanized components and will be affected by Halogenated Hydrocarbon solvents.

There are three key elements to the Halogenated Hyrdocarbon (HHC) solvent hazard.

1. The presence of HHC solvents.

1,1,1 – Trichloroethane and Methylene Chloride are the most common of these solvents. However, other HHC solvents are suspect if used; either as part of paint or adhesives formulation, or for clean-up flushing. Most handling equipment contains these elements. In contact with these metals, HHC solvents could generate a corrosive reaction of a

Aluminum or Galvanized Parts.

catalytic nature.

Equipment capable of withstanding pressure. When HHC solvent contact aluminum or galvanized parts inside a closed container such as a pump, spray gun, or fluid handling system, the chemical reaction can, over time, result in a build-up of heat and



pressure, which can reach explosive proportions. When all three elements are present, the result can be an extremely violent explosion. The reaction can be sustained with very little aluminum or galvanized metal; any amount of aluminum is too much.

- The reaction is unpredictable. Prior use of an HHC solvent without incident (corrosion or explosion) does NOT mean that such use is safe. These solvents can be dangerous alone (as a clean-up or flushing agent) or when used as a component or a coating material. There is no known inhibitor that is effective under all circumstances. Mixing HHC solvents with other materials or solvents such as MEKP, alcohol, or toluene may render the inhibitors ineffective.
- The use of reclaimed solvents is particularly hazardous. Reclaimers may not add any inhibitors. The possible presence of water in reclaimed solvents could also feed the reaction.
- Anodized or other oxide coatings cannot be relied upon to prevent the explosive reaction. Such
  coatings can be worn, cracked, scratched, or too thin to prevent contact. There is no known way
  to make oxide coatings or to employ aluminum alloys to safely prevent the chemical reaction
  under all circumstances.
- Several solvent suppliers have recently begun promoting HHC solvents for use in coating systems. The increasing use of HHC solvents is increasing the risk. Because of their exemption from many state implementation plans as Volatile Organic Compounds (VOCs), their low flammability hazard, and their not being classified as toxic or carcinogenic substances, HHC solvents are very desirable in many respects.



#### **WARNING**

Do not use Halogenated Hydrocarbon (HHC) solvents in pressurized fluid systems having aluminum or galvanized wetted parts.

Magnum Venus Products is aware of NO stabilizers available to prevent HHC solvents from reaction under all conditions with aluminum components in closed fluid systems. HHC solvents are dangerous when used with aluminum components in a closed fluid system.

- Consult your material supplier to determine whether your solvent or coating contains Halogenated Hydrocarbon solvents.
- Magnum Venus Products recommends that you contact your solvent supplier regarding the best non-flammable clean-up solvent with the heat toxicity for your application.
- If, however, you find it necessary to use flammable solvents, they must be kept in approved, electrically grounded containers.
- Bulk solvent should be stored in a well-ventilated, separate building, 50 feet away from your main plant.
- You should only allow enough solvent for one day's use in your laminating area.
- NO SMOKING signs must be posted and observed in all areas of storage or where solvents and other flammable materials are used.
- Adequate ventilation (as covered in OSHA Section 1910.94 and NFPA No.91) is important wherever solvents are stored or used, to minimize, confine and exhaust the solvent vapors.
- Solvents should be handled in accordance with OSHA Section 1910.106 and 1910.107.



### Catalyst Diluents

Magnum Venus Products spray-up and gel-coat systems currently produced are designed so that catalyst diluents are not required. Magnum Venus Products therefore recommends that diluents not be used to avoid possible contamination which could lead to an explosion due to the handling and mixing of MEKP and diluents. In addition, it eliminates any problems from the diluent being contaminated through rust particles in drums, poor quality control on the part of the diluents suppliers, or any other reason. If diluents are absolutely required, contact your catalyst supplier and follow his instructions explicitly. Preferably the supplier should premix the catalyst to prevent possible "on the job" contamination while mixing.



#### WARNING

If diluents are not used, remember that catalyst spillage and gun, hose, and packing leaks are potentially more hazardous since each drop contains a higher concentration of catalyst and will therefore react more quickly with overspray and the leak.

## **Cured Laminate, Overspray and Laminate Sandings Accumulation**

- Remove all accumulations of overspray, Fiberglass Reinforced Plastic (FRP) sandings, etc. from the building as they occur. If this waste is allowed to build up, spillage of catalyst is more likely to start a fire; in addition, the fire would burn hotter and longer.
- Floor coverings, if used, should be non-combustible.
- Spilled or leaked catalyst may cause a fire if it comes in contact with an FRP product, oversprayed chop or resin, FRP sandings or any other material with MEKP.

To prevent spillage and leakage, you should:

1.	Maintain your Magnum Venus Products System.	Check the gun several times daily for catalyst and resin packing or valve leaks. REPAIR ALL LEAKS IMMEDIATELY.
2.	Never leave the gun hanging over or lying inside the mold.	A catalyst leak in this situation would certainly damage the part, possibly the mold, and may cause a fire.
3.	Inspect resin and catalyst hoses daily for wear or stress at the entry and exits of the boom sections and at the hose and fittings.	Replace if wear or weakness is evident or suspected.
4.	Arrange the hoses and fiberglass roving guides so that the fiberglass strands DO NOT rub against any of	If allowed to rub, the hose will be cut through, causing a hazardous leakage of material which could increase the danger of fire. Also, the material

may spew onto personnel in the area.

## **Toxicity of Chemicals**

the hoses at any point.

- Magnum Venus Products recommends that you consult OSHA Sections 1910.94, 1910.106, 1910.107 and NFPA No.33, Chapter 14, and NFPA No.91.
- Contact your chemical supplier(s) and determine the toxicity of the various chemicals used as well as the best methods to prevent injury, irritation and danger to personnel.



• Also determine the best methods of first aid treatment for each chemical used in your plant.

### **Equipment Safety**

Magnum Venus Products suggest that personal safety equipment such as EYE GOGGLES, GLOVES, EAR PROTECTION, and RESPIRATORS be worn when servicing or operating this equipment. Ear protection should be worn when operating a fiberglass chopper to protect against hearing loss since noise levels can be as high as 116 dB (decibels). This equipment should only be operated or serviced by technically trained personnel!



#### CAUTION

Never place fingers, hands, or any body part near or directly in front of the spray gun fluid tip. The force of the liquid as it exits the spray tip can cause serious injury by shooting liquid through the skin. NEVER LOOK DIRECTLY INTO THE GUN SPRAY TIP OR POINT THE GUN AT OR NEAR ANOTHER PERSON OR AN ANIMAL.



#### **DANGER**

Contaminated catalyst may cause fire or explosion. Before working on the catalyst pump or catalyst accumulator, wash hands and tools thoroughly. Be sure work area is free from dirt, grease, or resin. Clean catalyst system components with clean water daily.



#### DANGER

Eye, skin, and respiration hazard. The catalyst MEKP may cause blindness, skin irritation, or breathing difficulty. Keep hands away from face. Keep food and drink away from work area.

## **Treatment of Chemical Injuries**



#### **CAUTION**

Refer to your catalyst manufacturer's safety information regarding the safe handling and storage of catalyst. Wear appropriate safety equipment as recommended.

Great care should be used in handling the chemicals (resins, catalyst and solvents) used in polyester systems. Such chemicals should be treated as if they hurt your skin and eyes and as if they are poison to your body. For this reason, Magnum Venus Products recommends the use of protective clothing and eye wear in using polyester systems. However, users should be prepared in the event of such an injury.

#### Precautions include:

Know precisely what chemicals you are using and obtain information from your chemical supplier on what to do in the event the chemical gets onto your skin or into the eyes, or if swallowed.

Keep this information together and easily available so that it may be used by those administering first aid or treating the injured person.



Be sure the information from your chemical supplier includes instructions on how to treat any toxic effects the chemicals have.



#### **WARNING**

Contact your doctor immediately in the event of an injury. If the product's MSDS includes first aid instructions, administer first aid immediately after contacting a doctor.

Fast treatment of the outer skin and eyes that contact chemicals generally includes immediate and thorough washing of the exposed skin and immediate and continuous flushing of the eyes with lots of clean water for at least 15 minutes or more. These general instructions of first aid treatment may be incorrect for some chemicals; you must know the chemicals and treatment before an accident occurs. Treatment for swallowing a chemical frequently depends upon the nature of the chemical.

## **Emergency Stop Procedure**

In an emergency, follow these steps to stop a system:

1. The ball valve located where the air enters the power head of the resin pump, should be moved to the "OFF" or closed position.

Note The "open" or "on" position is when the ball valve handle is parallel (in line) with the ball valve body. The "closed" or "off" position is when the ball valve handle is perpendicular (across) the ball valve body.

- 2. Turn all system regulators to the "OFF" position (counter-clockwise) position.
- 3. Verify / secure the catalyst relief line, located on the catalyst relief valve.
- 4. Verify / secure the resin return line, located on the resin filter.
- 5. Place a container under the resin pump ball valve to catch ejected resin.
- 6. Locate the ball valve on the resin pump.
- 7. Rotate the ball valve 90 degrees to the "On" or open position.

## Grounding

Grounding an object means providing an adequate path for the flow of the electrical charge from the object to the ground. An adequate path is one that permits charge to flow from the object fast enough that it will not accumulate to the extent that a spark can be formed. It is not possible to define exactly what will be an adequate path under all conditions since it depends on many variables. In any event, the grounding means should have the lowest possible electrical resistance.

Grounding straps should be installed on all loose conductive objects in the spraying area. This includes material containers and equipment. Magnum Venus Products recommends grounding straps be made of AWG No.18 stranded wire as a minimum and the larger wire be used where possible. NFPA Bulletin No77 states that the electrical resistance of such a leakage path should be 1 meg ohm (10<sup>6</sup> ohms) or less.



# GROUNDING

#### **CAUTION**

Whenever flammable or combustible liquids are transferred from one container to another, or from one container to the equipment, both containers or container and equipment shall be effectively bonded and grounded to dissipate static electricity. For further information, see National Fire Protection Association (NFPA) 77, titled "Recommended Practice on Static Electrical". Refer especially to section 7-7 titled "Spray Application of Flammable and Combustible Materials".

# Introduction

The RC-1000 Roving Cutter was designed to cut glass roving into short lengths of ½ to 4 inches and dispense it into a resin fan. When properly adjusted the chopped glass will be spread evenly from edge to edge of the resin pattern and the glass/resin mixture on the part will need a minimum amount of rolling.

This manual provides information for the operation, maintenance, and simple repair of the MVP RC-1000 Roving Cutter. The following procedures are included:

- Step-by-step operation instructions
- Step-by-step adjustment instructions
- Step-by-step assembly and disassembly



Please read this manual carefully and retain for future reference. Follow the steps in the order given, otherwise you may damage the equipment or injure yourself.

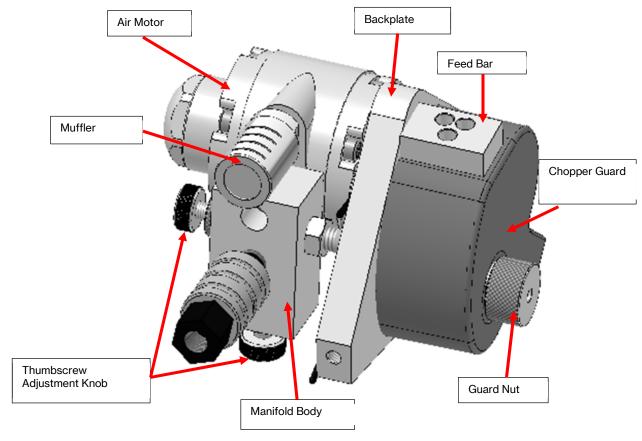
# Air Requirements

- 1. The RC-1000 requires 15 cfm of clean filtered air at a minimum of 90 psi (6.2 bar) to operate efficiently.
- 2. The air supply hose must have a minimum 5/16" inside diameter for a 25' hose. A longer hose may need a larger inside diameter.
- 3. Preferably the air will be clean, dry, and oil free.

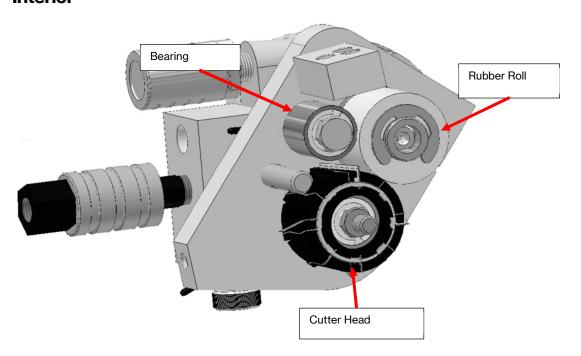
Note Using lower air pressures or smaller hose than the recommendations above could result in poor operation.



# **Unit Overview**



## Interior







# Operating the Cutter

- 1. Connect the cutter to an appropriate air supply and gun.
- 2. Double up the end of the roving and insert into one of the three holes in the feed bar on top of the cutter.
- 3. Turn the motor control knob on the bottom of the manifold about one full turn out.

#### Note Opening or closing the motor control knob will increase or decrease the glass output accordingly.

4. Turn the blower control knob on the side of the manifold about ½ turn out to start.

#### Note The blower control keeps air moving through the chopper cover to help keep it from plugging.

- 5. Pull the gun trigger and glass will be dispensed into the resin fan.
- 6. Adjust both the motor control knob and blower control knob to produce the desired output and pattern.



# Adjusting the Cutter



#### WARNING

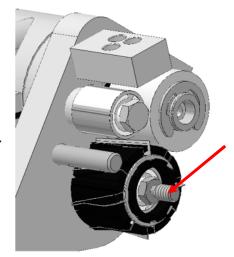
Before attempting to adjust the cutter, make sure the air supply is disconnected. Never operate the cutter without the guard installed or personal injury may result.

The glass should enter the resin fan as soon as possible without excessive glass fallout. Normally, if the glass enters the resin when the glass pattern and resin pattern are about the same width it will give the best results. Center the glass pattern by moving the cutter left, right, forward, or backward until it aligns as desired.

## **Cutting Head**

The cutting head must have sufficient tension against the anvil sleeve to cut properly. Excessive tension will overload the motor and create starting problems. Insufficient tension will not allow complete cutting. If you need to adjust the tension of the cutting head, follow these steps:

- 1. Loosen the guard nut and remove the guard from the side of the cutter.
- 2. Loosen the cutting head bolt in the center of the cutting head.



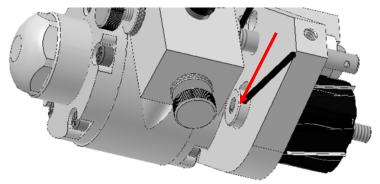




#### **WARNING**

BLADES ARE SHARP. Use caution when working with or near the cutting head to prevent injury.

3. Rotate the long eccentric nut on the other side of the backplate until the cutting head is adjusted to the appropriate specification.



# Idler Bearing and Rubber Roll

The idler bearing should be adjusted so that the bearing is not quite touching the anvil sleeve. With glass roving in place, the idler should hold the glass against the anvil sleeve. Excessive tension may cause the glass to wrap around the idler bearing. To adjust the idler bearing, follow these steps:

- 4. Loosen the idler bolt in the center of the bearing.
- 5. Rotate the idler bearing until it has slight tension against the rubber roll but is able to spin without spinning the rubber roll.
- 6. If you need to replace the rubber roll, remove the snap-ring from the end of the anvil sleeve and slide the roll off.
- 7. Replace with the appropriate roll for your application according to the table below.

Part Number	Description	Durometer (Hardness)
RC-1021B	Black Natural Rubber	60 Durometer ±5
RC-1021W	White Natural Rubber	60 Durometer ±5
RC-1021-HW	Hard White Natural Rubber	65 Durometer ±5
RC-1021-W-Gray	Gray Natural Rubber	75 Durometer ±5

- 8. Retighten when the idler bearing is adjusted properly.
- 9. When all necessary adjustments are complete, replace the cover guard and secure with the guard nut.



#### CAUTION

Never attempt to operate the cutter without the guard installed and secured in place.



## Air Motor

The air motor is precision built. With proper care and under normal operation, it will last hundreds of hours of continuous use. It is important that the motor be lubricated at the end of each working shift. To lubricate the motor, follow these steps:

- 10. Remove the motor speed control valve.
- 11. Completely close the blower thumbscrew to prevent oil from entering the interior of the chopper.
- 12. Insert 8 drops of a lightweight oil.
- 13. Replace the needle valve and reopen the blower thumbscrew to the desired setting.
- 14. Run the cutter for approximately 5 seconds.

#### Note It is not necessary to cut glass during this run.



#### **WARNING**

The clearances for this motor are extremely critical. If repair is needed, send the motor to an authorized distributor for repair. The warranty is void if this motor is opened by anyone except factory authorized repair centers.



- 1. Loosen the guard nut and slide the guard off the side of the cutter assembly.
- 2. Remove the snap-ring from the front of the rubber roll.
- 3. Remove the other snap-ring from the groove in the anvil sleeve next to the back plate.
- 4. Loosen the screw in the top corner of the backplate and slide the motor assembly out of the backplate.

Note Do not use a hammer or otherwise force the motor out of the backplate. If frozen, apply slight pressure with a flathead screwdriver between the motor and backplate and it will release.

- 5. Remove the Allen screw from the front of the manifold to remove it from the motor.
- 6. Remove the cutter head and idler bearing by unscrewing their corresponding bolts from the eccentric nuts on the other side of the backplate.



The cutter comes from the factory set to cut 1 inch lengths of glass roving using four evenly spaced blades inserted into the cutting head assembly. There are slots in the cutting head at every 1/2 inch for the end user to vary the length of the cut for different applications by inserting or removing blades.





#### **WARNING**

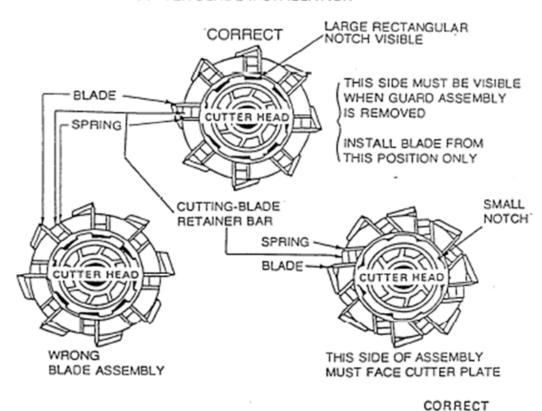
# BLADES ARE SHARP. Use caution when working with or near the cutting head to prevent injury.

To replace dulled cutting blades, follow these steps:

- 1. Use a small screwdriver to pry out the blade retainer and spring, causing the old blade to fall free from the slot.
- 2. Orient the cutting head so the side with the large rectangular notches are visible.
- 3. Place a new blade on the front (right) side of the slot.
- 4. Insert the retaining bar next to the blade, then use a pair of needle-nose pliers to insert the retaining spring.



#### CUTTER BLADE INSTALLATION



5. Complete these steps for each slot you wish to use for your application.

Note The 1 inch length is the most popular application. To achieve 1" cutting length, skip every other slot in the cutting head. If there is no blade in the slot, it will still contain the retaining bar and spring.

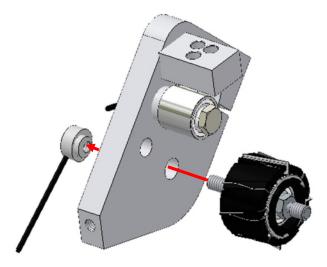


#### Note If you are unable to attain the desired chop length with the standard 8-blade rotor assembly, refer to the table below for additional rotor options.

Part Number	Description	# of Blades	Chop Length
RC-1016	8 Blade Rotor Assy (Standard)	4	1" for 4 blades
			½" for 8 blades
RC-1016-SP3	3 Blade Rotor Assy	3	1½"
RC-1016-SP5	5 Blade Rotor Assy	5	7/8"
RC-1016-SP12	12 Blade Rotor Assy	12	3/8"

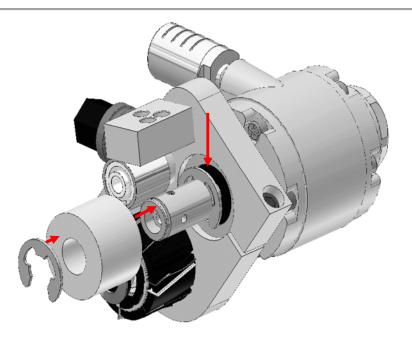
# Reassembling the Cutter

- 1. Replace the Teflon O-ring in the back of the manifold with a new one.
- 2. Line up the manifold with the holes on the front of the air motor.
- 3. Insert the Allen screw into the top hole in the manifold and tighten down into the motor using the appropriate Allen wrench.
- 4. Slide the cutter head bolt through the cutter bearing and spacer, then slide the exposed threads of the bolt through the appropriate hole in the backplate.
- 5. Screw the cutter head bolt into the long eccentric nut on the other side of the backplate and tighten.

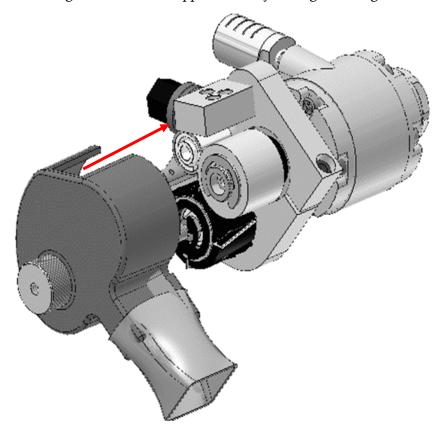


- 6. Align the blower tube up with the hole furthest to the left in the backplate and slide the backplate onto the motor shaft
- 7. Reinstall one of the snap-rings into the groove of the shaft closest to the air motor.
- 8. Slide the anvil sleeve inside the rubber roll onto the shaft past the open lip of the shaft.
- 9. Install the other E-ring retaining ring into the exposed groove on the shaft.





- 10. Align the slit in the guard with the feed bar and the end of the cutter head bolt with the guard nut.
- 11. Slide guard onto the chopper assembly and tighten the guard nut onto the cutter head bolt.





# A Parts Drawings

The following drawings are included for your reference:

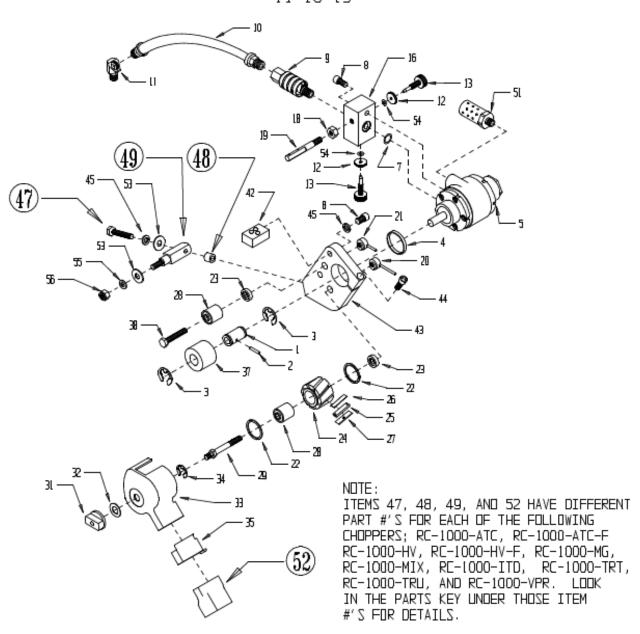
Parts Drawings					
Part Number	Description				
RC-1000-LCD	Basic Roving Cutter with Popular Attachment Options				
RC-1000-TLN-I	Chopper for Internal Mix Talon Gun				
RC-1000-TLN-IF	Chopper for Internal Mix Fit Talon Gun				
RC-1000-TLN-X	Chopper for External Mix Talon Gun				
RC-1000-TLN-XF	Chopper for External Mix Fit Talon Gun				
RC-1000-CPR	Chopper for CPR or Duramax Gun				
RC-1000-VFTC	Chopper for VFTC and CPC Style Guns				
RC-1091 Options	Extension and Chute Options for RC-1000 Choppers				

For complete parts lists and visual breakdowns for each of these assemblies, visit our website at <a href="https://www.mvpind.com/application-support/technical-documents/product-drawings/">https://www.mvpind.com/application-support/technical-documents/product-drawings/</a>.



# RC-1000-XXX ROVING CUTTER ASSY.

(SEE NOTE)

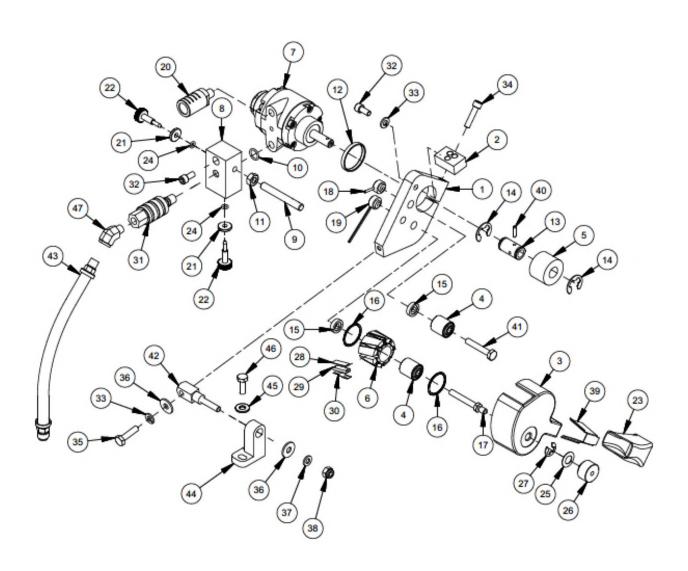




# RC-1000-XXX ROVING CUTTER ASSY. 11-16-13 CUSTOMER PARTS KEY

ITEN	PART #	DESCRIPTION	QTY	ITEN	PART #	DESCRIPTION QTT
lι	RC-1023	TIRE SHAFT	1	48	OPTIONS:	l
2	F-RP-02-09	ROLL PIN	1		RC-1003	SPACER FOR RC-1000-ATC,
3	RC-5133-62MD	RETAINING RING	2			RE-1000-ATC-F, RE-1000-MG,
4	RC-1010A	AIR MOTOR SPACER	1			& RC-1000-TRU
5	RC-1100-1	AIR MOTOR	1		NONE	SPACER FOR RC-1000-HV,
7	D-T-013	O-RING	1			RC-1000-HV-F
8	F-CS-04C-08	BOLT	2		RC-4091	SPACER FOR RC-1000-MIX,
9	RC-1007	VALVE	1			RE-1000-TRT, & RE-1000-VPR
10	RC-1084	FLEX HOSE	1		RE-4092	SPACER FOR RC-1000-ITO
11	PF-SE-02-05T-45	ELBOW	1	49	OPTIONS:	l
12	RC-1032A1	LDCK NUT	2		ATC-40605-M	MOUNT FOR RC-1000-ATC,
13	RC-2051	THUMB SCREW	2			RE-1000-ATC-F, RE-1000-MIX,
16	RC-2032	WANIFOLD BODY	1			& RC-10D0-ITD
18	F-HN-05C	HEX NUT	1		RC-4038-M	MOUNT FOR RC-1000-HV,
19	RC-1030-1	BLOWER TUBE	1			RC-1000-HV-F, RC-1000-TRT,
20	RC-1024-L	ECCENTRIC NUT, LONG	1			RE-1000-TRU, & RE-1000-VPR
21	RC-1024	ECCBNTRIC NUT	1		RC-1005-M	MOUNT FOR RC-1000-HG
22	RC-1016F	RETAINING RING	2	51	RC-2052	MUFFLER L
23	F-FW-D4SE	SPACER	2	52	OPTIONS:	
24	RC-1016C	CUTTER HEAD	1		RC-1091	EXTENSION FOR RC-1000-ATC,
25	RC-1016A	RETAINING BAR	В			RC-1000-HV, RC-1000-MG,
26	RC-1016B	RETAINING SPRING	В			& RC-1000-ITO
27	RC-1017-1	BLADE	4		RC-1091-ZP	EXTENSION FOR RC-1000-MIX
20		LABLE AS RE-1017, DTY			RC-1091-T	EXTENSION FOR RC-1000-TRU
28	RC-1018A	BEARING	2		RC-1091-F	EXTENSION FOR RC-1000-ATC-F.
29	RC-1016E	BOLT	1			RE-1000-HV-F, RC-1000-TRT,
31	RC-1014A	SUGRE WASHED	1		E EW 04	& RC-10D0-VPR WASHER 2
32	RC-1090-02	SPRING WASHER	1	53 54	F-FW-04	
33	RC-1014E	CHOPPER GUARD	1	54 55	D-B-00B	
34 35	RC-1014B RC-1014C	RETAINING RING GUARD INSERT	1	55 56	RC-1034 F-LN-04C	NYLON WASHER (
37	RC-1021W	ANVIL SLEENE	1	30	F-LN-04L	LUCK NOT
38	F-HB-04C-24	HEX BOLT	1	Agame		
42	RC-1015	FEED BAR	1	ASSK	BLIES WHICE CAN E	R OKDEKED:
43	RC-3013N	BACKPLATE	1	DC 11	70	AIR MOTOR ASSEMBLY
44	F-CZ-04C-16	CAP SCREW	í	RC-11	NOLUDES ITEMS L, 2	
45	F-SW-04	SPLIT WASHER	2	RC-10		ZUTTER ASSEMBLY
47	OPTIONS:	ar Ear William	1			24, 25, 26, 27, AND 28
"	F-HB-04C-24	BOLT FOR RC-1000-ATC,	•	RC-10		IDLER ASSEMBLY
		RC-1000-ATC-F, RC-100			NOLUDES ITEMS 21,	
		& RC-1000-TRU		RC-10		SUARD ASSEMBLY
	F-HB-04C-16	BOLT FOR RC-1000-HV,				32, 33, 34, AND 35
		& RC-1000-HV-F		RC-20		MANIFOLD ASSEMBLY
	F-HB-04C-36	BOLT FOR RC-1000-MIX,				8, 12, 13, 16, 18, 19, AND 54
		RC-1000-TRT, & RC-100	0-VPR	-		-, 12, 13, 10, 10, 10, nno 54
	F-HB-04C-56	BOLT FOR RC-1000-ITO				





CHOPPER FOR INTERNAL MIX TALON		RC-1000-TLN-I
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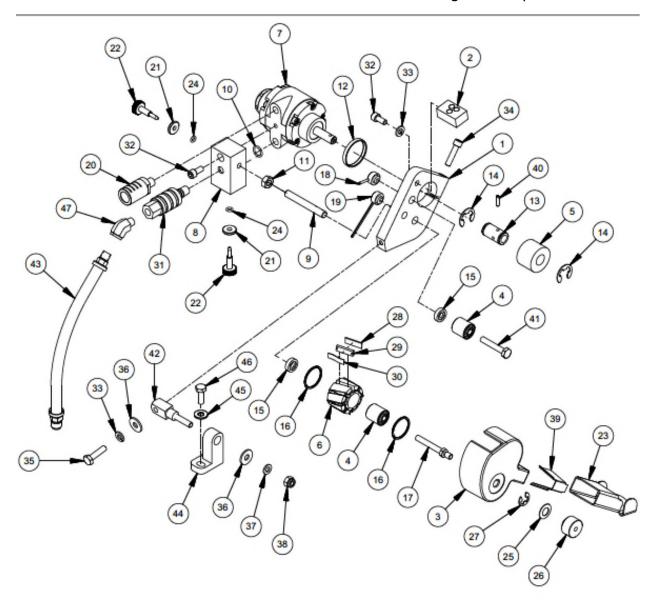
Parts List				
ITEM	PART NUMBER	QTY	DESCRIPTION	
1	RC-3013N	1	BACK PLATE	
2	RC-1015	1	FEED BAR	
3	RC-1014E	1	GUARD	
4	RC-1018A	2	BEARING	
5	RC-1021W	1	ANVIL SLEEVE WHITE	
6	RC-1016C	1	CUTTER HEAD	
7	RC-1100-1	1	AIR MOTOR	
8	RC-2032	1	MANIFOLD BODY	
9	RC-1030-1	1	BLOWER TUBE	
10	O-T-013	1	O-RING	
	F-HN-05C	1	HEX NUT	
12	RC-1010A	1	CUTTER HEAD RETAINER	
	RC-1023	1	MOTOR TIRE SHAFT	
	RC-5133-62MD	2	RETAINING RING	
	F-FW-04SE	2	SPACER	
16	RC-1016F	2	RETAINING RING	
17	RC-1016E	1	CUTTER HEAD BOLT	
18	RC-1024	1	ECCENTRIC NUT	
19	RC-1024-L	1	LONG ECCENTRIC NUT	
20	RC-2052	1	MUFFLER	
21	RC-1032A1	2	LOCK NUT	
22	RC-2051	2	THUMB SCREW	
23	RC-1091	1	EXTENSION	
24	O-B-008	2	O-RING	
25	RC-1090-02	1	SPRING WASHER	
26	RC-1014A	1	GUARD NUT	
27	RC-1014B	1	RETAINING RING	
28	RC-1017-1	4	BLADE	
29	RC-1016A	8	RETAINING BAR	
30	RC-1016B	8	RETAINING SPRING	
31	RC-1010B	1	VALVE	
32	F-CS-04C-08	2	CAP SCREW	
33	F-SW-04	2	LOCK WASHER	
	F-CS-04C-16	1	SOCKET HEAD CAP SCREW	
35	F-HB-04C-16	1	1/4 HEX BOLT	
36	F-FW-04	2	FLAT WASHER	
	RC-1034	1	NYLON WASHER	
	F-LN-04C	1	LOCK NUT	
	RC-1014C	1	GUARD INSERT	
		1		
	F-RP-02-09	1	ROLL PIN	
41	F-HB-04C-24	1	HEX BOLT	
-	RC-4038-M	_	MOUNT	
43	RC-1084	1	HOSE CHORDED BRACKET	
44	TLN-1070-01	1	CHOPPER BRACKET	
	F-FW-04-SAE	1	FLAT WASHER SAE	
46	F-HB-04C-12	1	1/4 HEX BOLT	
47	PF-SE-02-BR-45	1	45 DEG STREET ELBOW	

#### ASSEMBLIES AVAILABLE SEPARATELY:

RC-1100 AIR MOTOR ASSEMBLY
INCLUDES ITEMS 7, 13, AND 40
RC-1016 CUTTER ASSEMBLY
INCLUDES ITEMS 4, 6, 16, 28, 29, AND 30
RC-1018 IDLER ASSEMBLY
INCLUDES ITEMS 4, 15, 18, AND 41
RC-1014 GUARD ASSEMBLY
INCLUDES ITEMS 3, 25, 26, 27, AND 39
RC-2025 MANIFOLD ASSEMBLY
INCLUDES ITEMS 8, 9, 10, 11, 21, 22, 24, AND 32

CHOPPER FOR INTERNAL MIX TALON		RC-1000-TLN-I
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CHOPPER FOR INTERNAL MIX FIT TALON		RC-1000-TLN-IF
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	Parts List				
ITEM	PART NUMBER	QTY	DESCRIPTION		
1	RC-3013N	1	BACK PLATE		
2	RC-1015	1	FEED BAR		
3	RC-1014E	1	GUARD		
4	RC-1018A	2	BEARING		
5	RC-1021W	1	ANVIL SLEEVE WHITE		
6	RC-1016C	1	CUTTER HEAD		
7	RC-1100-1	1	AIR MOTOR		
8	RC-2032	1	MANIFOLD BODY		
9	RC-1030-1	1	BLOWER TUBE		
10	O-T-013	1	O-RING		
11	F-HN-05C	1	HEX NUT		
12	RC-1010A	1	CUTTER HEAD RETAINER		
13	RC-1023	1	MOTOR TIRE SHAFT		
14	RC-5133-62MD	2	RETAINING RING		
15	F-FW-04SE	2	SPACER		
16	RC-1016F	2	RETAINING RING		
17	RC-1016E	1	CUTTER HEAD BOLT		
18	RC-1024	1	ECCENTRIC NUT		
19	RC-1024-L	1	LONG ECCENTRIC NUT		
20	RC-2052	1	MUFFLER		
21	RC-1032A1	2	LOCK NUT		
22	RC-2051	2	THUMB SCREW		
23	RC-1091-F-L	1	EXTENSION		
24	O-B-008	2	O-RING		
25	RC-1090-02	1	SPRING WASHER		
26	RC-1014A	1	GUARD NUT		
27	RC-1014B	1	RETAINING RING		
28	RC-1017-1	4	BLADE		
29	RC-1016A	8	RETAINING BAR		
30	RC-1016B	8	RETAINING SPRING		
31	RC-1007	1	VALVE		
32	F-CS-04C-08	2	CAP SCREW		
33	F-SW-04	2	LOCK WASHER		
-	F-CS-04C-16	1	SOCKET HEAD CAP SCREW		
	F-HB-04C-16	1	1/4 HEX BOLT		
36	F-FW-04	2	FLAT WASHER		
37	RC-1034	1	NYLON WASHER		
	F-LN-04C	1	LOCK NUT		
39	RC-1014C	1	GUARD INSERT		
	F-RP-02-09	1	ROLL PIN		
41	F-HB-04C-24	1	HEX BOLT		
42	RC-4038-M	1	MOUNT		
43	RC-1084	1	HOSE		
_	TLN-1070-01	1	CHOPPER BRACKET		
45	F-FW-04-SAE	1	FLAT WASHER SAE		
	F-HB-04C-12	1	1/4 HEX BOLT		
47	PF-SE-02-BR-45	1	45 DEG STREET ELBOW		

#### ASSEMBLIES AVAILABLE SEPARATELY:

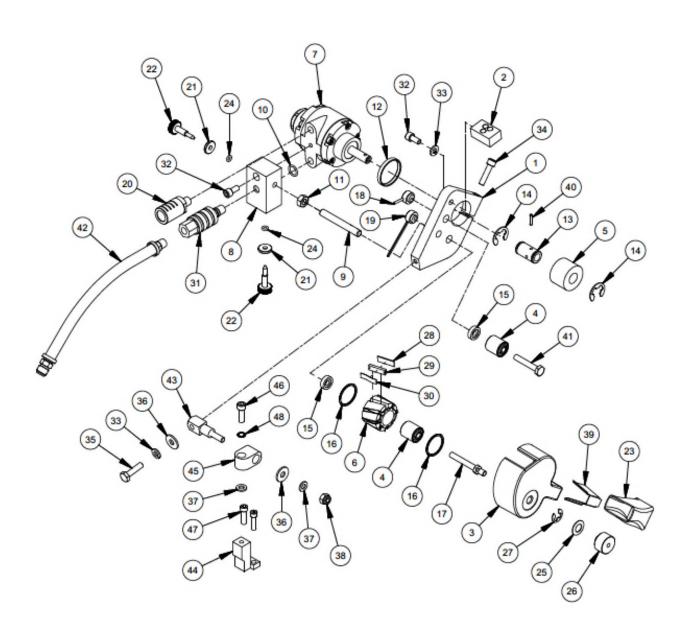
RC-1100 AIR MOTOR ASSEMBLY
INCLUDES ITEMS 7, 13, AND 40
RC-1016 CUTTER ASSEMBLY
INCLUDES ITEMS 4, 6, 16, 28, 29, AND 30
RC-1018 IDLER ASSEMBLY
INCLUDES ITEMS 4, 15, 18, AND 41
RC-1014 GUARD ASSEMBLY
INCLUDES ITEMS 3, 25, 26, 27, AND 39
RC-2025 MANIFOLD ASSEMBLY
INCLUDES ITEMS 8, 9, 10, 11, 21, 22, 24, AND 32

# MAGNUM VENUS PLASTECH

CHOPPER FOR INTERNAL MIX FIT TALON RC-1000-TLN-IF

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CHOPPER FOR EXTERNAL MIX TALON	RC-1000-TLN-X			
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		Parts	List		
ITEM	PART NUMBER	QTY	DESCRIPTION		
1	RC-3013N	1	BACK PLATE		
2	RC-1015	1	FEED BAR		
3	RC-1014E	1	GUARD		
4	RC-1018A	2	BEARING		
5	RC-1021W	1	ANVIL SLEEVE WHITE		
6	RC-1016C	1	CUTTER HEAD		
7	RC-1100-1	1	AIR MOTOR		
8	RC-2032	1	MANIFOLD BODY		
9	RC-1030-1	1	BLOWER TUBE		
10	O-T-013	1	O-RING		
11	F-HN-05C	1	HEX NUT		
12	RC-1010A	1	CUTTER HEAD RETAINER		
13	RC-1023	1	MOTOR TIRE SHAFT		
14	RC-5133-62MD	2	RETAINING RING		
15	F-FW-04SE	2	SPACER		
16	RC-1016F	2	RETAINING RING		
17	RC-1016E	1	CUTTER HEAD BOLT		
18	RC-1024	1	ECCENTRIC NUT		
19	RC-1024-L	1	LONG ECCENTRIC NUT		
20	RC-2052	1	MUFFLER		
21	RC-1032A1	2	LOCK NUT		
22	RC-2051	2	THUMB SCREW		
	RC-1091	1	EXTENSION		
24	O-B-008	2	O-RING		
25	RC-1090-02	1	SPRING WASHER		
26	RC-1014B 1		GUARD NUT RETAINING RING		
27					
28	RC-1017-1	4	BLADE		
29	RC-1016A	8	RETAINING BAR		
30	RC-1016B	8	RETAINING SPRING		
31	RC-1007	1	VALVE		
32	F-CS-04C-08	2	CAP SCREW		
33	F-SW-04	2	LOCK WASHER		
34	F-CS-04C-16	1	SOCKET HEAD CAP SCREW		
35	F-HB-04C-16	1	1/4 HEX BOLT		
36	F-FW-04	2	FLAT WASHER		
	RC-1034	2	NYLON WASHER		
38	F-LN-04C	1	LOCK NUT		
39	RC-1014C	1	GUARD INSERT		
40	F-RP-02-09	1	ROLL PIN		
41	F-HB-04C-24	1	HEX BOLT		
42	RC-1084	1	HOSE		
	RC-4048-M	1	MOUNT		
44	TLN-2040	1	CHOPPER MOUNT		
45	TLN-2052	1	PIVOT PIECE		
46	F-CS-04C-12	1	CAP SCREW		
47	F-CS-1224-12	2	CAP SCREW		
48	F-SBW-04	1	WASHER		

#### ASSEMBLIES AVAILABLE SEPARATELY:

RC-1100 AIR MOTOR ASSEMBLY
INCLUDES ITEMS 7, 13, AND 40
RC-1016 CUTTER ASSEMBLY
INCLUDES ITEMS 4, 6, 16, 28, 29, AND 30
RC-1018 IDLER ASSEMBLY
INCLUDES ITEMS 4, 15, 18, AND 41
RC-1014 GUARD ASSEMBLY
INCLUDES ITEMS 3, 25, 26, 27, AND 39
RC-2025 MANIFOLD ASSEMBLY
INCLUDES ITEMS 8, 9, 10, 11, 21, 22, 24, AND 32

## MAGNUM VENUS PLASTECH

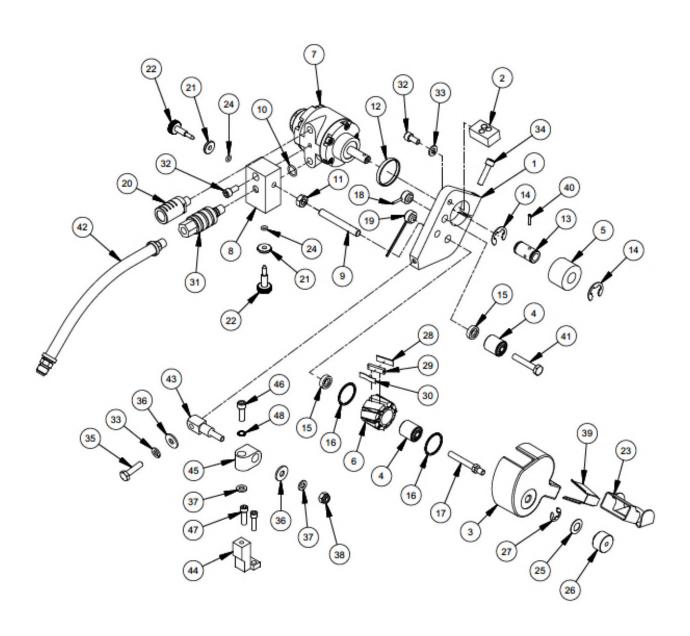
CHOPPER FOR EXTERNAL MIX TALON RC-1000-TLN-X



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CHOPPER FOR EXTERNAL MIX FIT TALON	RC-1000-TLN-XF			
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Parts List							
TEM	PART NUMBER	QTY	DESCRIPTION				
1	RC-3013N	1	BACK PLATE				
2	RC-1015	1	FEED BAR				
3	RC-1014E	1	GUARD				
4	RC-1018A	2	BEARING				
5	RC-1021W	1	ANVIL SLEEVE WHITE				
6	RC-1016C	1	CUTTER HEAD				
7	RC-1100-1	1	AIR MOTOR				
8	RC-2032	1	MANIFOLD BODY				
9	RC-1030-1	1	BLOWER TUBE				
10	O-T-013	1	O-RING				
11	F-HN-05C	1	HEX NUT				
12	RC-1010A	1	CUTTER HEAD RETAINER				
13	RC-1023	1	MOTOR TIRE SHAFT				
14	RC-5133-62MD	2	RETAINING RING				
15	F-FW-04SE	2	SPACER				
16	RC-1016F	2	RETAINING RING				
17	RC-1016E	1	CUTTER HEAD BOLT				
18	RC-1024	1	ECCENTRIC NUT				
19	RC-1024-L	1	LONG ECCENTRIC NUT				
20	RC-2052	1	MUFFLER				
21	RC-1032A1	2	LOCK NUT				
22	RC-2051	2	THUMB SCREW				
23	RC-1091-F	1	EXTENSION				
24	O-B-008	2	O-RING				
25	RC-1090-02	1	SPRING WASHER				
26	RC-1014A	1	GUARD NUT				
27	RC-1014B	1	RETAINING RING				
28	RC-1017-1	4	BLADE				
	RC-1016A	8	RETAINING BAR				
30	RC-1016B	8	RETAINING SPRING				
31	RC-1007 1 F-CS-04C-08 2		VALVE				
32			CAP SCREW				
33	F-SW-04	2	LOCK WASHER				
34	F-CS-04C-16	1	SOCKET HEAD CAP SCREW				
35	F-HB-04C-16	1	1/4 HEX BOLT				
36	F-FW-04	2	FLAT WASHER				
37	RC-1034	2	NYLON WASHER				
38	F-LN-04C	1	LOCK NUT				
39	RC-1014C	1	GUARD INSERT				
40	F-RP-02-09	1	ROLL PIN				
	F-HB-04C-24	1	HEX BOLT				
42 RC-1084		1	HOSE				
43	RC-4048-M	1	MOUNT				
44	TLN-2040	1	CHOPPER MOUNT				
45 TLN-2052-F		1	PIVOT MOUNT				
46	F-CS-04C-12	1	CAP SCREW				
47	F-CS-1224-12	2	CAP SCREW				
48	F-SBW-04	1	WASHER				

#### ASSEMBLIES AVAILABLE SEPARATELY:

RC-1100 AIR MOTOR ASSEMBLY
INCLUDES ITEMS 7, 13, AND 40
RC-1016 CUTTER ASSEMBLY
INCLUDES ITEMS 4, 6, 16, 28, 29, AND 30
RC-1018 IDLER ASSEMBLY
INCLUDES ITEMS 4, 15, 18, AND 41
RC-1014 GUARD ASSEMBLY
INCLUDES ITEMS 3, 25, 26, 27, AND 39
RC-2025 MANIFOLD ASSEMBLY
INCLUDES ITEMS 8, 9, 10, 11, 21, 22, 24, AND 32

## MAGNUM VENUS PLASTECH

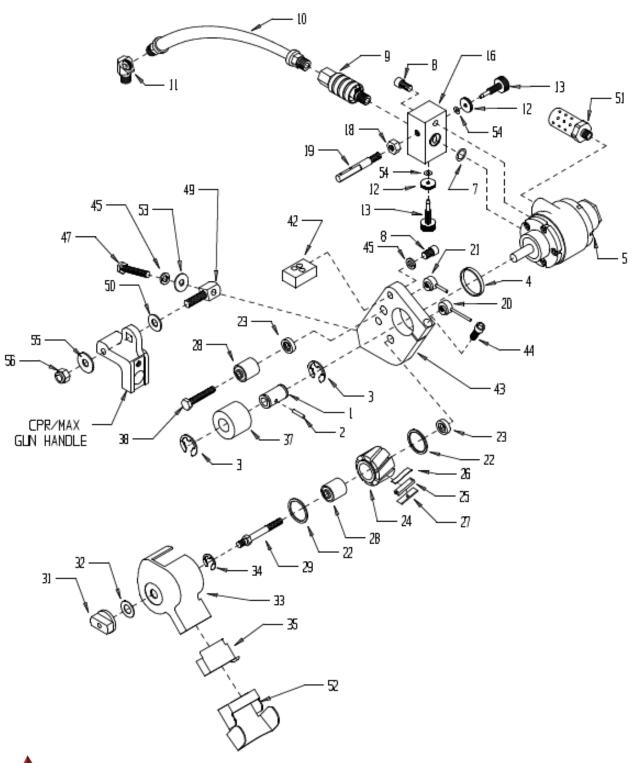
CHOPPER FOR EXTERNAL MIX FIT TALON RC-1000-TLN-XF

REV: A 02/08/2017 SHEET 2 / 2 7/2/2013



# RC-1000-CPR ROVING CUTTER ASSY.

11-16-13 (BT2)



# RC-1000-CPR ROVING CUTTER ASSY. 11-16-13 CUSTOMER PARTS KEY

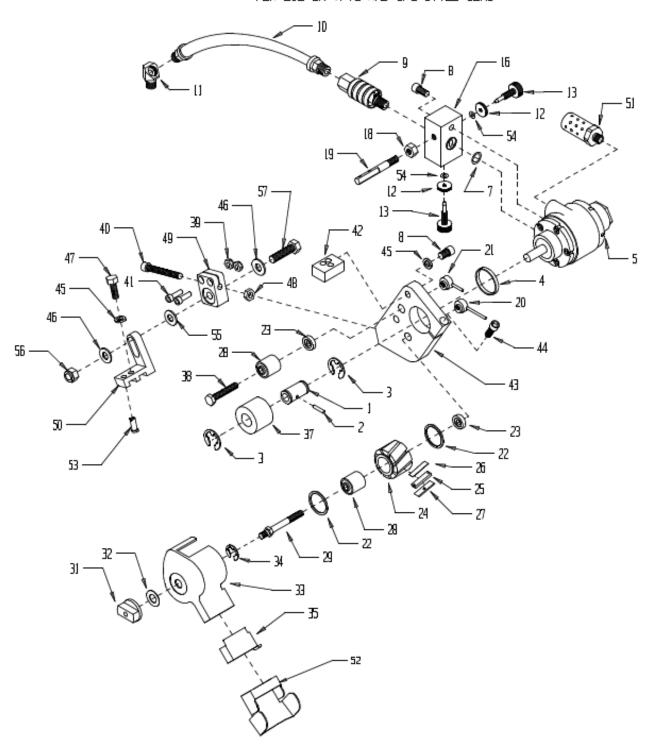
	1 TEM	PART #	DESCRIPTION	QTY	ITEN	PART #	DESCRIPTION	QTY
	1	RC-1023	TIRE SHAFT	1	49	RC-1041-W	HOLINT	l
١	2	F-RP-D2-09	ROLL PIN	j	50	RC-1042	NYLON WASHER	ĺ
١	3	RC-5133-62MD	RETAINING RING	2	51	RC-2052	HLIFFLER	I
١	4	RC-1010A	AIR MOTOR SPACER	1	52	RC-1091-F	NDI 2NBTXB	I
١	5	RC-1100-1	AIR MOTOR	1	53	F-FW-04	MAZHER	I
١	7	D-T-013	D-RING	1	54	0 <del>-0</del> -00B	O-RING	2
١	В	F-CS-D4C-08	BOLT	2	55	F-FW-05	WASHER	I
١	9	RC-10D7	VALVE	1	56	F-LN-05C	LOCK NUT	l
١	10	RC-10B4	FLEX HOSE	1				
١	11	PF-SE-02-05T-45	EL.80W	1				
١	12	RC-1032A1	LOCK NUT	2				
١	13	RC-2051	THUMB SCREW	2	ASSEME	BLIES WHICH CAN BE	ORDERED:	
١	16	RC-2032	MANIFOLD BOOY	1				
١	lB	F-HN-050	HEX NUT	1		XO A1		
١	19	RC=1030=1	BLOWER TUBE	1		NOTINGEZ ILENZ (° S'		
١	20	RC-1024-L	ECCENTRIC NUT, LONG	1	RC-101		ITTER ASSEMBLY	
١	21	RC-1024	ECCENTRIC NUT	1			24, 25, 26, 27, AND 28	
١	22	RC-1016F	RETAINING RING	2	RE-101		OLER ASSEMBLY	
١	23	F-FW-D4SE	SPACER	2		VOLLIDES ITEMS 21, 2		
١	24	RC-1016E	CLITTER HEAD	1	RC-101		JARO ASSEMBLY	
١	25	RC-1016A	RETAINING BAR	В		VOLLOES ITEMS 31, 3		
١	26	RC-10168	RETAINING SPRING	8	RE-202		MILOTO YZZEWBTA	
١	27	RC-1017-1	BLADE	4	I	VOLUDES ITEMS 7, 8,	12, 13, [6, 18, 19, AND 9	54
١			LABLE AS RC-1017, QTY 10					
١	28	RC-1018A	BEARING	2				
١	29	RC-1016E	BOLT	1				
١	31	RC-1014A	GUARD NUT	1				
١	32	RC-1090-02	SPRING WASHER	1				
١	33	RC-1014E	CHOPPER GUARD	1				
١	34	RC-1014B	RETAINING RING	1				
١	35	RC-1014E	GUARO INSERT	1				
١	37	RC-1021W	ANVIL SLEEVE	1				
١	38	F-HB-D4C-24	HEX BOLT	1				
١	42	RC-1015	FEED BAR	1				
	43	RC-3013N	BACKPLATE	1				
1	44	F-CS-D4C-16	CAP SCREW	1				
	45	F-SW-D4	SPLIT WASHER	2				
	47	F-H8-D4C-20	HEX BOLT	1				



# RC-1000-VFTC ROVING CUTTER ASSY.

11-16-13 (BT2)

FOR USE ON VETC AND CPC STYLE GUNS





# RC-1000-VFTC ROVING CUTTER ASSY. 11-16-13 CUSTOMER PARTS KEY

	ITK	PART #	DESCRIPTION	QTY	ITEN	PART #	DESCRIPTION	QTY
	ı	RC-1023	TIRE SHAFT	1	48	F-HN-04C	HEX NLIT	I
١	2	F-RP-02-09	ROLL PIN	1	49	RC-PRO-MB-1	MOUNT BLOCK	l
1	3	RC-5133-62MD	RETAINING RING	2	50	5103-16-l	CHOPPER MOUNT	l
١	4	RC-1010A	AIR MOTOR SPACER	1	51	RC-2052	MUFFLER	I
1	5	RC-1100-1	AIR MOTOR	1	52	RC-1091 <del>-</del> F	сноррек сните	l
1	7	D-T-013	O <del>-R</del> ING	1	53	5103-17-l	ECCENTRIC STUD	l
1	8	F-CS-D4C-08	BOLT	2	54	D-B-00B	O-RING	2
1	g	RC-1007	VALVE	1	55	F-FW-05-HF	HARD FIBER WASHER	l
١	10	RC-1084	FLEX HOSE	1	56	F-LN-05C	LOCK NUT	l
1	11	PF-SE-02-05T-45	ELBOW	1	57	F-HB-05C-24	HEX BOLT	l
1	12	RC-1032A1	LOCK NUT	2				
1	13	RC-2051	THUMB SCREW	2	Accomu	NATION WILLIAM COLD TO	ADDUDUD.	
1	16	RC-2032	WANIFOLD BODY	1	ASSEM	BLIES WHICH CAN B	E ORDEKED:	
1	18	F-HN-05C	HEX NUT	1	RC-111	10	VIOLED ASSOCIATION OT	
1	19	RC-1030-1	BLOWER TUBE	1			YJBM922A SOTOM SIA	
1	20	RC-1024-L	ECCENTRIC NUT, LONG	1	RC-10	NCLUDES ITEMS (, :	z, and s Cutter Assembly	
١	21	RC-1024	ECCENTRIC NUT	1			24, 25, 26, 27, AND 28	
1	22	RC-1016F	RETAINING RING	2	RC-10		IDLER ASSEMBLY	
1	23	F-FW-D4SE	SPACER	2		NCLUDES ITEMS 21,		
1	24	RC-1016C	CUTTER HEAD	1	RC-10		GUARD ASSEMBLY	
1	25	RC-1016A	RETAINING BAR	В			32, 33, 34, AND 35	
	26	RC-10168	RETAINING SPRING	В	RC-20		MANIFOLD ASSEMBLY	
	27	RC-1017-1	BLADE	4			3, 12, 13, 16, 18, 19, AND	54
1	20		LABLE AS RE-1017, DTY	2			JNT KIT	-
1	28 29	RC-101BA	BEARING BOLT	1			40, 41, 45, 46, 47, 48, 4	9, 50.
1	29 31	RC-1016E RC-1014A	GUARD NUT	1		3, 55, 56, AND 57		-,,
1	32	RC-1090-02	SPRING WASHER	1				
1	33	RC-1014E	CHOPPER GUARD	1				
1	34	RC-1014B	RETAINING RING	1	NOTE:		MAY BE USED ON CPC-1000 A	ND
	35	RC-1014C	GUARD INSERT	1		CPC-2000 GUNS AS	WELL AS VPTC GUNS	
	37	RC-1021W	ANVIL SLEEVE	1				
1	38	F-HB-04C-24	HEX BOLT	i				
	39	F-TLN-1024	THIN LOOK NUT	ź				
1	40	F-CS-04C-32	CAP SCREW	1				
1	4[	F-CS-1024-10	CAP SCREW	2				
	42	RC-1015	FEED BAR	1				
1	43	RC-3013N	BACKPLATE	1				
	44	F-CS-04C-16	CAP SCREW	1				
	45	F-SW-D4	SPLIT WASHER	2				
	46	E-FW-D5-SAE-GRB	FLAT WASHER	2				
	47	F-HB-04C-12	HEX BOLT	1				



# USED FIJR RC-1000-TRU AND RC-3000-TRU USED FOR RC-1000-TRT, RC-1000-VPR, RC-3000-TRT, AND RC-3000-VPR RC-1091-T RC-1091-F-L RC-1091 CHOPPER SNOUT OPTIONS FOR RC-1000-XXX AND RC-3000-XXX MODELS USED FOR RC-1000-MIX AND RC-3000-MIX USED FOR RC-1000-TRT, RC-1000-VPR, RC-3000-TRT, AND RC-3000-VPR (812) RC-1091-SP RC-1091-F USED FOR RC-1000-TRU AND RC-3000-TRU USED FIPR RC-1000-ATC, RC-1000-HVLPF, RC-1000-MG, RC-3000-HTC, RC-3000-MG, AND RC-3000-HTD RC-1091-T-SHDRT RC-1091





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