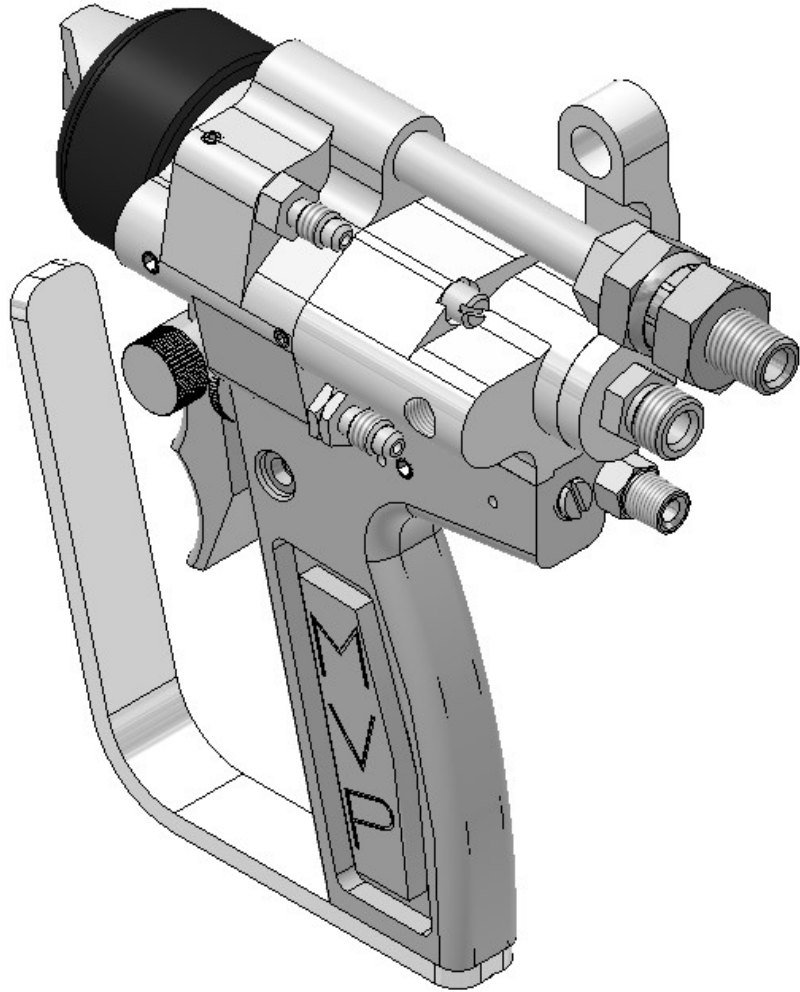


ATC Chopper Gun

Repair Manual

This manual is applicable to the following models:

- ATC-4000-X
- ATC-6000-X



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Magnum Industries Europe Ltd. t/a Magnum Venus Products

Official Distributor of MVP Range in the United Kingdom and Ireland

Unit 22a, Navigation Drive, Hurst Business Park,
Brierley Hill, West Midlands, DY5 1UT, UK.

phone: +44 (0)1384 486222
email: info@mvpeurope.co.uk
website: www.mvpeurope.co.uk



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Safety & Warning Information

Warnings

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

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

Recommended National Fire Protection Association (NFPA) Documentation:

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

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.

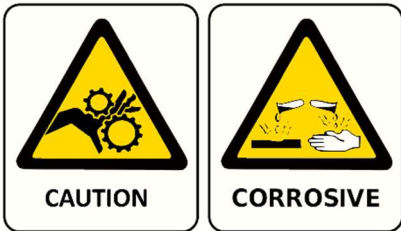
Safety Precautions

- Avoid skin contact and inhalation of all chemicals.
- Review Material Safety Data Sheet (MSDS) to promote the safe handling of chemicals in use.
- 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.



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). <https://www.osha.gov/about.html>

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 (Possible Target) | Known (Possible) Health Effect |
| Epoxy resins | Skin, lungs, eyes | Contact and allergic dermatitis, 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 (Possible Target) | Known (Possible) Health Effect |
| Aramid fibers | Skin (lungs) | Skin and respiratory irritation, contact dermatitis (chronic interstitial lung disease) |
| Carbon/graphite fibers | Skin (lungs) | As noted for aramid fibers |
| Glass fibers (continuous filament) | Skin (lungs) | As noted for aramid fibers |
| Hardeners and curing agents | | |
| Composite Component | Organ System Target (Possible Target) | Known (Possible) Health Effect |
| Diaminodiphenylsulfone | N/A | No known effects with workplace exposure |
| Methylenedianiline | Liver, skin | Hepatotoxicity, suspect human carcinogen |
| Other aromatic amines | | |
| Composite Component | Organ System Target (Possible Target) | Known (Possible) Health Effect |
| Meta-phenylenediamine (MPDA) | Liver, skin (kidney, bladder) | Hepatitis, contact dermatitis (kidney and bladder cancer) |
| Aliphatic and cyclo-aliphatic amines | Eyes, skin | Severe irritation, contact dermatitis |
| 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 Hydrocarbon 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 Hydrocarbon (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. |
| 2. | Aluminum or Galvanized Parts. | Most handling equipment contains these elements. In contact with these metals, HHC solvents could generate a corrosive reaction of a catalytic nature. |
| 3. | 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 the hoses at any point. | 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

- 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.



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:

1. 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.
2. Keep this information together and easily available so that it may be used by those administering first aid or treating the injured person.
3. 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 UPS 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 may be as low as 1 meg ohm (10 ohms) but that resistance as high as 10,000 meg ohms will produce an adequate leakage path in some cases.

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 AT series guns are some of the most advanced state of the art guns introduced into the composites industry. They feature low maintenance, few adjustments, superb quality, and a long service life. The AT series guns are air trigger guns; as the trigger is pulled, air is shifted from one side of a piston to the other. The pistons are attached to the gun needles and the air shifting opens and closes the needles. The ATC chopper has a poppet valve which is pushed when the resin needle moves to the open position, allowing the chopper air to be turned on and off by pulling the gun trigger.

This manual provides information for the operation, maintenance, and simple repair of the MVP ATC Chopper Gun. The following procedures are included:

- Step-by-step assembly and disassembly
- Troubleshooting guidance



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.

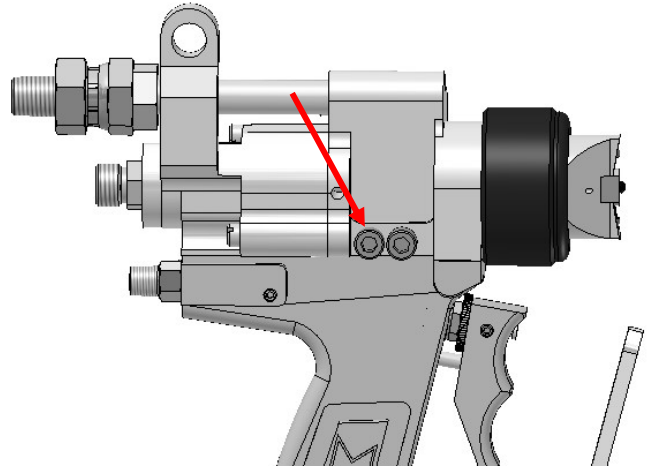
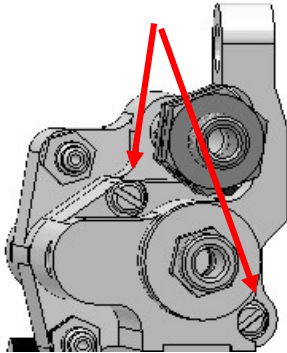
As you disassemble the equipment, lay out the components on a clean surface in the correct order and direction to assist with reassembly.

This manual cover all the variations of the ATC Chopper Gun:

- ATC-4000-XXX External Mix Chop Gun
- ATC-6000-XXX External Mix Chop Gun – With Signal

Disassembling the Gun

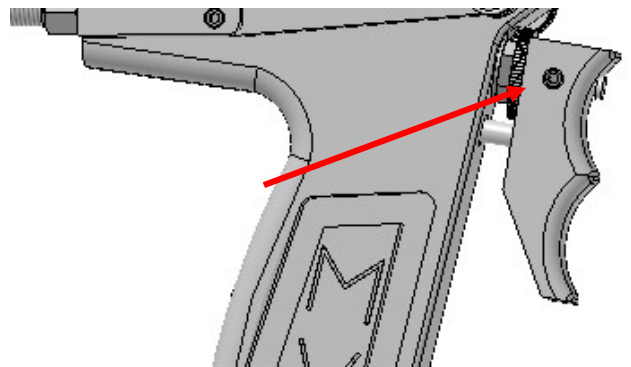
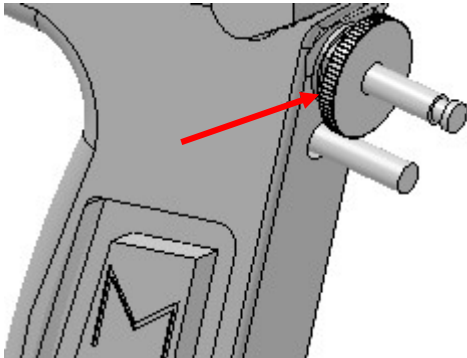
1. Remove the two Allen screws from the side of the gun to separate the gun into two components, the handle and the head/cylinder.
2. Remove the two screws on the back of the cylinder and cautiously remove the cylinder from the back of the gun head.



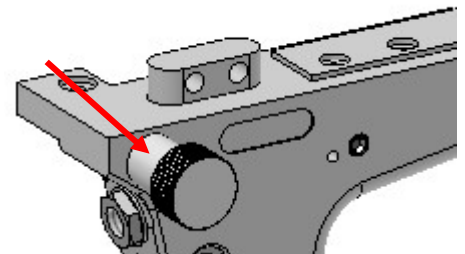
Servicing Gun Handle

Disassemble Handle

1. Loosen the set screw holding the trigger button assembly and remove the button.
2. Unscrew and remove the trigger lock.



3. Remove the trigger housing.
4. Remove the trigger valve assembly from the front of the gun.
5. Remove the refinement air adjustment screw and spring from the side of the gun.
6. Unscrew the refinement air packing nut from the side of the gun and remove the O-rings.
7. Remove the three O-rings on the top of the handle.



8. Thoroughly clean and inspect all parts for wear or damage; replace parts as needed with MVP parts.

Reassemble Handle

9. Open the seal kit and match O-rings with the ones being replaced.
10. Replace O-rings on the trigger valve.

Note ***A special tool is available for order to install the O-rings on the trigger valve.***

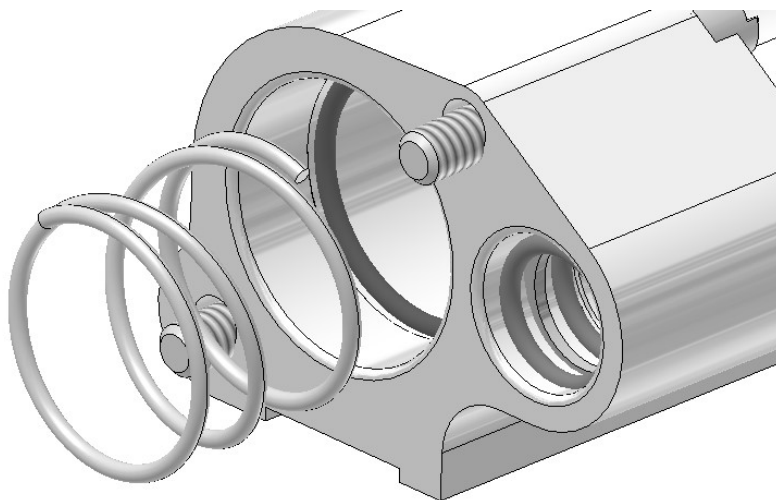
11. Install the spring onto the trigger valve and install into the front of the gun.
12. Thread the trigger housing into the front of the gun over the trigger valve using a $\frac{7}{16}$ wrench.
13. Thread the trigger lock into the trigger housing.
14. Place the trigger button onto the end of the trigger valve, depressing it all the way.
15. Tighten the set screw on the side of the trigger button to hold in place.
16. Replace the O-rings in the air refinement needle valve on the side of the handle.

Note ***The Buna (black) O-ring is first, followed by the Teflon (white) O-ring.***

17. Install the packing nut, turning just until it stops.
18. Place the spring onto the refinement air needle.
19. Lubricate with Super O Lube and install the refinement air needle into the side of the gun.
20. Replace the O-rings on top of the handle.
21. Set the handle aside for now.

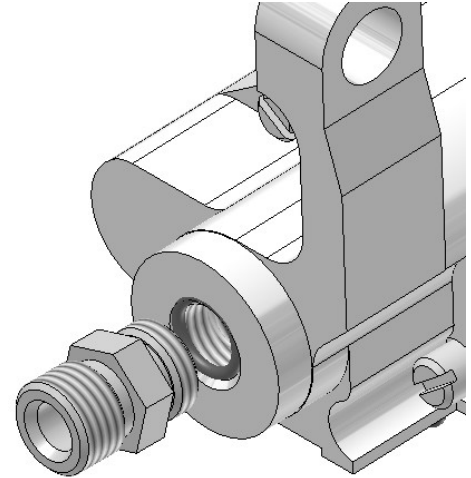
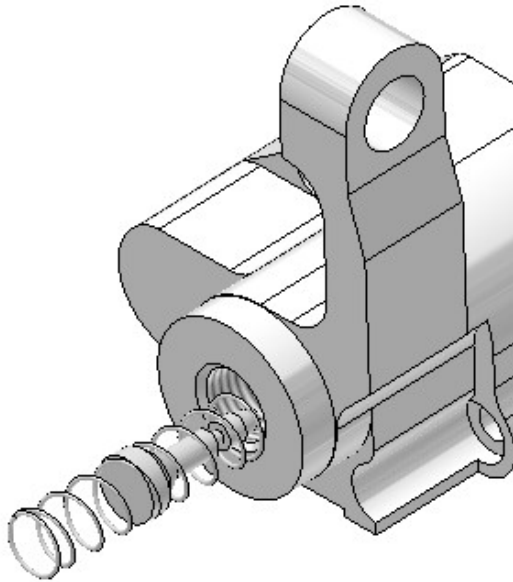
Repairing Cylinder

1. Remove and check the spring from inside the cylinder.



2. Check the inside of the cylinder.

3. Check and clear the air ports on the bottom of the cylinder.
4. Remove the chopper air fitting from the back of the cylinder.
5. Push out the chopper air poppet valve and spring from inside the cylinder.



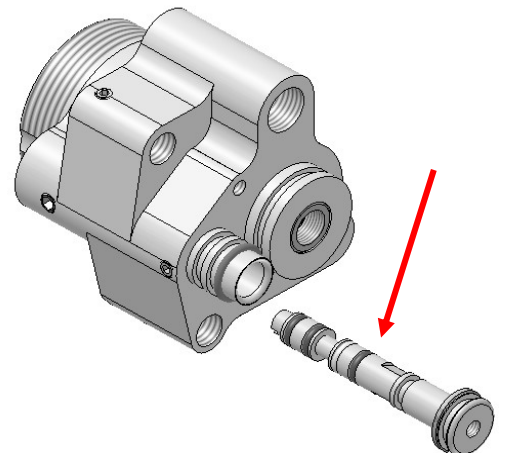
6. Replace the O-rings on the poppet valve.
7. Lubricate the inside of the cylinder and the chopper poppet valve.
8. Push the chopper poppet valve and spring into the back of the cylinder.
9. Replace the O-ring on the chopper air fitting.
10. Reinstall the chopper air fitting.
11. Push the end of the poppet valve from the inside of the cylinder to check that it is moving freely.
12. Reinstall spring into the cylinder.

Repairing Gun Head

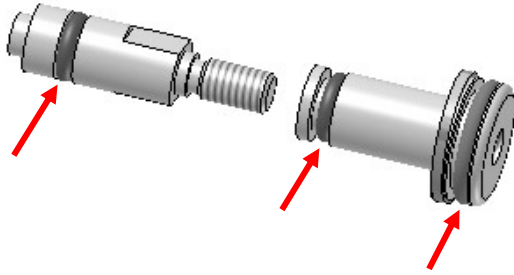
1. Remove the catalyst spool assembly from the gun head.

Note *The catalyst spool assembly consists of three pieces, the valve front, valve back, and the catalyst piston.*

2. Unscrew the valve back from the catalyst piston, using care not to lose the lock nut.



3. Replace the O-rings on the valve back and catalyst piston.

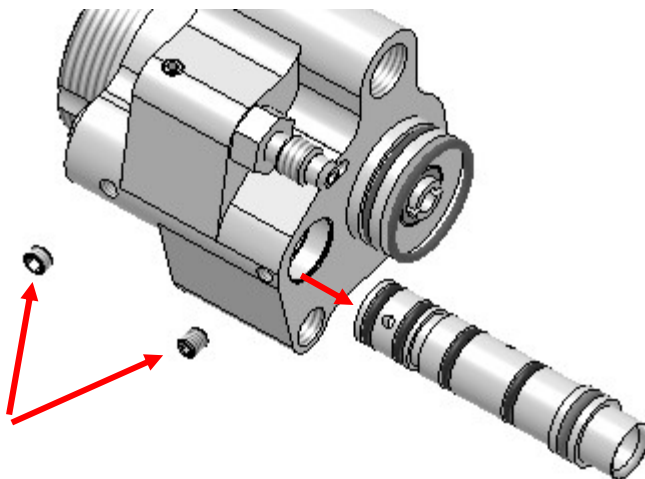
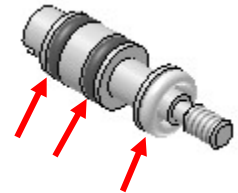


Note *A special tool is available to install the O-rings on the catalyst spool valve.*

4. Reinstall the lock washer.
5. Use a drop of removable thread lock compound on the threads of the valve back, then thread the valve back into the catalyst piston.
6. Unscrew the valve front from the valve back.

Note *The valve front is reverse-threaded. It will unscrew counter-clockwise from the valve back.*

7. Replace the O-rings on the valve front and the O-ring between the valve front and valve back.
8. Use a drop of removable thread lock compound on the valve front threads and thread into the valve back.
9. Set the catalyst spool aside for now.
10. Install a new O-ring onto the catalyst cylinder on the gun head.
11. Remove the two set screws on the side of the gun head holding the catalyst cylinder in place and remove the catalyst cylinder from the gun head.



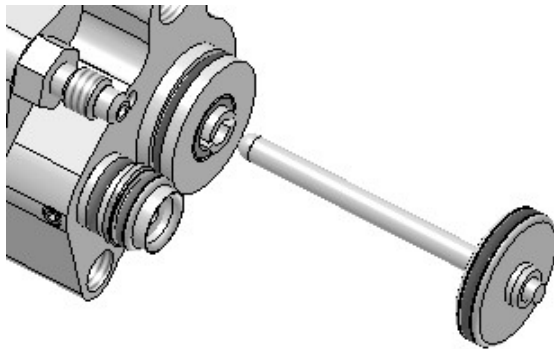
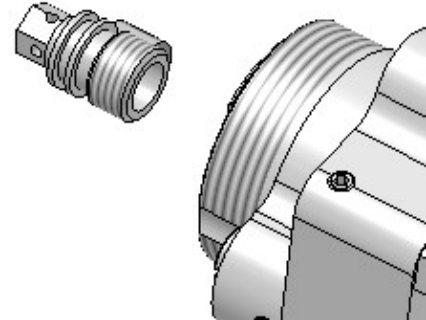
12. Make note of the O-ring positions on the catalyst cylinder.
13. Lubricate the new O-rings from the seal kit with SSL-10 or Vaseline and replace the O-rings on the catalyst cylinder.

Note *Installing the new O-rings in the wrong positions will cause the gun not to work properly.*

14. Reinstall the catalyst cylinder into the gun head by rotating it back and forth while pushing it into the gun head, making sure not to damage the O-rings and to align the hole in the catalyst cylinder with the hole in the side of the gun head.
15. Replace the set screws back into the gun head.

Note ***The hole in the catalyst cylinder has to line up with the hole in the gun head so that the set screw may be reinstalled. If the screw does not go in fully you may need to realign the catalyst cylinder.***

16. Using a $\frac{5}{16}$ nut driver, remove the diffuser seat from the front of the gun.
17. Using special tool ATC-40323-BT, remove the cartridge assembly from the front of the gun.
18. Pull the resin needle piston assembly from the back of the gun head.



19. Replace the O-ring on the resin needle piston.
20. Remove the packing retainer from the back of the gun head and replace the O-ring with a new one.
21. Replace the packing retainer back into the back of the gun head.
22. Replace the O-ring for the resin cylinder seal.
23. Replace the two tip pin O-rings on the front of the gun.
24. Remove the catalyst cylinder plug on the front of the gun head and replace the O-ring.
25. Reinstall the catalyst cylinder plug into the front of the gun head.
26. Replace the O-ring on the diffuser seat.
27. Using a pin and wrench, loosen the needle packing housing from the packing retainer.
28. Check that the packing press moves freely in the packing housing and clean as necessary.
29. Replace the two packings in the packing housing.
30. Hand tighten the packing housing, packing press, and two packings together with the packing retainer.

Note ***Use caution not to overtighten the packing retainer into the packing housing. The resin needle will not go through the packing if it is too tight.***

31. Tighten the lock nut to secure the packing housing.

32. Install the packing housing assembly (cartridge assembly) into the front of the gun head.
33. Press the diffuser seat as far as it will go into the front of the gun head.
34. Using a $\frac{5}{16}$ nut driver, adjust the packing seat until it is snug, then just a little more.
35. Insert the catalyst spool valve assembly into the back of the gun head.
36. Using the two screws, attach the cylinder assembly to the gun head.
37. Attach the gun head and cylinder to the handle.

Troubleshooting

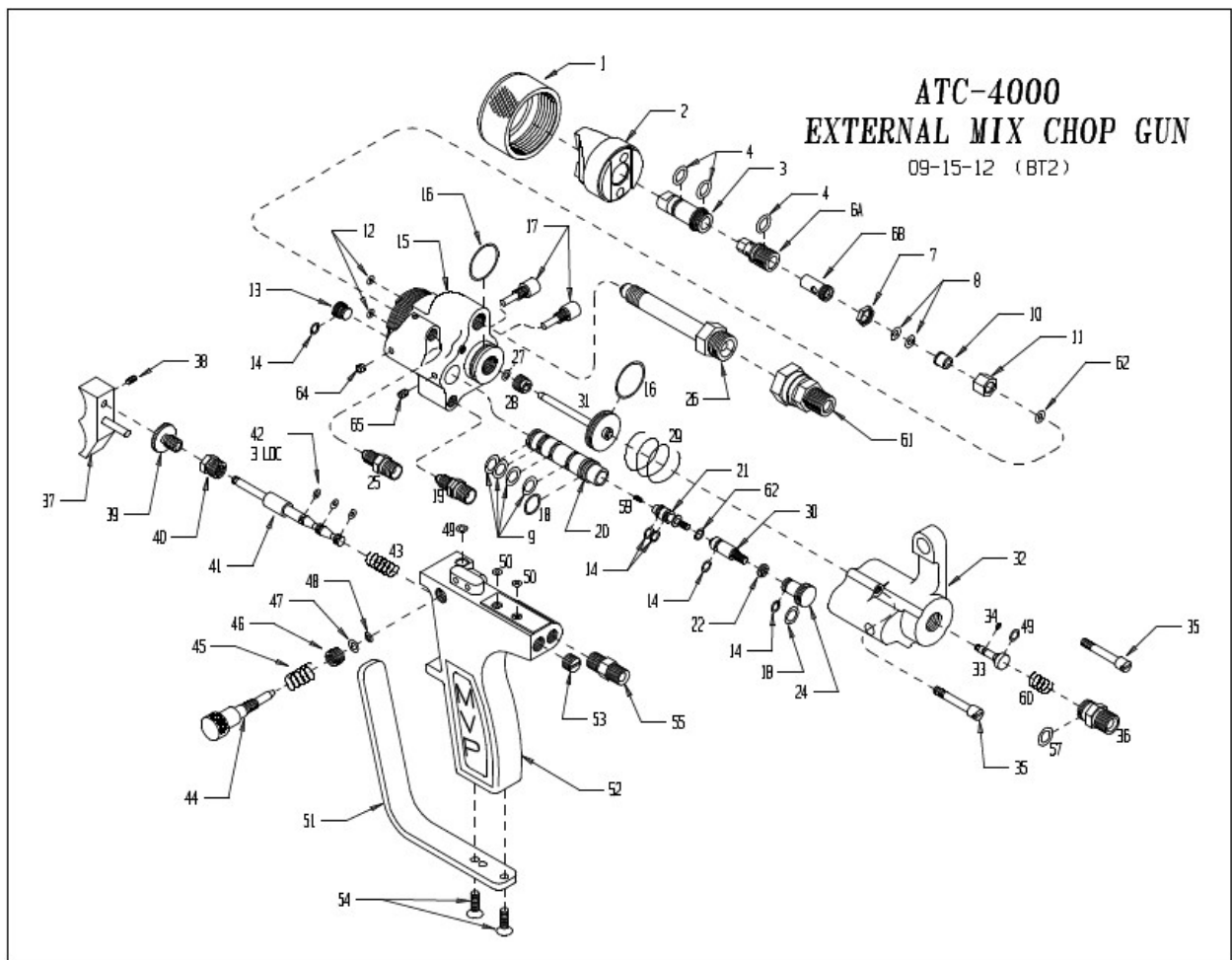
| Air Assisted AT Gun Troubleshooting | | |
|---|---|---|
| Symptom | Possible Cause | Remedy |
| Air leaking form exhaust port on back of handle while trigger is in OFF position | O-ring material worn or cut | Replace O-rings |
| | O-rings on catalyst piston worn or cut | |
| | O-rings on trigger valve worn or cut | |
| Air leaking from exhaust port on back of handle while trigger is either OFF or ON | O-rings on trigger valve worn or cut | Replace O-rings |
| | O-rings on catalyst valve and/or material piston worn or nicked | |
| Catalyst leaking from catalyst tip while gun is sitting (not being triggered) | O-rings on catalyst valve worn or cut | Replace O-rings |
| Catalyst leaks from weep hole on catalyst side of gun | O-rings on catalyst valve worn or cut | Replace O-rings |
| No catalyst is coming from gun | Catalyst air piston is not actuating | Check for clogged catalyst air passages (small holes underneath back cylinder) Note <i>There is more than one passageway from holes</i> |
| | Plugged catalyst restrictor (Allen screw with orifice located in front of catalyst valve) | Clean and clear orifice |
| | Plugged catalyst passageway in head of gun or catalyst tips | Inspect, clean, and clear passageways |
| | No catalyst flow to gun | See Slave Pump troubleshooting for your system |

| | | |
|--|----------------------------------|--|
| Material is leaking from front of gun | Loose diffuser seat | Tighten diffuser seat ¼ to ½ turn at a time until snug, then one more ¼ turn. Note Overtightening diffuser seat may cause binding of material needle |
| | Worn needle and/or seat | Replace worn items |
| | O-ring on diffuser nicked or cut | Replace O-ring |
| Material leaking from weep hole on side of gun | Loose diffuser seat | Tighten diffuser seat ¼ to ½ turn at a time until snug, then one more ¼ turn. Note Overtightening diffuser seat may cause binding of material needle |
| | Worn needle packing | Replace packing and adjust as indicated in manual |

Parts Drawings

The following illustrated parts breakdown drawings are included:

| Applicable Parts | |
|------------------|---------------------------------------|
| Part Number | Description |
| ATC-4000 | External Mix Chop Gun |
| ATC-4000-A | External Mix Chop Gun – Automatic |
| ATC-4000-FIT | External Mix Chop Gun – FIT |
| ATC-4000-FIT-A | Chop Gun – FIT – Automatic |
| ATC-4000-FIT-INT | Chop Gun – FIT- International |
| ATC-4000-INT | External Mix Chop Gun – International |
| ATC-6000 | External Mix Chop Gun – With Signal |
| ATC-6000-FIT | External Mix Chop Gun – FIT |
| ATC-6000-FIT-INT | Chop Gun – FIT – International |
| ATC-6000-INT | External Mix Chop Gun – International |
| ATC-40314 | Cartridge Assembly |
| ATC-40402-TT | Test Catalyst Tip Assembly |
| AT-EXT-SK | Seal Kit |



**ATC-4000
CHOPPER GUN
09-15-12
PARTS KEY, PAGE 1**

| ITEM | PART # | DESCRIPTION | QTY | ITEM | PART # | DESCRIPTION | QTY |
|------|---------------|---------------------------|-----|------|-----------------|---------------------|-----|
| 1 | MG-1018-CL-PL | RETAINING RING | 1 | 43 | ATC-40105 | SPRING | 1 |
| 2 | UCT-40402 | CATALYST TIP | 1 | 44 | ATC-40505 | AIR ADJUSTING SCREW | 1 |
| 3 | UCT-XXX | SPRAY TIP (XXX = SIZE) | 1 | 45 | ATC-40506 | SPRING | 1 |
| 4* | O-E-012 | O-RING | 3 | 46 | ATC-40509 | INSERT | 1 |
| 6A | ATC-40323-A | DIFFUSER SEAT | 1 | 47* | ATC-40304-1 | O-RING | 1 |
| 6B | ATC-40323-B | PACKING RETAINER | 1 | 48* | O-B-007 | O-RING | 1 |
| 7 | ATC-40319 | LOCKNUT | 1 | 49* | O-B-008 | O-RING | 2 |
| 8* | ATC-40304 | PACKING (SET OF 2) | 1 | 50* | O-B-006 | O-RING | 2 |
| 9* | O-S-012A | O-RING | 4 | 51 | ATC-40709 | GUARD | 1 |
| 10 | ATC-40318 | PACKING PRESS | 1 | 52 | ATC-4003-2 | HANDLE ASSY. | 1 |
| 11 | ATC-40317 | PACKING HOUSING | 1 | 53 | ATC-40106 | PLUG | 1 |
| 12* | O-S-006 | O-RING | 2 | 54 | F-FHCS-1032-08 | SCREW | 2 |
| 13 | ATC-40201 | CAT. CYLINDER PLUG | 1 | 55 | PF-HN-02-02S | AIR FITTING | 1 |
| 14* | O-S-008 | O-RING | 5 | 57* | O-S-012 | O-RING | 1 |
| 15 | ATC-4001 | HEAD (SEE NOTE C) | 1 | 59 | ATC-40611 | RESTRICTOR (.040) | 1 |
| 16* | O-S-020 | O-RING | 2 | 60 | ATC-40610 | SPRING | 1 |
| 17 | ATC-40701 | SCREW | 2 | 61 | PF-SW-04M-06F | SWIVEL | 1 |
| 18* | O-S-013 | O-RING | 2 | 62* | O-T-008 | O-RING | 2 |
| 19 | ATC-40214 | CATALYST FITTING | 1 | 64 | F-SS-1032-02-SS | SET SCREW | 1 |
| 20 | ATC-40206 | CATALYST CYLINDER | 1 | 65 | ATC-40616 | SET SCREW | 1 |
| 21 | ATC-40704 | VALVE FRONT | 1 | | | | |
| 22 | ATC-40208 | LOCK WASHER | 1 | | | | |
| 24 | ATC-40209 | CATALYST PISTON | 1 | | | | |
| 25 | ATC-40213 | AIR FITTING | 1 | | | | |
| 26 | ATC-40311 | MATERIAL TUBE | 1 | | | | |
| 27* | O-E-008 | O-RING | 1 | | | | |
| 28 | ATC-40305 | PACKING RETAINER | 1 | | | | |
| 29 | ATC-40325 | SPRING | 1 | | | | |
| 30 | ATC-40705 | VALVE BACK | 1 | | | | |
| 31 | ATC-40321 | NEEDLE ASSY. | 1 | | | | |
| 32 | ATC-4002 | GUN BACK | 1 | | | | |
| 33 | ATC-40602 | CHOPPER AIR VALVE | 1 | | | | |
| 34* | O-B-003 | O-RING | 1 | | | | |
| 35 | ATC-40501 | SCREW | 2 | | | | |
| 36 | ATC-40607 | AIR FITTING | 1 | | | | |
| 37 | ATC-40113 | TRIGGER BUTTON | 1 | | | | |
| 38 | ATC-40108 | SET SCREW | 1 | | | | |
| 39 | ATC-40111 | TRIGGER LOCK | 1 | | | | |
| 40 | ATC-40101 | TRIGGER HOUSING | 1 | | | | |
| 41 | ATC-40103 | TRIGGER VALVE | 1 | | | | |
| 42* | O-E-006 | O-RING | 3 | | | | |

SEAL KIT SOLD SEPARATELY:

* AT-EXT-SK SEAL KIT

HOSES AVAILABLE SEPARATELY:

FOR 6:1 RATIO PUMP:
FLUID HOSE - HFL-0666-XX

FOR 11:1 RATIO PUMP:
FLUID HOSE - HAW-0664-XX WITH HAW-0444-5

ALL RATIO PUMPS:
REFINEMENT AIR HOSE - HA-0324-XX
CATALYST HOSE - HC-0224-XX
CHOPPER AIR HOSE - HA-0644-XX
CATALYST ATOMIZING AIR HOSE - HA-0224-XX

XX = HOSE LENGTH DESIRED (25 FT. IS STD.)

**ATC-4000
CHOPPER GUN
09-15-12
PARTS KEY, PAGE 2**

OPTIONAL EQUIPMENT:

ATC-40611-1 .020" CATALYST RESTRICTOR

ATC-40314 CARTRIDGE ASSEMBLY WHICH INCLUDES
ITEMS 4 - 11, AND ATC-40323-BT

ATC-40402-BIG DOUBLE SIDED CLEANABLE
CAT TIP. (SEE NOTE A)

ATC-40402-CL SINGL SIDED CLEANABLE
CAT TIP. (SEE NOTE A)

ATC-40323-A-TL 5/16 NUT DRIVER

ATC-40323-BT TOOL FOR ATC-40323-B

ATC-40103-1 TRIGGER VALVE O-RING TOOL

ATC-40204-1 CAT. VALVE O-RING TOOL

MG-1018-CL ALUMINUM RETAINING RING

ATC-XXX SPRAY TIP (XXX = SIZE)

ATC-40402 CATALYST TIP FOR ATC-XXX TIP

MG-1018 RETAINING RING FOR ATC-40402

NOTE A:

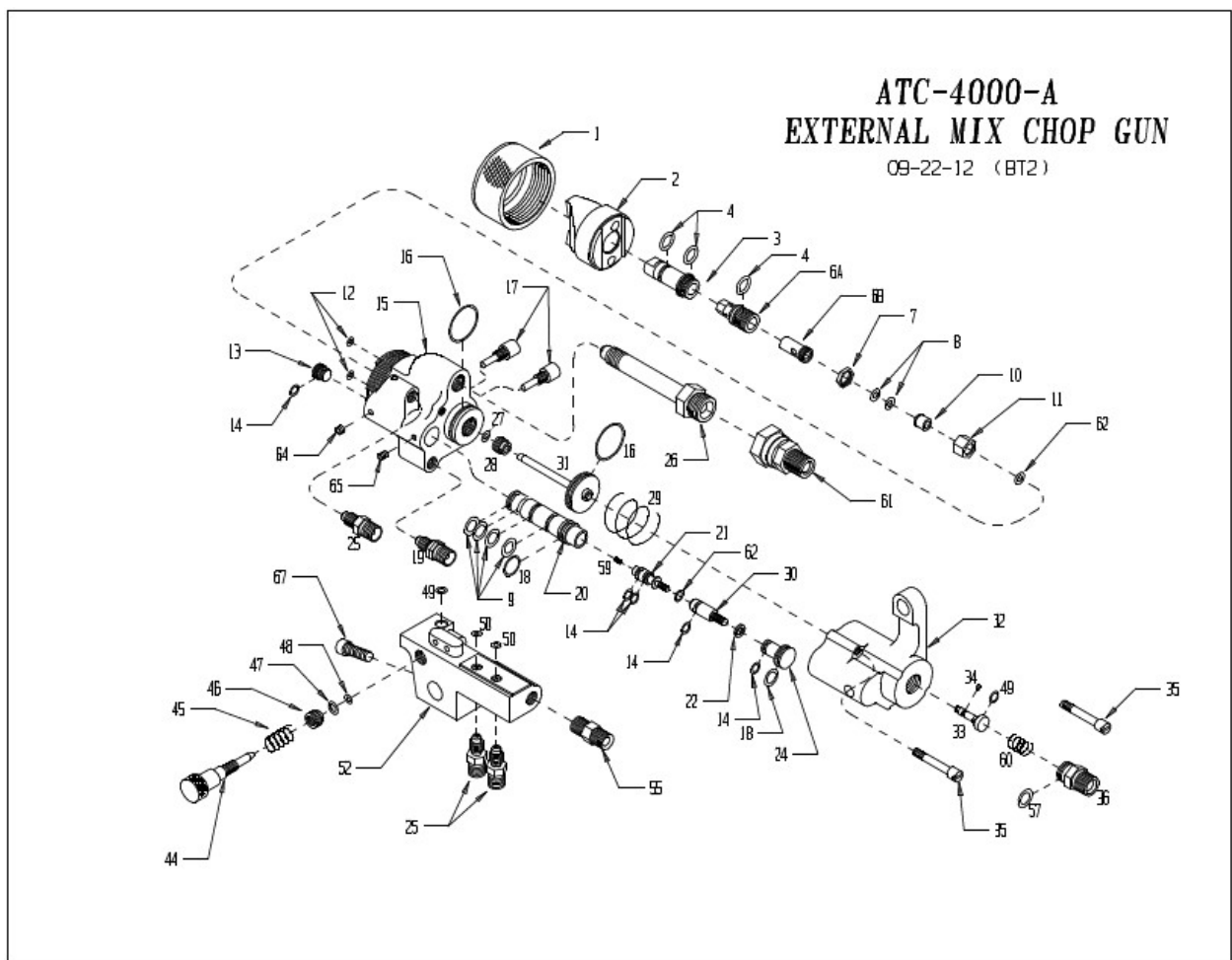
MG-1018-CL-PL RETAINING RING IS NEEDED WHEN USING EITHER ATC-40402-BIG, ATC-40402-CL OR UCT-40402 CAT TIPS. (A MG-1018-CL ALUMINUM RETAINING RING MAY BE PURCHASED INSTEAD OF THE MG-1018-CL-PL DELRIN PLASTIC RING)

NOTE B:

TRIGGER VALVE O-RINGS ARE MADE OF EPR RUBBER AND CAN ONLY BE LUBRICATED WITH "SUPER O LUBE"

NOTE C:

ATC-4001 HEAD ASSEMBLY INCLUDES ITEM 20, ATC-40206, ITEM 9, D-S-012A, ITEM 64, F-SS-1032-02-SS, AND ITEM 65. ATC-40616



**ATC-4000-A
CHOPPER GUN
09-22-12
PARTS KEY, PAGE 1**

| ITEM | PART # | DESCRIPTION | QTY | ITEM | PART # | DESCRIPTION | QTY |
|------|---------------|---------------------------|-----|------|-----------------|-------------------|-----|
| 1 | MG-1018-CL-PL | RETAINING RING | 1 | 50* | O-B-006 | O-RING | 2 |
| 2 | UCT-40402 | CATALYST TIP | 1 | 52 | ATC-4003-A | HANDLE ASSY. | 1 |
| 3 | UCT-XXX | SPRAY TIP (XXX = SIZE) | 1 | 55 | PF-HN-02-02S | AIR FITTING | 1 |
| 4* | O-E-012 | O-RING | 3 | 57* | O-S-012 | O-RING | 1 |
| 6A | ATC-40323-A | DIFFUSER SEAT | 1 | 59 | ATC-40611 | RESTRICTOR (.040) | 1 |
| 6B | ATC-40323-B | PACKING RETAINER | 1 | 60 | ATC-40610 | SPRING | 1 |
| 7 | ATC-40319 | LOCKNUT | 1 | 61 | PF-SW-04M-06F | SWIVEL | 1 |
| 8* | ATC-40304 | PACKING (SET OF 2) | 1 | 62* | O-T-008 | O-RING | 2 |
| 9* | O-S-012A | O-RING | 4 | 64 | F-SS-1032-02-SS | SET SCREW | 1 |
| 10 | ATC-40318 | PACKING PRESS | 1 | 65 | ATC-40616 | SET SCREW | 1 |
| 11 | ATC-40317 | PACKING HOUSING | 1 | 67 | F-CS-04C-12 | CAP SCREW | 1 |
| 12* | O-S-006 | O-RING | 2 | | | | |
| 13 | ATC-40201 | CAT. CYLINDER PLUG | 1 | | | | |
| 14* | O-S-008 | O-RING | 5 | | | | |
| 15 | ATC-4001 | HEAD (SEE NOTE B) | 1 | | | | |
| 16* | O-S-020 | O-RING | 2 | | | | |
| 17 | ATC-40701 | SCREW | 2 | | | | |
| 18* | O-S-013 | O-RING | 2 | | | | |
| 19 | ATC-40214 | CATALYST FITTING | 1 | | | | |
| 20 | ATC-40206 | CATALYST CYLINDER | 1 | | | | |
| 21 | ATC-40704 | VALVE FRONT | 1 | | | | |
| 22 | ATC-40208 | LOCK WASHER | 1 | | | | |
| 24 | ATC-40209 | CATALYST PISTON | 1 | | | | |
| 25 | ATC-40213 | AIR FITTING | 3 | | | | |
| 26 | ATC-40311 | MATERIAL TUBE | 1 | | | | |
| 27* | O-E-008 | O-RING | 1 | | | | |
| 28 | ATC-40305 | PACKING RETAINER | 1 | | | | |
| 29 | ATC-40325 | SPRING | 1 | | | | |
| 30 | ATC-40705 | VALVE BACK | 1 | | | | |
| 31 | ATC-40321 | NEEDLE ASSY. | 1 | | | | |
| 32 | ATC-4002 | GUN BACK | 1 | | | | |
| 33 | ATC-40602 | CHOPPER AIR VALVE | 1 | | | | |
| 34* | O-B-003 | O-RING | 1 | | | | |
| 35 | ATC-40501 | SCREW | 2 | | | | |
| 36 | ATC-40607 | AIR FITTING | 1 | | | | |
| 44 | ATC-40505 | AIR ADJUSTING SCREW | 1 | | | | |
| 45 | ATC-40506 | SPRING | 1 | | | | |
| 46 | ATC-40509 | INSERT | 1 | | | | |
| 47* | ATC-40304-1 | O-RING | 1 | | | | |
| 48* | O-B-007 | O-RING | 1 | | | | |
| 49* | O-B-008 | O-RING | 2 | | | | |

SEAL KIT SOLD SEPARATELY:

* AT-EXT-SK SEAL KIT

HOSES AVAILABLE SEPARATELY:

FOR 6:1 RATIO PUMP;
FLUID HOSE - HFL-0666-XX

FOR 11:1 RATIO PUMP;
FLUID HOSE - HAW-0664-XX WITH HAW-0444-5

ALL RATIO PUMPS;
REFINEMENT AIR HOSE - HA-0324-XX
CATALYST HOSE - HC-0224-XX
CHOPPER AIR HOSE - HA-0644-XX
CATALYST ATOMIZING AIR HOSE - HA-0224-XX

XX = HOSE LENGTH DESIRED (25 FT. IS STD.)

**ATC-4000-A
CHOPPER GUN
09-22-12
PARTS KEY, PAGE 2**

OPTIONAL EQUIPMENT:

ATC-40611-1 .020" CATALYST RESTRICTOR

ATC-40314 CARTRIDGE ASSEMBLY WHICH INCLUDES
ITEMS 4 - 11 AND ATC-40323-BT

ATC-40402-BIG DOUBLE SIDED CLEANABLE
CAT TIP. (SEE NOTE A)

ATC-40402-CL SINGLE SIDED CLEANABLE
CAT TIP. (SEE NOTE A)

ATC-40323-A-TL 5/16 NUT DRIVER

ATC-40323-BT TOOL FOR ATC-40323-B

ATC-40204-1 CAT. VALVE O-RING TOOL

MG-1018 ALUMINUM RETAINING RING

ATC-XXX SPRAY TIP (XXX = SIZE)

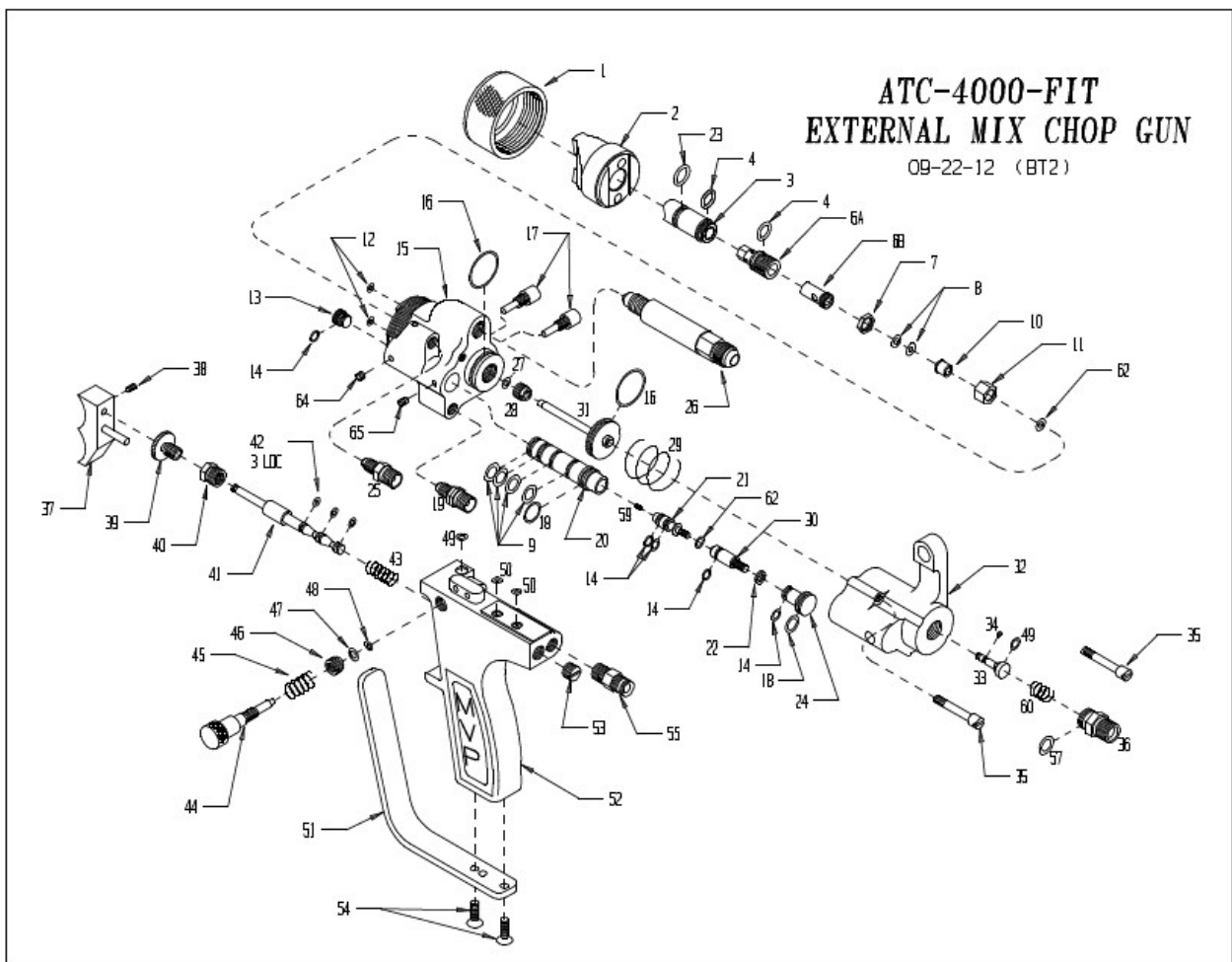
ATC-40402 CATALYST TIP FOR ATC-XXX TIP

NOTE A:

MG-1018-CL-PL RETAINING RING IS NEEDED WHEN
USING EITHER ATC-40402-BIG, ATC-40402-CL
OR UCT-40402 CAT TIPS. (A MG-1018-CL ALUMINUM
RETAINING RING MAY BE PURCHASED INSTEAD OF THE
MG-1018-CL-PL DELRIN PLASTIC RING)

NOTE B:

ATC-4001 HEAD ASSEMBLY INCLUDES ITEM
20. ATC-40206, ITEM 9, D-S-012A, ITEM
64. F-SS-1032-02-SS, AND ITEM
65. ATC-40616



**ATC-4000-FIT
CHOPPER GUN
09-22-12
PARTS KEY, PAGE 1**

| ITEM | PART # | DESCRIPTION | QTY | ITEM | PART # | DESCRIPTION | QTY |
|------|---------------|---------------------------|-----|------|-----------------|---------------------|-----|
| 1 | MG-1018-CL-PL | RETAINING RING | 1 | 44 | ATC-40505 | AIR ADJUSTING SCREW | 1 |
| 2 | UMT-40402 | CATALYST TIP | 1 | 45 | ATC-40506 | SPRING | 1 |
| 3 | UMT-XXXX | SPRAY TIP (XXX = SIZE) | 1 | 46 | ATC-40509 | INSERT | 1 |
| 4* | O-E-012 | O-RING | 2 | 47* | ATC-40304-1 | O-RING | 1 |
| 6A | ATC-40323-A | DIFFUSER SEAT | 1 | 48* | O-B-007 | O-RING | 1 |
| 6B | ATC-40323-B | PACKING RETAINER | 1 | 49* | O-B-008 | O-RING | 2 |
| 7 | ATC-40319 | LOCKNUT | 1 | 50* | O-B-006 | O-RING | 2 |
| 8* | ATC-40304 | PACKING (SET OF 2) | 1 | 51 | ATC-40709 | GUARD | 1 |
| 9* | O-S-012A | O-RING | 4 | 52 | ATC-4003-2 | HANDLE ASSY. | 1 |
| 10 | ATC-40318 | PACKING PRESS | 1 | 53 | ATC-40106 | PLUG | 1 |
| 11 | ATC-40317 | PACKING HOUSING | 1 | 54 | F-FHCS-1032-08 | SCREW | 2 |
| 12* | O-S-006 | O-RING | 2 | 55 | PF-HN-02-02S | AIR FITTING | 1 |
| 13 | ATC-40201 | CAT. CYLINDER PLUG | 1 | 57* | O-S-012 | O-RING | 1 |
| 14* | O-S-008 | O-RING | 5 | 59 | ATC-40611 | RESTRICTOR (.040) | 1 |
| 15 | ATC-4001 | HEAD (SEE NOTE B) | 1 | 60 | ATC-40610 | SPRING | 1 |
| 16* | O-S-020 | O-RING | 2 | 62* | O-T-008 | O-RING | 2 |
| 17 | ATC-40701 | SCREW | 2 | 64 | F-SS-1032-02-SS | SET SCREW | 1 |
| 18* | O-S-013 | O-RING | 2 | 65 | ATC-40616 | SET SCREW | 1 |
| 19 | ATC-40214 | CATALYST FITTING | 1 | | | | |
| 20 | ATC-40206 | CATALYST CYLINDER | 1 | | | | |
| 21 | ATC-40704 | VALVE FRONT | 1 | | | | |
| 22 | ATC-40208 | LOCK WASHER | 1 | | | | |
| 23* | O-E-013 | O-RING | 1 | | | | |
| 24 | ATC-40209 | CATALYST PISTON | 1 | | | | |
| 25 | ATC-40213 | AIR FITTING | 1 | | | | |
| 26 | ATC-40311-F | MATERIAL TUBE | 1 | | | | |
| 27* | O-E-008 | O-RING | 1 | | | | |
| 28 | ATC-40305 | PACKING RETAINER | 1 | | | | |
| 29 | ATC-40325 | SPRING | 1 | | | | |
| 30 | ATC-40705 | VALVE BACK | 1 | | | | |
| 31 | ATC-40321 | NEEDLE ASSY. | 1 | | | | |
| 32 | ATC-4002 | GUN BACK | 1 | | | | |
| 33 | ATC-40602 | CHOPPER AIR VALVE | 1 | | | | |
| 34* | O-B-003 | O-RING | 1 | | | | |
| 35 | ATC-40501 | SCREW | 2 | | | | |
| 36 | ATC-40607 | AIR FITTING | 1 | | | | |
| 37 | ATC-40113 | TRIGGER BUTTON | 1 | | | | |
| 38 | ATC-40108 | SET SCREW | 1 | | | | |
| 39 | ATC-40111 | TRIGGER LOCK | 1 | | | | |
| 40 | ATC-40101 | TRIGGER HOUSING | 1 | | | | |
| 41 | ATC-40103 | TRIGGER VALVE | 1 | | | | |
| 42* | O-E-006 | O-RING | 3 | | | | |
| 43 | ATC-40105 | SPRING | 1 | | | | |

SEAL KIT SOLD SEPARATELY:

* AT-EXT-SK SEAL KIT

HOSES AVAILABLE SEPARATELY:

FOR 3:1 AND 6:1 RATIO PUMP:
FLUID HOSE - HFL-0888-XX WITH A
PF-HN-08S-06J NIPPLE AND A
HFL-046J6J-5 WHIP

FOR 11:1 RATIO PUMP:
FLUID HOSE - HAW-0888-XX WITH A
PF-HN-08S-06J NIPPLE AND A
HAW-046J6J-5

ALL RATIO PUMPS:
REFINEMENT AIR HOSE - HA-0324-XX
CATALYST HOSE - HC-0224-XX
CHOPPER AIR HOSE - HA-0644-XX
CATALYST ATOMIZING AIR HOSE - HA-0224-XX

XX = HOSE LENGTH DESIRED (25 FT. IS STD.)

**ATC-4000-FIT
CHOPPER GUN
09-22-12
PARTS KEY, PAGE 2**

OPTIONAL EQUIPMENT:

ATC-40611-1 .020" CATALYST RESTRICTOR

ATC-40314 CARTRIDGE ASSEMBLY WHICH INCLUDES
ITEMS 4 - 11 AND ATC-40323-BT

ATC-40323-A-TL 5/16 NUT DRIVER

ATC-40323-BT TOOL FOR ATC-40323-B

ATC-40103-1 TRIGGER VALVE O-RING TOOL

ATC-40204-1 CAT. VALVE O-RING TOOL

MG-1018-CL ALUMINUM RETAINING RING

FMT-40402-3 FMT STYLE CATALYST TIP

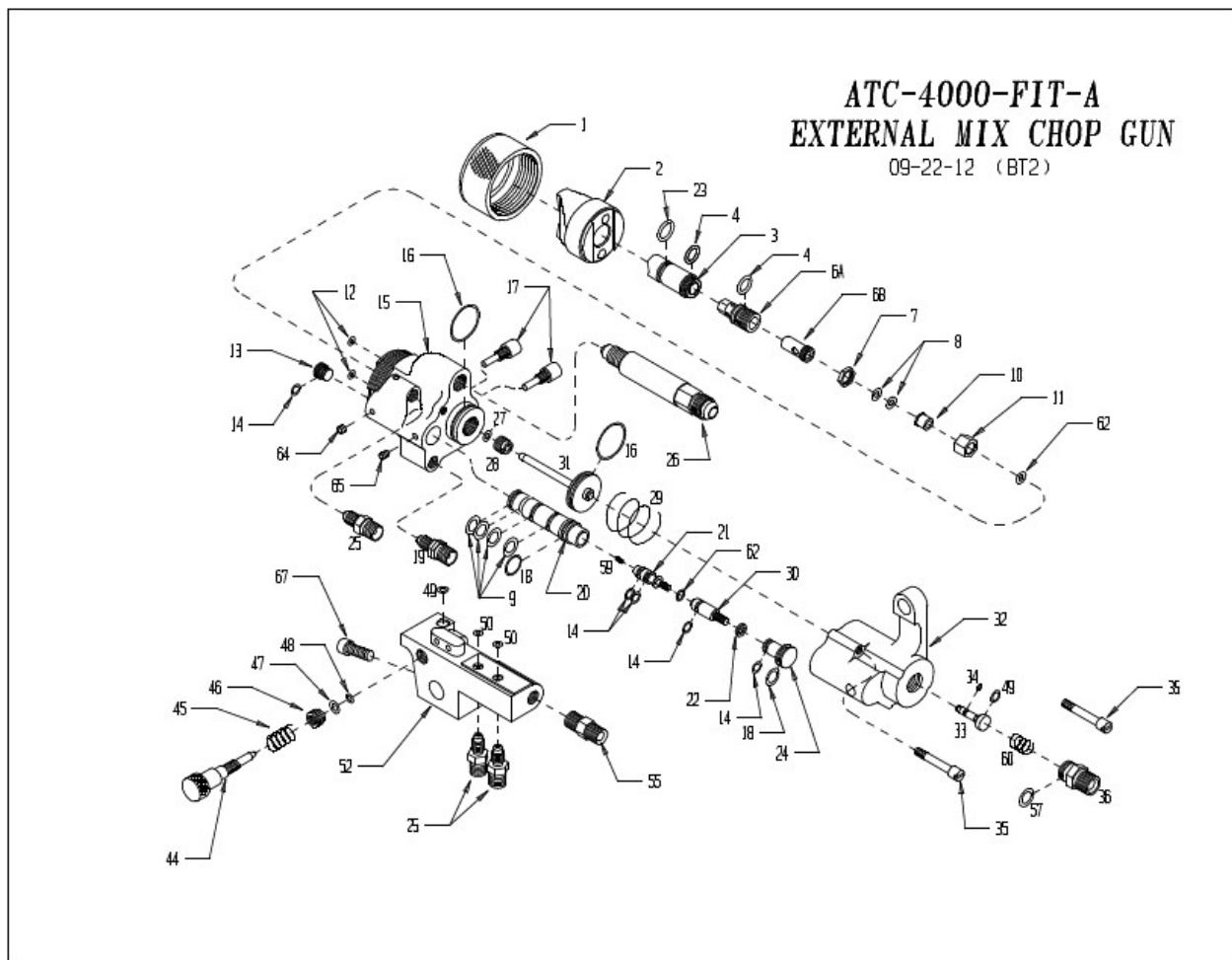
FMT-XXXX-HT FMT STYLE SPRAY TIP

NOTE A:

TRIGGER VALVE O-RINGS ARE MADE OF EPR
RUBBER AND CAN ONLY BE LUBRICATED WITH
"SUPER O LUBE"

NOTE B:

ATC-4001 HEAD ASSEMBLY INCLUDES ITEM
20, ATC-40206, ITEM 9, O-S-012A, ITEM
64, F-SS-1032-02-SS, AND ITEM
65. ATC-40616



**ATC-4000-FIT-A
CHOPPER GUN
09-22-12
PARTS KEY, PAGE 1**

| ITEM | PART # | DESCRIPTION | QTY | ITEM | PART # | DESCRIPTION | QTY |
|------|---------------|----------------------------|-----|------|-----------------|-------------------|-----|
| 1 | MG-101B-CL-PL | RETAINING RING | 1 | 50* | O-B-006 | O-RING | 2 |
| 2 | UMT-40402 | CATALYST TIP | 1 | 52 | ATC-4003-A | HANDLE ASSY. | 1 |
| 3 | UMT-XXXX | SPRAY TIP (XXXX = SIZE) | 1 | 55 | PF-HN-02-02S | AIR FITTING | 1 |
| 4* | O-E-012 | O-RING | 2 | 57* | O-S-012 | O-RING | 1 |
| 6A | ATC-40323-A | DIFFUSER SEAT | 1 | 59 | ATC-40611 | RESTRICTOR (.040) | 1 |
| 6B | ATC-40323-B | PACKING RETAINER | 1 | 60 | ATC-40610 | SPRING | 1 |
| 7 | ATC-40319 | LOCKNUT | 1 | 62* | O-T-008 | O-RING | 2 |
| 8* | ATC-40304 | PACKING (SET OF 2) | 1 | 64 | F-SS-1032-02-SS | SET SCREW | 1 |
| 9* | O-S-012A | O-RING | 4 | 65 | ATC-40616 | SET SCREW | 1 |
| 10 | ATC-40318 | PACKING PRESS | 1 | 67 | F-CS-04C-12 | CAP SCREW | 1 |
| 11 | ATC-40317 | PACKING HOUSING | 1 | | | | |
| 12* | O-S-006 | O-RING | 2 | | | | |
| 13 | ATC-40201 | CAT. CYLINDER PLUG | 1 | | | | |
| 14* | O-S-008 | O-RING | 5 | | | | |
| 15 | ATC-4001 | HEAD (SEE NOTE B) | 1 | | | | |
| 16* | O-S-020 | O-RING | 2 | | | | |
| 17 | ATC-40701 | SCREW | 2 | | | | |
| 18* | O-S-013 | O-RING | 2 | | | | |
| 19 | ATC-40214 | CATALYST FITTING | 1 | | | | |
| 20 | ATC-40206 | CATALYST CYLINDER | 1 | | | | |
| 21 | ATC-40704 | VALVE FRONT | 1 | | | | |
| 22 | ATC-40208 | LOCK WASHER | 1 | | | | |
| 23 | O-E-013 | O-RING | 1 | | | | |
| 24 | ATC-40209 | CATALYST PISTON | 1 | | | | |
| 25 | ATC-40213 | AIR FITTING | 3 | | | | |
| 26 | ATC-40311-F | MATERIAL TUBE | 1 | | | | |
| 27* | O-E-008 | O-RING | 1 | | | | |
| 28 | ATC-40305 | PACKING RETAINER | 1 | | | | |
| 29 | ATC-40325 | SPRING | 1 | | | | |
| 30 | ATC-40705 | VALVE BACK | 1 | | | | |
| 31 | ATC-40321 | NEEDLE ASSY. | 1 | | | | |
| 32 | ATC-4002 | GUN BACK | 1 | | | | |
| 33 | ATC-40602 | CHOPPER AIR VALVE | 1 | | | | |
| 34* | O-B-003 | O-RING | 1 | | | | |
| 35 | ATC-40501 | SCREW | 2 | | | | |
| 36 | ATC-40607 | AIR FITTING | 1 | | | | |
| 44 | ATC-40505 | AIR ADJUSTING SCREW | 1 | | | | |
| 45 | ATC-40506 | SPRING | 1 | | | | |
| 46 | ATC-40509 | INSERT | 1 | | | | |
| 47* | ATC-40304-1 | O-RING | 1 | | | | |
| 48* | O-B-007 | O-RING | 1 | | | | |
| 49* | O-B-008 | O-RING | 2 | | | | |

SEAL KIT SOLD SEPARATELY:

* AT-EXT-SK SEAL KIT

HOSES AVAILABLE SEPARATELY:

FOR 3:1 AND 6:1 RATIO PUMP:
FLUID HOSE - HFL-0888-XX WITH A
PF-HN-08S-06J NIPPLE AND A
HFL-046J6J-5 WHIP

FOR 11:1 RATIO PUMP:
FLUID HOSE - HAW-0888-XX WITH A
PF-HN-08S-06J NIPPLE AND A
HAW-046J6J-5

ALL RATIO PUMPS:
REFINEMENT AIR HOSE - HA-0324-XX
CATALYST HOSE - HC-0224-XX
CHOPPER AIR HOSE - HA-0644-XX
CATALYST ATOMIZING AIR HOSE - HA-0224-XX

XX = HOSE LENGTH DESIRED (<25 FT. IS STD.)

**ATC-4000-FIT-A
CHOPPER GUN
09-22-12
PARTS KEY, PAGE 2**

OPTIONAL EQUIPMENT:

ATC-40611-1 .020" CATALYST RESTRICTOR

ATC-40314 CARTRIDGE ASSEMBLY WHICH INCLUDES
ITEMS 4 - 11 AND ATC-40323-BT

ATC-40323-A-TL 5/16 NUT DRIVER

ATC-40323-BT TOOL FOR ATC-40323-B

ATC-40204-1 CAT. VALVE O-RING TOOL

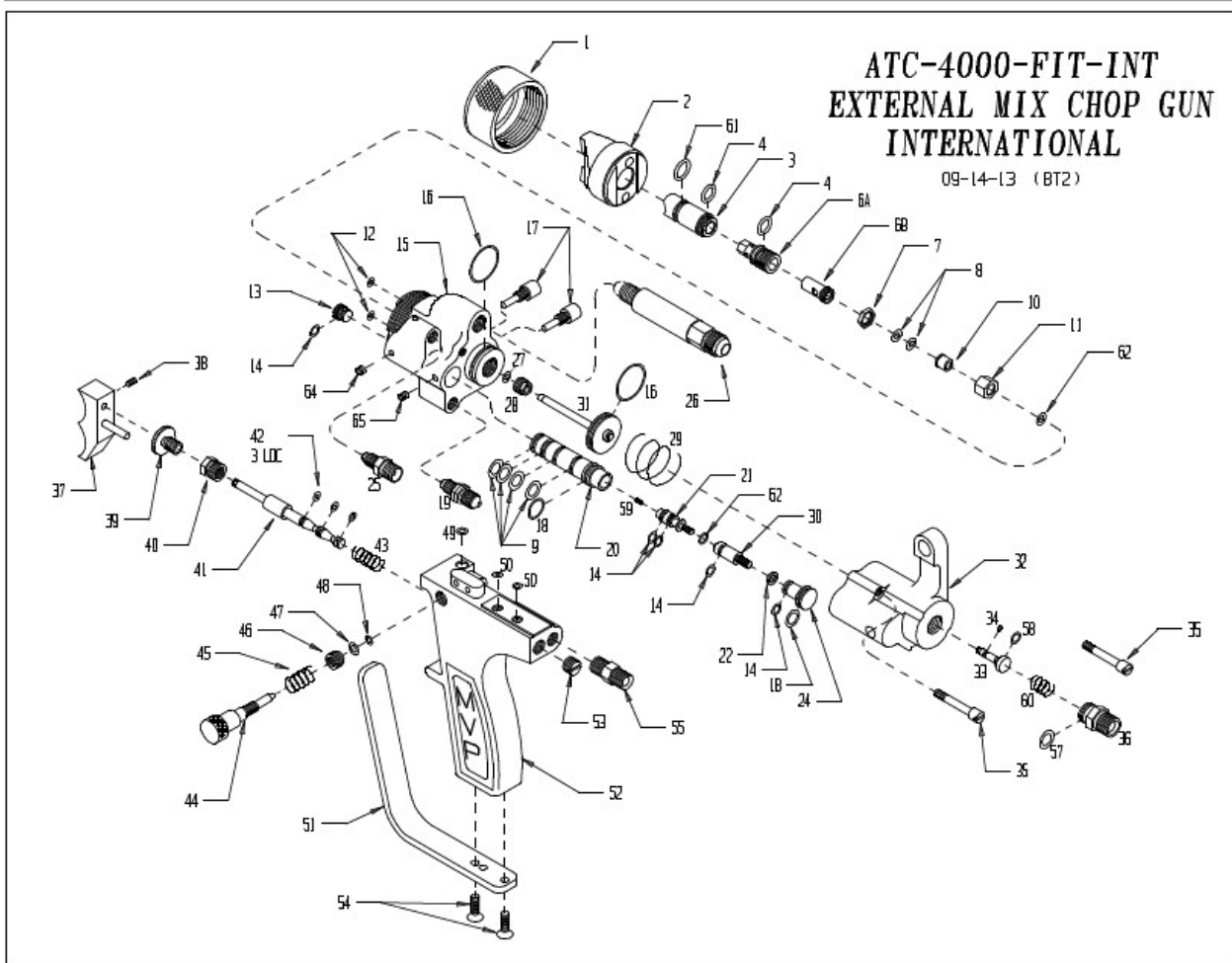
MG-1018-CL ALLUMINUM RETAINING RING

FMT-40402-3 FMT STYLE CATALYST TIP

FMT-XXXX-HT FMT STYLE SPRAY TIP

NOTE A:

ATC-4001 HEAD ASSEMBLY INCLUDES ITEM
20. ATC-40206, ITEM 9. D-S-012A, ITEM
64. F-SS-1032-02-SS, AND ITEM
65. ATC-40616



**ATC-4000-FIT-INT
CHOPPER GUN
09-14-13
PARTS KEY, PAGE 1**

| ITEM | PART # | DESCRIPTION | QTY | ITEM | PART # | DESCRIPTION | QTY |
|------|---------------|----------------------------|-----|------|-----------------|-------------------|-----|
| 1 | MG-1018-CL-PL | RETAINING RING | 1 | 48* | O-B-007 | O-RING | 1 |
| 2 | LMT-40402-INT | CATALYST TIP | 1 | 49* | O-B-008 | O-RING | 1 |
| 3 | LMT-XXXX | SPRAY TIP (XXXX = SIZE) | 1 | 50* | O-B-006 | O-RING | 2 |
| 4* | O-E-012 | O-RING | 2 | 51 | ATC-40709 | GUARD | 1 |
| 6A | ATC-40323-A | DIFFUSER SEAT | 1 | 52 | ATC-4003-2 | HANDLE ASSY. | 1 |
| 6B | ATC-40323-B | PACKING RETAINER | 1 | 53 | ATC-40106 | PLUG | 1 |
| 7 | ATC-40319 | LOCKNUT | 1 | 54 | F-FHCS-1032-08 | SCREW | 2 |
| 8* | ATC-40304 | PACKING (SET OF 2) | 1 | 55 | PF-HN-02-02S | AIR FITTING | 1 |
| 9* | O-S-012A | O-RING | 4 | 57* | O-S-012 | O-RING | 1 |
| 10 | ATC-40318 | PACKING PRESS | 1 | 58* | O-B-008 | O-RING | 1 |
| 11 | ATC-40317 | PACKING HOUSING | 1 | 59 | ATC-40611 | RESTRICTOR (.040) | 1 |
| 12* | O-S-006 | O-RING | 2 | 60 | ATC-40610 | SPRING | 1 |
| 13 | ATC-40201 | CAT. CYLINDER PLUG | 1 | 61* | O-E-013 | O-RING | 1 |
| 14* | O-S-008 | O-RING | 5 | 62* | O-T-008 | O-RING | 2 |
| 15 | ATC-4001 | HEAD (SEE NOTE B) | 1 | 64 | F-SS-1032-02-SS | SET SCREW | 1 |
| 16* | O-S-020 | O-RING | 2 | 65 | ATC-40616 | SET SCREW | 1 |
| 17 | ATC-40701 | SCREW | 2 | | | | |
| 18* | O-S-013 | O-RING | 2 | | | | |
| 19 | ATC-40216 | CATALYST FITTING | 1 | | | | |
| 20 | ATC-40206 | CATALYST CYLINDER | 1 | | | | |
| 21 | ATC-40704 | VALVE FRONT | 1 | | | | |
| 22 | ATC-40208 | LOCK WASHER | 1 | | | | |
| 24 | ATC-40209 | CATALYST PISTON | 1 | | | | |
| 25 | ATC-40213 | AIR FITTING | 1 | | | | |
| 26 | ATC-40311-F | MATERIAL TUBE | 1 | | | | |
| 27* | O-E-008 | O-RING | 1 | | | | |
| 28 | ATC-40305 | PACKING RETAINER | 1 | | | | |
| 29 | ATC-40325 | SPRING | 1 | | | | |
| 30 | ATC-40705 | VALVE BACK | 1 | | | | |
| 31 | ATC-40321 | NEEDLE ASSY. | 1 | | | | |
| 32 | ATC-4002 | GUN BACK | 1 | | | | |
| 33 | ATC-40602 | CHOPPER AIR VALVE | 1 | | | | |
| 34* | O-B-003 | O-RING | 1 | | | | |
| 35 | ATC-40501 | SCREW | 2 | | | | |
| 36 | ATC-40607 | AIR FITTING | 1 | | | | |
| 37 | ATC-40113 | TRIGGER BUTTON | 1 | | | | |
| 38 | ATC-40108 | SET SCREW | 1 | | | | |
| 39 | ATC-40111 | TRIGGER LOCK | 1 | | | | |
| 40 | ATC-40101 | TRIGGER HOUSING | 1 | | | | |
| 41 | ATC-40103 | TRIGGER VALVE | 1 | | | | |
| 42* | O-E-006 | O-RING | 3 | | | | |
| 43 | ATC-40105 | SPRING | 1 | | | | |
| 44 | ATC-40505 | AIR ADJUSTING SCREW | 1 | | | | |
| 45 | ATC-40506 | SPRING | 1 | | | | |
| 46 | ATC-40509 | INSERT | 1 | | | | |
| 47* | ATC-40304-1 | O-RING | 1 | | | | |

SEAL KIT SOLD SEPARATELY:

* AT-EXT-SK SEAL KIT

HOSES AVAILABLE SEPARATELY:

FOR 3:1 AND 6:1 RATIO PUMP:

FLUID HOSE - HFL-0888-XX WITH A
PF-HN-08S-06J NIPPLE AND A
HFL-046J6J-5 WHIP

FOR 11:1 RATIO PUMP

FLUID HOSE - HAW-0888-XX WITH A
PF-HN-08S-06J NIPPLE AND A
HAW-046J6J-5

REFINEMENT AIR HOSE - HA-0324-XX
CATALYST HOSE - HCHP-023J3J-XXLC
CHOPPER AIR HOSE - HA-0644-XX
CATALYST ATOMIZING AIR HOSE - HA-0224-XX

XX = HOSE LENGTH DESIRED (25 FT. IS STD.)

**ATC-4000-FIT-INT
CHOPPER GUN
09-14-13
PARTS KEY, PAGE 2**

OPTIONAL EQUIPMENT:

ATC-40611-1 .020" CATALYST RESTRICTOR

ATC-40314 CARTRIDGE ASSEMBLY WHICH INCLUDES
ITEMS 4 - 11 AND ATC-40323-BT

ATC-40323-A-TL 5/16 NUT DRIVER

ATC-40323-BT TOOL FOR ATC-40323-B

ATC-40204-1 CAT. VALVE O-RING TOOL

ATC-40103-1 TRIGGER VALVE O-RING TOOL

MG-1018-CL ALUMINUM RETAINING RING

FMT-40402-INT FMT STYLE CATALYST TIP

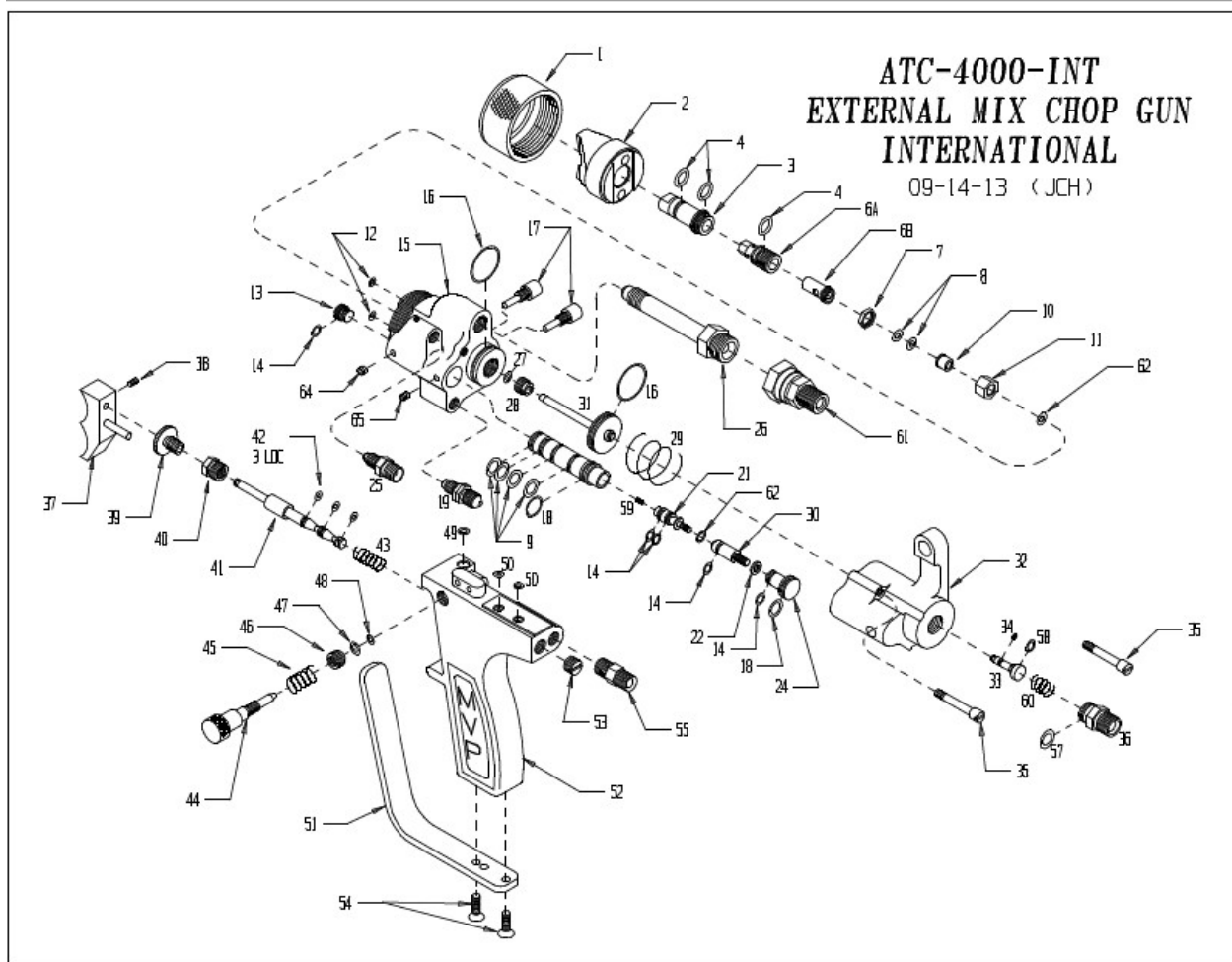
FMT-XXXX-HT FMT STYLE SPRAY TIP

NOTE A:

TRIGGER VALVE O-RINGS ARE MADE OF EPR RUBBER AND CAN ONLY BE LUBRICATED WITH "SUPER O LUBE"

NOTE B:

ATC-4001 HEAD ASSEMBLY INCLUDES ITEM 20. ATC-40206, ITEM 9. D-S-012A, ITEM 64. F-SS-1032-02-SS, AND ITEM 65. ATC-40616



**ATC-4000-INT
INTERNATIONAL CHOP GUN
09-14-13
PARTS KEY, PAGE 1**

| ITEM | PART # | DESCRIPTION | QTY | ITEM | PART # | DESCRIPTION | QTY |
|------|---------------|---------------------------|-----|------|-----------------|-------------------|-----|
| 1 | MG-1018-CL-PL | RETAINING RING | 1 | 46 | ATC-40509 | INSERT | 1 |
| 2 | UCT-40402-INT | CATALYST TIP | 1 | 47* | ATC-40304-1 | O-RING | 1 |
| 3 | UCT-XXX | SPRAY TIP (XXX = SIZE) | 1 | 48* | O-B-007 | O-RING | 1 |
| 4* | O-E-012 | O-RING | 3 | 49* | O-B-008 | O-RING | 1 |
| 6A | ATC-40323-A | DIFFUSER SEAT | 1 | 50* | O-B-006 | O-RING | 2 |
| 6B | ATC-40323-B | PACKING RETAINER | 1 | 51 | ATC-40709 | GUARD | 1 |
| 7 | ATC-40319 | LOCKNUT | 1 | 52 | ATC-4003-2 | HANDLE ASSY. | 1 |
| 8* | ATC-40304 | PACKING (SET OF 2) | 1 | 53 | ATC-40106 | PLUG | 1 |
| 9* | O-S-012A | O-RING | 4 | 54 | F-FHCS-1032-08 | SCREW | 2 |
| 10 | ATC-40318 | PACKING PRESS | 1 | 55 | PF-HN-02-02S | AIR FITTING | 1 |
| 11 | ATC-40317 | PACKING HOUSING | 1 | 57* | O-S-012 | O-RING | 1 |
| 12* | O-S-006 | O-RING | 2 | 58* | O-B-008 | O-RING | 1 |
| 13 | ATC-40201 | CAT. CYLINDER PLUG | 1 | 59 | ATC-40611 | RESTRICTOR (.040) | 1 |
| 14* | O-S-008 | O-RING | 5 | 60 | ATC-40610 | SPRING | 1 |
| 15 | ATC-4001 | HEAD (SEE NOTE C) | 1 | 61 | PF-SW-04M-06F | SWIVEL | 1 |
| 16* | O-S-020 | O-RING | 2 | 62* | O-T-008 | O-RING | 2 |
| 17 | ATC-40701 | SCREW | 2 | 64 | F-SS-1032-02-SS | SET SCREW | 1 |
| 18* | O-S-013 | O-RING | 2 | 65 | ATC-40616 | SET SCREW | 1 |
| 19 | ATC-40216 | CATALYST FITTING | 1 | | | | |
| 20 | ATC-40206 | CATALYST CYLINDER | 1 | | | | |
| 21 | ATC-40704 | VALVE FRONT | 1 | | | | |
| 22 | ATC-40208 | LOCK WASHER | 1 | | | | |
| 24 | ATC-40209 | CATALYST PISTON | 1 | | | | |
| 25 | ATC-40213 | AIR FITTING | 1 | | | | |
| 26 | ATC-40311 | MATERIAL TUBE | 1 | | | | |
| 27* | O-E-008 | O-RING | 1 | | | | |
| 28 | ATC-40305 | PACKING RETAINER | 1 | | | | |
| 29 | ATC-40325 | SPRING | 1 | | | | |
| 30 | ATC-40705 | VALVE BACK | 1 | | | | |
| 31 | ATC-40321 | NEEDLE ASSY. | 1 | | | | |
| 32 | ATC-4002 | GUN BACK | 1 | | | | |
| 33 | ATC-40602 | CHOPPER AIR VALVE | 1 | | | | |
| 34* | O-B-003 | O-RING | 1 | | | | |
| 35 | ATC-40501 | SCREW | 2 | | | | |
| 36 | ATC-40607 | AIR FITTING | 1 | | | | |
| 37 | ATC-40113 | TRIGGER BUTTON | 1 | | | | |
| 38 | ATC-40108 | SET SCREW | 1 | | | | |
| 39 | ATC-40111 | TRIGGER LOCK | 1 | | | | |
| 40 | ATC-40101 | TRIGGER HOUSING | 1 | | | | |
| 41 | ATC-40103 | TRIGGER VALVE | 1 | | | | |
| 42* | O-E-006 | O-RING | 3 | | | | |
| 43 | ATC-40105 | SPRING | 1 | | | | |
| 44 | ATC-40505 | AIR ADJUSTING SCREW | 1 | | | | |
| 45 | ATC-40506 | SPRING | 1 | | | | |

SEAL KIT SOLD SEPARATELY:

AT-EXT-SK SEAL KIT

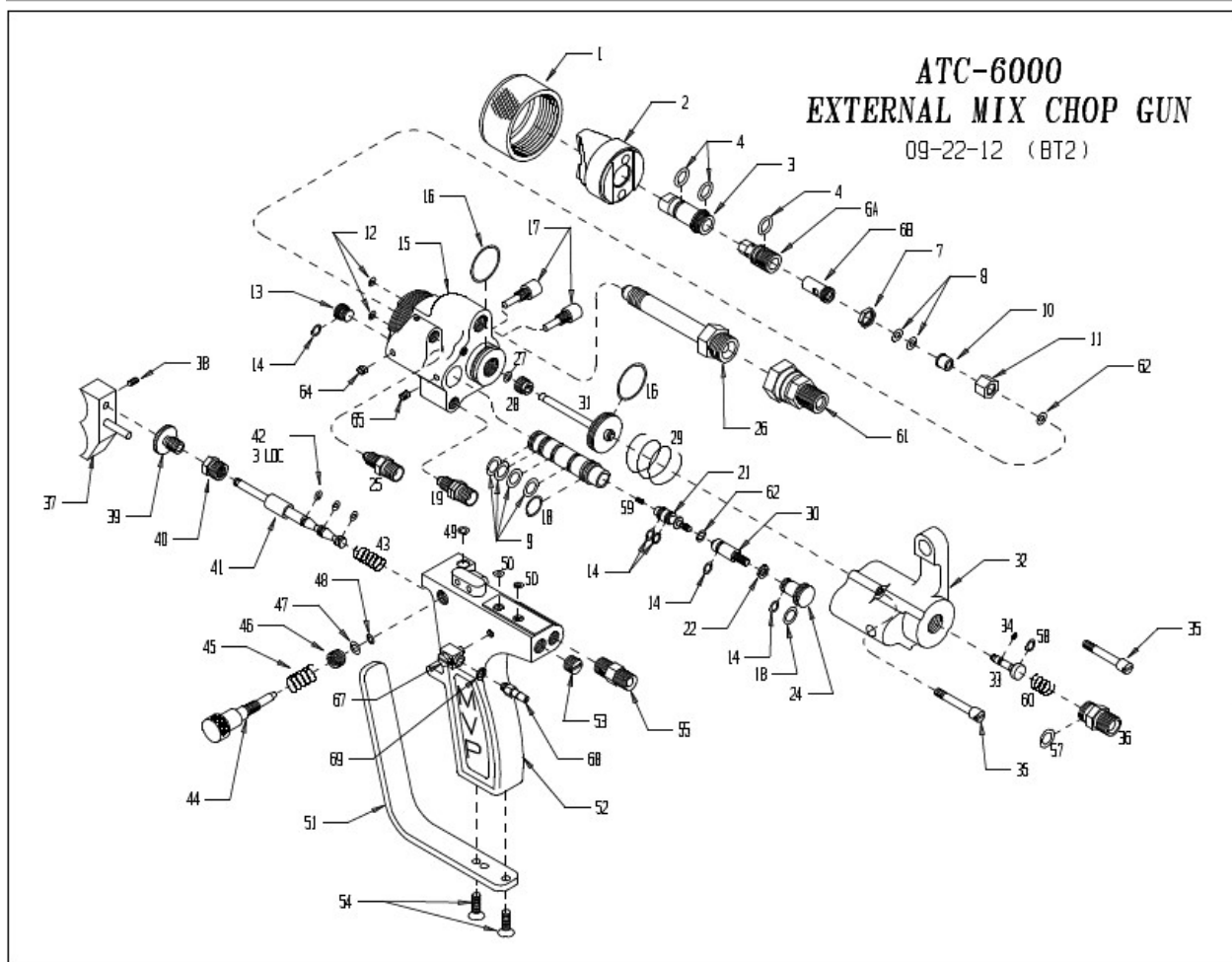
HOSES AVAILABLE SEPARATELY:

FOR 6:1 RATIO PUMP:
FLUID HOSE - HFL-0666-XX

FOR 11:1 RATIO PUMP:
FLUID HOSE - HAW-0664-XX WITH HAW-0444-5

ALL RATIO PUMPS:
REFINEMENT AIR HOSE - HA-0324-XX
CATALYST HOSE - HCHP-023J3J-XXLC
CHOPPER AIR HOSE - HA-0644-XX
CATALYST ATOMIZING AIR HOSE - HA-0224-XX

XX = HOSE LENGTH DESIRED (25 FT. IS STD.)



**ATC-6000
INTERNATIONAL CHOP GUN
09-22-12
PARTS KEY, PAGE 1**

| ITEM | PART # | DESCRIPTION | QTY | ITEM | PART # | DESCRIPTION | QTY |
|------|---------------|---------------------------|-----|------|-----------------|-------------------|-----|
| 1 | MG-1018-CL-PL | RETAINING RING | 1 | 47* | ATC-40304-1 | O-RING | 1 |
| 2 | UCT-40402 | CATALYST TIP | 1 | 48* | O-B-007 | O-RING | 1 |
| 3 | UCT-XXX | SPRAY TIP (XXX = SIZE) | 1 | 49* | O-B-008 | O-RING | 2 |
| 4* | O-E-012 | O-RING | 3 | 50* | O-B-006 | O-RING | 2 |
| 6A | ATC-40323-A | DIFFUSER SEAT | 1 | 51 | ATC-40709 | GUARD | 1 |
| 6B | ATC-40323-B | PACKING RETAINER | 1 | 52 | ATC-4003-SIG | HANDLE ASSY. | 1 |
| 7 | ATC-40319 | LOCKNUT | 1 | 53 | ATC-40106 | PLUG | 1 |
| 8* | ATC-40304 | PACKING (SET OF 2) | 1 | 54 | F-FHCS-1032-08 | SCREW | 2 |
| 9* | O-S-012A | O-RING | 4 | 55 | PF-HN-02-02S | AIR FITTING | 1 |
| 10 | ATC-40318 | PACKING PRESS | 1 | 57* | O-S-012 | O-RING | 1 |
| 11 | ATC-40317 | PACKING HOUSING | 1 | 59 | ATC-40611 | RESTRICTOR (.040) | 1 |
| 12* | O-S-006 | O-RING | 2 | 60 | ATC-40610 | SPRING | 1 |
| 13 | ATC-40201 | CAT. CYLINDER PLUG | 1 | 61 | PF-SW-04M-06F | SWIVEL | 1 |
| 14* | O-S-008 | O-RING | 5 | 62* | O-T-008 | O-RING | 2 |
| 15 | ATC-4001 | HEAD (SEE NOTE C) | 1 | 64 | F-SS-1032-02-SS | SET SCREW | 1 |
| 16* | O-S-020 | O-RING | 2 | 65 | ATC-40616 | SET SCREW | 1 |
| 17 | ATC-40701 | SCREW | 2 | 67 | TRU-1021 | ELBOW | 1 |
| 18* | O-S-013 | O-RING | 2 | 68 | TRU-1022 | BARB | 1 |
| 19 | ATC-40214 | CATALYST FITTING | 1 | 69 | 7304-3-1 | SEAL | 1 |
| 20 | ATC-40206 | CATALYST CYLINDER | 1 | | | | |
| 21 | ATC-40704 | VALVE FRONT | 1 | | | | |
| 22 | ATC-40208 | LOCK WASHER | 1 | | | | |
| 24 | ATC-40209 | CATALYST PISTON | 1 | | | | |
| 25 | ATC-40213 | AIR FITTING | 1 | | | | |
| 26 | ATC-40311 | MATERIAL TUBE | 1 | | | | |
| 27* | O-E-008 | O-RING | 1 | | | | |
| 28 | ATC-40305 | PACKING RETAINER | 1 | | | | |
| 29 | ATC-40325 | SPRING | 1 | | | | |
| 30 | ATC-40705 | VALVE BACK | 1 | | | | |
| 31 | ATC-40321 | NEEDLE ASSY. | 1 | | | | |
| 32 | ATC-4002 | GUN BACK | 1 | | | | |
| 33 | ATC-40602 | CHOPPER AIR VALVE | 1 | | | | |
| 34* | O-B-003 | O-RING | 1 | | | | |
| 35 | ATC-40501 | SCREW | 2 | | | | |
| 36 | ATC-40607 | AIR FITTING | 1 | | | | |
| 37 | ATC-40113 | TRIGGER BUTTON | 1 | | | | |
| 38 | ATC-40108 | SET SCREW | 1 | | | | |
| 39 | ATC-40111 | TRIGGER LOCK | 1 | | | | |
| 40 | ATC-40101 | TRIGGER HOUSING | 1 | | | | |
| 41 | ATC-40103 | TRIGGER VALVE | 1 | | | | |
| 42* | O-E-006 | O-RING | 3 | | | | |
| 43 | ATC-40105 | SPRING | 1 | | | | |
| 44 | ATC-40505 | AIR ADJUSTING SCREW | 1 | | | | |
| 45 | ATC-40506 | SPRING | 1 | | | | |
| 46 | ATC-40509 | INSERT | 1 | | | | |

SEAL KIT SOLD SEPARATELY:

* AT-EXT-SK SEAL KIT

HOSES AVAILABLE SEPARATELY:

FOR 6:1 RATIO PUMP:
FLUID HOSE - HFL-0666-XX

FOR 11:1 RATIO PUMP:
FLUID HOSE - HAW-0664-XX WITH HAW-0444-5

ALL RATIO PUMPS:
REFINEMENT AIR HOSE - HA-0324-XX
CATALYST HOSE - HC-0224-XX
CHOPPER AIR HOSE - HA-0644-XX
CATALYST ATOMIZING AIR HOSE - HA-0224-XX

XX = HOSE LENGTH DESIRED (25 FT. IS STD.)

**ATC-6000
INTERNATIONAL CHOP GUN
09-22-12
PARTS KEY, PAGE 2**

OPTIONAL EQUIPMENT:

ATC-40611-1 .020" CATALYST RESTRICTOR

ATC-40314 CARTRIDGE ASSEMBLY WHICH INCLUDES
ITEMS 4 - 11 AND ATC-40323-BT

ATC-40323-BT TOOL FOR ATC-40323-B

ATC-40323-A-TL 5/16 NUT DRIVER

ATC-40204-1 CAT. VALVE O-RING

ATC-40103-1 TRIGGER VALVE O-RING TOOL

ATC-40402-BIG DOUBLE SIDED CLEANABLE
CAT TIP. (SEE NOTE A)

ATC-40402-CL SINGLE SIDED CLEANABLE
CAT TIP. (SEE NOTE B)

MG-1018-CL ALUMINUM RETAINING RING

ATC-XXX SPRAY TIP (XXX = SIZE)

ATC-40402 CATALYST TIP FOR ATC-XXX

MG-1018 RETAINING RING FOR ATC-40402

NOTE C:

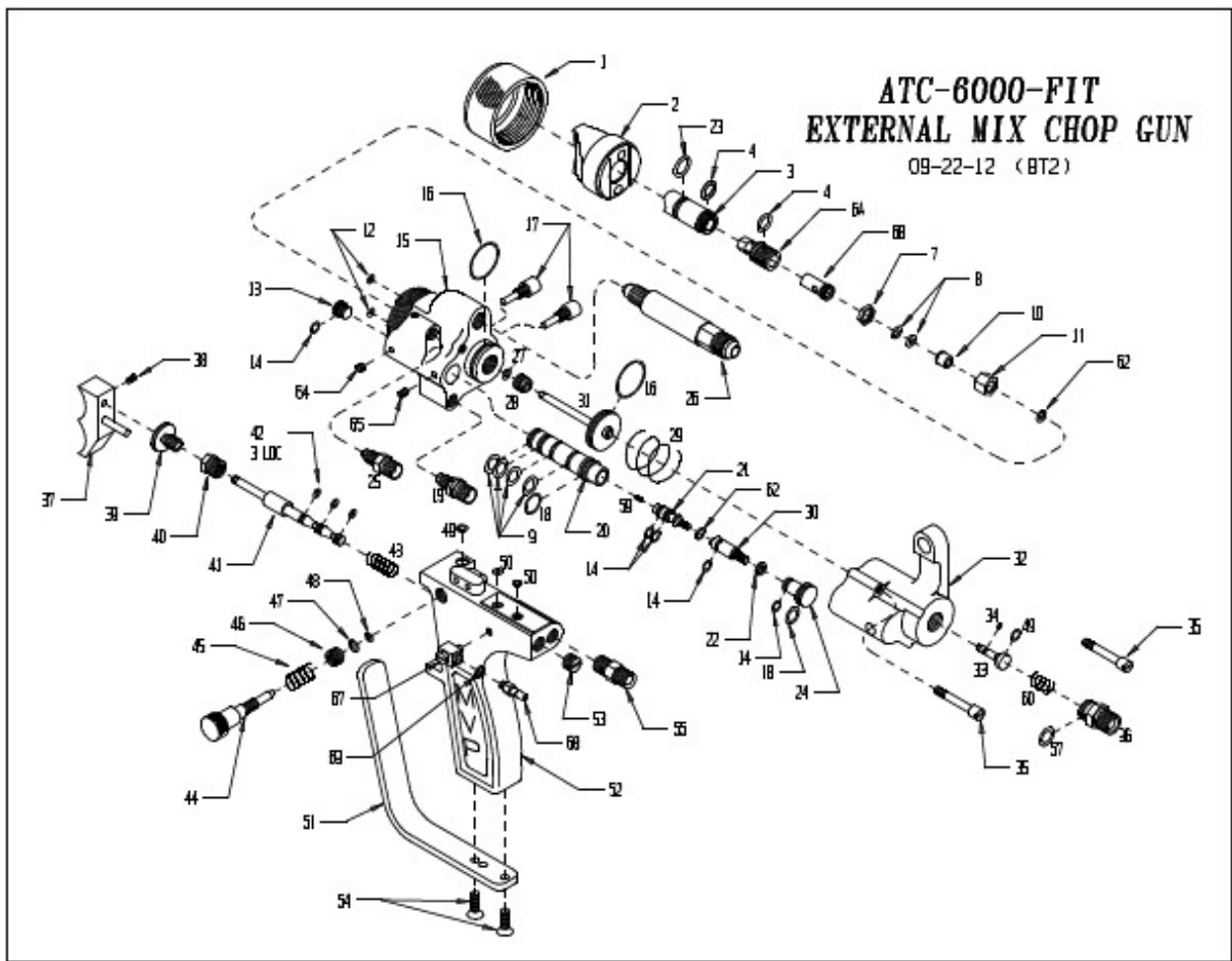
ATC-4001 HEAD ASSEMBLY INCLUDES ITEM
20. ATC-40206, ITEM 9. O-S-O12A, ITEM
64. F-SS-1032-02-SS, AND ITEM
65. ATC-40616

NOTE A:

MG-1018-CL-PL RETAINING RING IS NEEDED WHEN
USING EITHER ATC-40402-BIG-INT OR
ATC-40402-CL-INT CAT TIPS. (A MG-1018-CL
ALUMINUM RETAINING RING MAY BE PURCHASED
INSTEAD OF THE MG-1018-CL-PL DELRIN PLASTIC
RING)

NOTE B:

TRIGGER VALVE O-RINGS ARE MADE OF EPR
RUBBER AND CAN ONLY BE LUBRICATED WITH
"SUPER O LUBE"



**ATC-6000-FIT
CHOPPER GUN
09-22-12
PARTS KEY, PAGE 1**

| ITEM | PART # | DESCRIPTION | QTY | ITEM | PART # | DESCRIPTION | QTY |
|------|---------------|---------------------------|-----|------|-----------------|-------------------|-----|
| 1 | MG-1018-CL-PL | RETAINING RING | 1 | 45 | ATC-40506 | SPRING | 1 |
| 2 | UMT-40402 | CATALYST TIP | 1 | 46 | ATC-40509 | INSERT | 1 |
| 3 | UMT-XXXX | SPRAY TIP (XXX = SIZE) | 1 | 47* | ATC-40304-1 | O-RING | 1 |
| 4* | O-E-012 | O-RING | 2 | 48* | O-B-007 | O-RING | 1 |
| 6A | ATC-40323-A | DIFFUSER SEAT | 1 | 49* | O-B-008 | O-RING | 2 |
| 6B | ATC-40323-B | PACKING RETAINER | 1 | 50* | O-B-006 | O-RING | 2 |
| 7 | ATC-40319 | LOCKNUT | 1 | 51 | ATC-40709 | GUARD | 1 |
| 8* | ATC-40304 | PACKING (SET OF 2) | 1 | 52 | ATC-4003-SIG | HANDLE ASSY. | 1 |
| 9* | O-S-012A | O-RING | 4 | 53 | ATC-40106 | PLUG | 1 |
| 10 | ATC-40318 | PACKING PRESS | 1 | 54 | F-FHCS-1032-08 | SCREW | 2 |
| 11 | ATC-40317 | PACKING HOUSING | 1 | 55 | PF-HN-02-02S | AIR FITTING | 1 |
| 12* | O-S-006 | O-RING | 2 | 57* | O-S-012 | O-RING | 1 |
| 13 | ATC-40201 | CAT. CYLINDER PLUG | 1 | 59 | ATC-40611 | RESTRICTOR (.040) | 1 |
| 14* | O-S-008 | O-RING | 5 | 60 | ATC-40610 | SPRING | 1 |
| 15 | ATC-4001 | HEAD (SEE NOTE B) | 1 | 62* | O-T-008 | O-RING | 2 |
| 16* | O-S-020 | O-RING | 2 | 64 | F-SS-1032-02-SS | SET SCREW | 1 |
| 17 | ATC-40701 | SCREW | 2 | 65 | ATC-40616 | SET SCREW | 1 |
| 18* | O-S-013 | O-RING | 2 | 67 | TRU-1021 | ELBOW | 1 |
| 19 | ATC-40214 | CATALYST FITTING | 1 | 68 | TRU-1022 | BARB | 1 |
| 20 | ATC-40206 | CATALYST CYLINDER | 1 | 69 | 7304-3-1 | SEAL | 1 |
| 21 | ATC-40704 | VALVE FRONT | 1 | | | | |
| 22 | ATC-40208 | LOCK WASHER | 1 | | | | |
| 23* | O-E-013 | O-RING | 1 | | | | |
| 24 | ATC-40209 | CATALYST PISTON | 1 | | | | |
| 25 | ATC-40213 | AIR FITTING | 1 | | | | |
| 26 | ATC-40311-FIT | MATERIAL TUBE | 1 | | | | |
| 27* | O-E-008 | O-RING | 1 | | | | |
| 28 | ATC-40305 | PACKING RETAINER | 1 | | | | |
| 29 | ATC-40325 | SPRING | 1 | | | | |
| 30 | ATC-40705 | VALVE BACK | 1 | | | | |
| 31 | ATC-40321 | NEEDLE ASSY. | 1 | | | | |
| 32 | ATC-4002 | GUN BACK | 1 | | | | |
| 33 | ATC-40602 | CHOPPER AIR VALVE | 1 | | | | |
| 34* | O-B-003 | O-RING | 1 | | | | |
| 35 | ATC-40501 | SCREW | 2 | | | | |
| 36 | ATC-40607 | AIR FITTING | 1 | | | | |
| 37 | ATC-40113 | TRIGGER BUTTON | 1 | | | | |
| 38 | ATC-40108 | SET SCREW | 1 | | | | |
| 39 | ATC-40111 | TRIGGER LOCK | 1 | | | | |
| 40 | ATC-40101 | TRIGGER HOUSING | 1 | | | | |
| 41 | ATC-40103 | TRIGGER VALVE | 1 | | | | |
| 42* | O-E-006 | O-RING | 3 | | | | |
| 43 | ATC-40105 | SPRING | 1 | | | | |
| 44 | ATC-40505 | AIR ADJUSTING SCREW | 1 | | | | |

SEAL KIT SOLD SEPARATELY:

* AT-EXT-SK SEAL KIT

HOSES AVAILABLE SEPARATELY:

FOR 3:1 AND 5:1 RATIO PUMP:
FLUID HOSE - HFL-0888-XX WITH A
PF-HN-DBS-06J NIPPLE AND A
HFL-046J6J-5 WHIP

FOR 11:1 RATIO PUMP:
FLUID HOSE - HAW-0888-XX WITH A
PF-HN-DBS-06J NIPPLE AND A
HAW-046J6J-5 WHIP

ALL RATIO PUMPS:
REFINEMENT AIR HOSE - HA-0324-XX
CATALYST HOSE - HC-0224-XX
CHOPPER AIR HOSE - HA-0644-XX
CATALYST ATOMIZING AIR HOSE - HA-0224-XX

XX = HOSE LENGTH DESIRED (25 FT. IS STD.)

**ATC-6000-FIT
CHOPPER GUN
09-22-12
PARTS KEY, PAGE 2**

OPTIONAL EQUIPMENT:

ATC-40611-1 .020" CATALYST RESTRICTOR

ATC-40314 CARTRIDGE ASSEMBLY WHICH INCLUDES
ITEMS 4 - 11 AND ATC-40323-BT

ATC-40323-A-TL 5/16 NUT DRIVER

ATC-40323-BT TOOL FOR ATC-40323-B

ATC-40103-1 TRIGGER VALVE O-RING TOOL

ATC-40204-1 CAT. VALVE O-RING TOOL

MG-1018-CL ALUMINUM RETAINING RING

FMT-40402-3 FMT STYLE CATALYST TIP

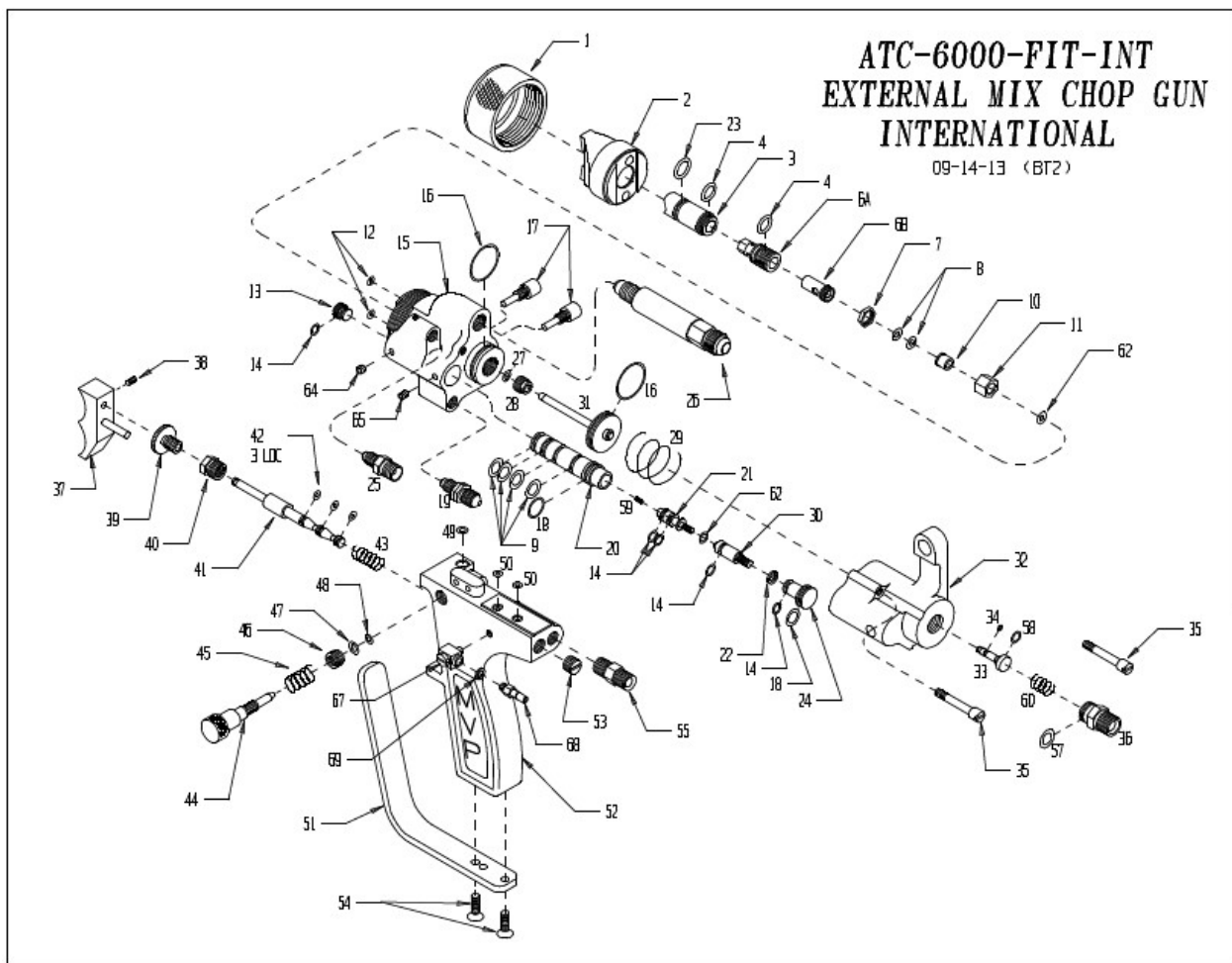
FMT-XXXX-HT FMT STYLE SPRAY TIP

NOTE A:

TRIGGER VALVE O-RINGS ARE MADE OF EPR RUBBER AND CAN ONLY BE LUBRICATED WITH "SUPER O LUBE"

NOTE B:

ATC-4001 HEAD ASSEMBLY INCLUDES ITEM 20. ATC-40206, ITEM 9. O-S-D12A, ITEM 64. F-SS-1032-02-SS, AND ITEM 65. ATC-40616



**ATC-6000-FIT-INT
CHOPPER GUN
09-14-13
PARTS KEY, PAGE 1**

| ITEM | PART # | DESCRIPTION | QTY | ITEM | PART # | DESCRIPTION | QTY |
|------|---------------|----------------------------|-----|------|-----------------|-------------------|-----|
| 1 | MG-1018-CL-PL | RETAINING RING | 1 | 46 | ATC-40509 | INSERT | 1 |
| 2 | UMT-40402-INT | CATALYST TIP | 1 | 47 | ATC-40304-1 | O-RING | 1 |
| 3 | UMT-XXXX | SPRAY TIP (XXXX = SIZE) | 1 | 48* | O-B-007 | O-RING | 1 |
| 4* | O-E-012 | O-RING | 2 | 49* | O-B-008 | O-RING | 1 |
| 6A | ATC-40323-A | DIFFUSER SEAT | 1 | 50* | O-B-006 | O-RING | 2 |
| 6B | ATC-40323-B | PACKING RETAINER | 1 | 51 | ATC-40709 | GUARD | 1 |
| 7 | ATC-40319 | LOCKNUT | 1 | 52 | ATC-4003-SIG | HANDLE ASSY. | 1 |
| 8* | ATC-40304 | PACKING (SET OF 2) | 1 | 53 | ATC-40106 | PLUG | 1 |
| 9* | O-S-012A | O-RING | 4 | 54 | F-FHCS-1032-08 | SCREW | 2 |
| 10 | ATC-40318 | PACKING PRESS | 1 | 55 | PF-HN-02-02S | AIR FITTING | 1 |
| 11 | ATC-40317 | PACKING HOUSING | 1 | 56* | O-T-008 | O-RING | 1 |
| 12* | O-S-006 | O-RING | 2 | 57* | O-S-012 | O-RING | 1 |
| 13 | ATC-40201 | CAT. CYLINDER PLUG | 1 | 58* | O-B-008 | O-RING | 1 |
| 14* | O-S-008 | O-RING | 5 | 59 | ATC-40611 | RESTRICTOR (.040) | 1 |
| 15 | ATC-4001 | HEAD (SEE NOTE B) | 1 | 60 | ATC-40610 | SPRING | 1 |
| 16* | O-S-020 | O-RING | 2 | 62* | O-T-008 | O-RING | 2 |
| 17 | ATC-40701 | SCREW | 2 | 64 | F-SS-1032-02-SS | SET SCREW | 1 |
| 18* | O-S-013 | O-RING | 2 | 65 | ATC-40616 | SET SCREW | 1 |
| 19 | ATC-40216 | CATALYST FITTING | 1 | 67 | TRU-1021 | ELBOW | 1 |
| 20 | ATC-40206 | CATALYST CYLINDER | 1 | 68 | TRU-1022 | BARB | 1 |
| 21 | ATC-40704 | VALVE FRONT | 1 | 69 | 7304-3-1 | SEAL | 1 |
| 22 | ATC-40208 | LOCK WASHER | 1 | | | | |
| 23* | O-E-013 | O-RING | 1 | | | | |
| 24 | ATC-40209 | CATALYST PISTON | 1 | | | | |
| 25 | ATC-40213 | AIR FITTING | 1 | | | | |
| 26 | ATC-40311-F | MATERIAL TUBE | 1 | | | | |
| 27* | O-E-008 | O-RING | 1 | | | | |
| 28 | ATC-40305 | PACKING RETAINER | 1 | | | | |
| 29 | ATC-40325 | SPRING | 1 | | | | |
| 30 | ATC-40705 | VALVE BACK | 1 | | | | |
| 31 | ATC-40321 | NEEDLE ASSY. | 1 | | | | |
| 32 | ATC-4002 | GUN BACK | 1 | | | | |
| 33 | ATC-40602 | CHOPPER AIR VALVE | 1 | | | | |
| 34* | O-B-003 | O-RING | 1 | | | | |
| 35 | ATC-40501 | SCREW | 2 | | | | |
| 36 | ATC-40607 | AIR FITTING | 1 | | | | |
| 37 | ATC-40113 | TRIGGER BUTTON | 1 | | | | |
| 38 | ATC-40108 | SET SCREW | 1 | | | | |
| 39 | ATC-40111 | TRIGGER LOCK | 1 | | | | |
| 40 | ATC-40101 | TRIGGER HOUSING | 1 | | | | |
| 41 | ATC-40103 | TRIGGER VALVE | 1 | | | | |
| 42* | O-E-006 | O-RING | 3 | | | | |
| 43 | ATC-40105 | SPRING | 1 | | | | |
| 44 | ATC-40505 | AIR ADJUSTING SCREW | 1 | | | | |
| 45 | ATC-40506 | SPRING | 1 | | | | |

SEAL KIT SOLD SEPARATELY:

* AT-EXT-SK SEAL KIT

HOSES AVAILABLE SEPARATELY:

FOR 3:1 AND 6:1 RATIO PUMP:
FLUID HOSE - HFL-0888-XX WITH A
PF-HN-08S-06J NIPPLE AND A
HFL-046J6J-5 WHIP

FOR 11:1 RATIO PUMP:
FLUID HOSE - HAW-0888-XX WITH A
PF-HN-08S-06J NIPPLE AND A
HAW-046J6J-5 WHIP

REFINEMENT AIR HOSE - HA-0324-XX
CATALYST HOSE - HCHP-023J3J-XXLC
CHOPPER AIR HOSE - HA-0644-XX
CATALYST ATOMIZING AIR HOSE - HA-0224-XX

XX = HOSE LENGTH DESIRED (25 FT. IS STD.)

**ATC-6000-FIT-INT
CHOPPER GUN
09-14-13
PARTS KEY, PAGE 2**

OPTIONAL EQUIPMENT:

ATC-40611-1 .020" CATALYST RESTRICTOR

ATC-40314 CARTRIDGE ASSEMBLY WHICH INCLUDES
ITEMS 4 - 11 AND ATC-40323-BT

ATC-40323-A-TL 5/16 NUT DRIVER

ATC-40323-BT TOOL FOR ATC-40323-B

ATC-40204-1 CAT. VALVE O-RING TOOL

ATC-40103-1 TRIGGER VALVE O-RING TOOL

MG-1018-CL ALUMINUM RETAINING RING

FMT-40402-INT FMT STYLE CATALYST TIP

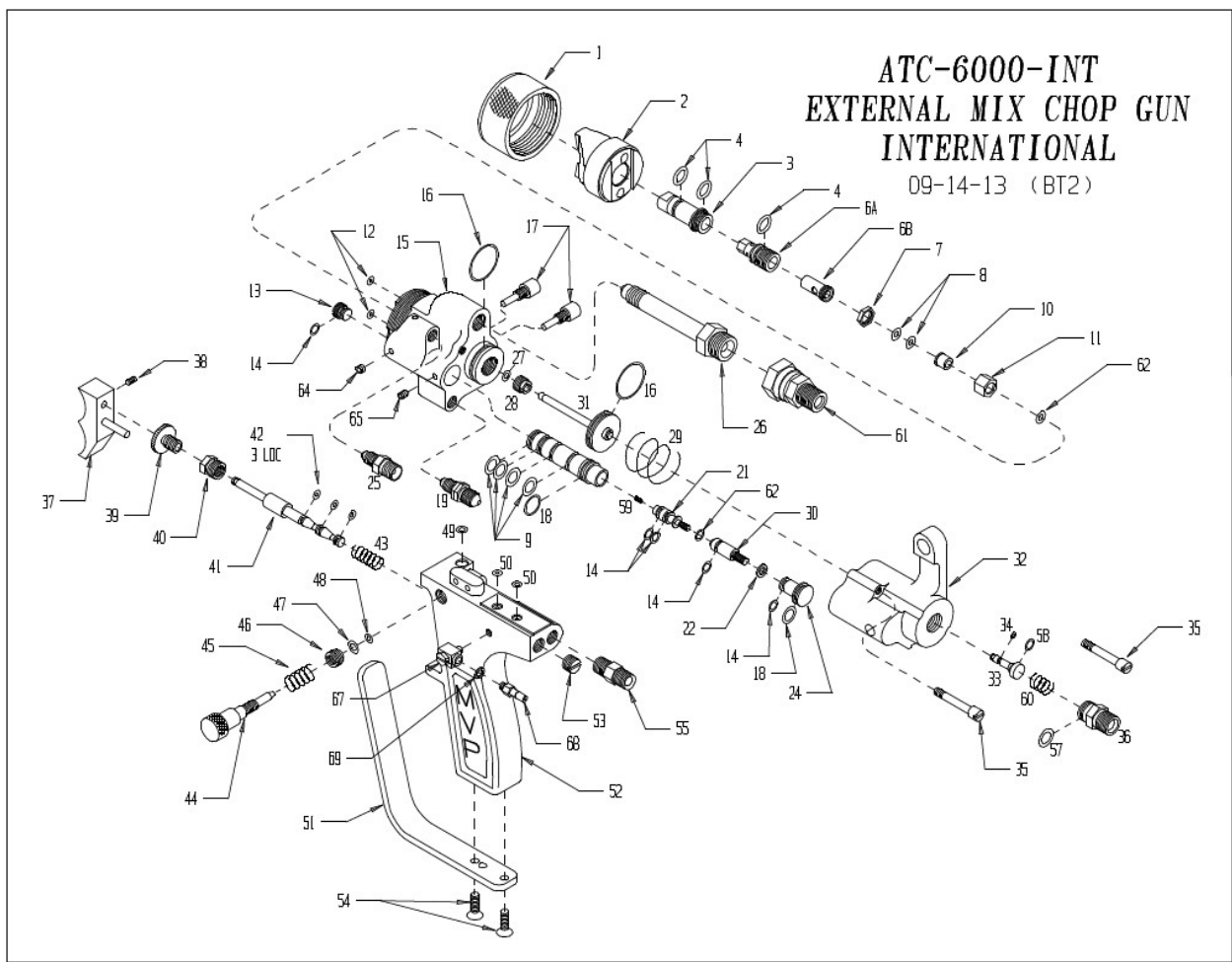
FMT-XXXX-HT FMT STYLE SPRAY TIP

NOTE A:

TRIGGER VALVE O-RINGS ARE MADE OF EPR
RUBBER AND CAN ONLY BE LUBRICATED WITH
"SUPER O LUBE"

NOTE B:

ATC-4001 HEAD ASSEMBLY INCLUDES ITEM
20, ATC-40206, ITEM 9, D-S-D12A, ITEM
64, F-SS-1032-02-SS, AND ITEM
65, ATC-40616



**ATC-6000-INT
INTERNATIONAL CHOP GUN
09-14-13
PARTS KEY, PAGE 1**

| ITEM | PART # | DESCRIPTION | QTY | ITEM | PART # | DESCRIPTION | QTY |
|------|---------------|---------------------------|-----|------|-----------------|-------------------|-----|
| 1 | MG-1018-CL-PL | RETAINING RING | 1 | 47* | ATC-40304-1 | O-RING | 1 |
| 2 | UCT-40402-INT | CATALYST TIP | 1 | 48* | O-B-007 | O-RING | 1 |
| 3 | UCT-XXX | SPRAY TIP (XXX = SIZE) | 1 | 49* | O-B-008 | O-RING | 2 |
| 4* | O-E-012 | O-RING | 3 | 50* | O-B-006 | O-RING | 2 |
| 6A | ATC-40323-A | DIFFUSER SEAT | 1 | 51 | ATC-40709 | GUARD | 1 |
| 6B | ATC-40323-B | PACKING RETAINER | 1 | 52 | ATC-4003-SIG | HANDLE ASSY. | 1 |
| 7 | ATC-40319 | LOCKNUT | 1 | 53 | ATC-40106 | PLUG | 1 |
| 8* | ATC-40304 | PACKING (SET OF 2) | 1 | 54 | F-FHCS-1032-08 | SCREW | 2 |
| 9* | O-S-012A | O-RING | 4 | 55 | PF-HN-02-02S | AIR FITTING | 1 |
| 10 | ATC-40318 | PACKING PRESS | 1 | 57* | O-S-012 | O-RING | 1 |
| 11 | ATC-40317 | PACKING HOUSING | 1 | 59 | ATC-40611 | RESTRICTOR (.040) | 1 |
| 12* | O-S-006 | O-RING | 2 | 60 | ATC-40610 | SPRING | 1 |
| 13 | ATC-40201 | CAT. CYLINDER PLUG | 1 | 61 | PF-SW-04M-06F | SWIVEL | 1 |
| 14* | O-S-008 | O-RING | 5 | 62* | O-T-008 | O-RING | 2 |
| 15 | ATC-4001 | HEAD (SEE NOTE C) | 1 | 64 | F-SS-1032-02-SS | SET SCREW | 1 |
| 16* | O-S-020 | O-RING | 2 | 65 | ATC-40616 | SET SCREW | 1 |
| 17 | ATC-40701 | SCREW | 2 | 67 | TRU-1021 | ELBOW | 1 |
| 18* | O-S-013 | O-RING | 2 | 68 | TRU-1022 | BARB | 1 |
| 19 | ATC-40216 | CATALYST FITTING | 1 | 69 | 7304-3-1 | SEAL | 1 |
| 20 | ATC-40206 | CATALYST CYLINDER | 1 | | | | |
| 21 | ATC-40704 | VALVE FRONT | 1 | | | | |
| 22 | ATC-40208 | LOCK WASHER | 1 | | | | |
| 24 | ATC-40209 | CATALYST PISTON | 1 | | | | |
| 25 | ATC-40213 | AIR FITTING | 1 | | | | |
| 26 | ATC-40311 | MATERIAL TUBE | 1 | | | | |
| 27* | O-E-008 | O-RING | 1 | | | | |
| 28 | ATC-40305 | PACKING RETAINER | 1 | | | | |
| 29 | ATC-40325 | SPRING | 1 | | | | |
| 30 | ATC-40705 | VALVE BACK | 1 | | | | |
| 31 | ATC-40321 | NEEDLE ASSY. | 1 | | | | |
| 32 | ATC-4002 | GUN BACK | 1 | | | | |
| 33 | ATC-40602 | CHOPPER AIR VALVE | 1 | | | | |
| 34* | O-B-003 | O-RING | 1 | | | | |
| 35 | ATC-40501 | SCREW | 2 | | | | |
| 36 | ATC-40607 | AIR FITTING | 1 | | | | |
| 37 | ATC-40113 | TRIGGER BUTTON | 1 | | | | |
| 38 | ATC-40108 | SET SCREW | 1 | | | | |
| 39 | ATC-40111 | TRIGGER LOCK | 1 | | | | |
| 40 | ATC-40101 | TRIGGER HOUSING | 1 | | | | |
| 41 | ATC-40103 | TRIGGER VALVE | 1 | | | | |
| 42* | O-E-006 | O-RING | 3 | | | | |
| 43 | ATC-40105 | SPRING | 1 | | | | |
| 44 | ATC-40505 | AIR ADJUSTING SCREW | 1 | | | | |
| 45 | ATC-40506 | SPRING | 1 | | | | |
| 46 | ATC-40509 | INSERT | 1 | | | | |

SEAL KIT SOLD SEPARATELY:

* AT-EXT-SK SEAL KIT

HOSES AVAILABLE SEPARATELY:

FOR 6:1 RATIO PUMP:
FLUID HOSE - HFL-0666-XX

FOR 11:1 RATIO PUMP:
FLUID HOSE - HAW-0664-XX WITH HAW-0444-5

ALL RATIO PUMPS:
REFINEMENT AIR HOSE - HA-0324-XX
CATALYST HOSE - HCHP-023J3J-XXLC
CHOPPER AIR HOSE - HA-0644-XX
CATALYST ATOMIZING AIR HOSE - HA-0224-XX

XX = HOSE LENGTH DESIRED (25 FT. IS STD.)

**ATC-6000-INT
INTERNATIONAL CHOP GUN
09-14-13
PARTS KEY, PAGE 2**

OPTIONAL EQUIPMENT:

ATC-40611-1 .020" CATALYST RESTRICTOR

ATC-40314 CARTRIDGE ASSEMBLY WHICH INCLUDES
ITEMS 4 - 11 AND ATC-40323-BT

ATC-40323-BT TOOL FOR ATC-40323-B

ATC-40323-A-TL 5/16 NUT DRIVER

ATC-40204-1 CAT. VALVE O-RING

ATC-40103-1 TRIGGER VALVE O-RING TOOL

ATC-40402-BIG-INT DOUBLE SIDED CLEANABLE
CAT TIP. (SEE NOTE A)

ATC-40402-CL-INT SINGLE SIDED CLEANABLE
CAT TIP. (SEE NOTE B)

MG-1018-CL ALUMINUM RETAINING RING

ATC-XXX SPRAY TIP (XXX = SIZE)

ATC-40402 CATALYST TIP FOR ATC-XXX

MG-1018 RETAINING RING FOR ATC-40402

NOTE A:

MG-1018-CL-PL RETAINING RING IS NEEDED WHEN USING EITHER ATC-40402-BIG-INT OR ATC-40402-CL-INT CAT TIPS. (A MG-1018-CL ALUMINUM RETAINING RING MAY BE PURCHASED INSTEAD OF THE MG-1018-CL-PL DELRIN PLASTIC RING)

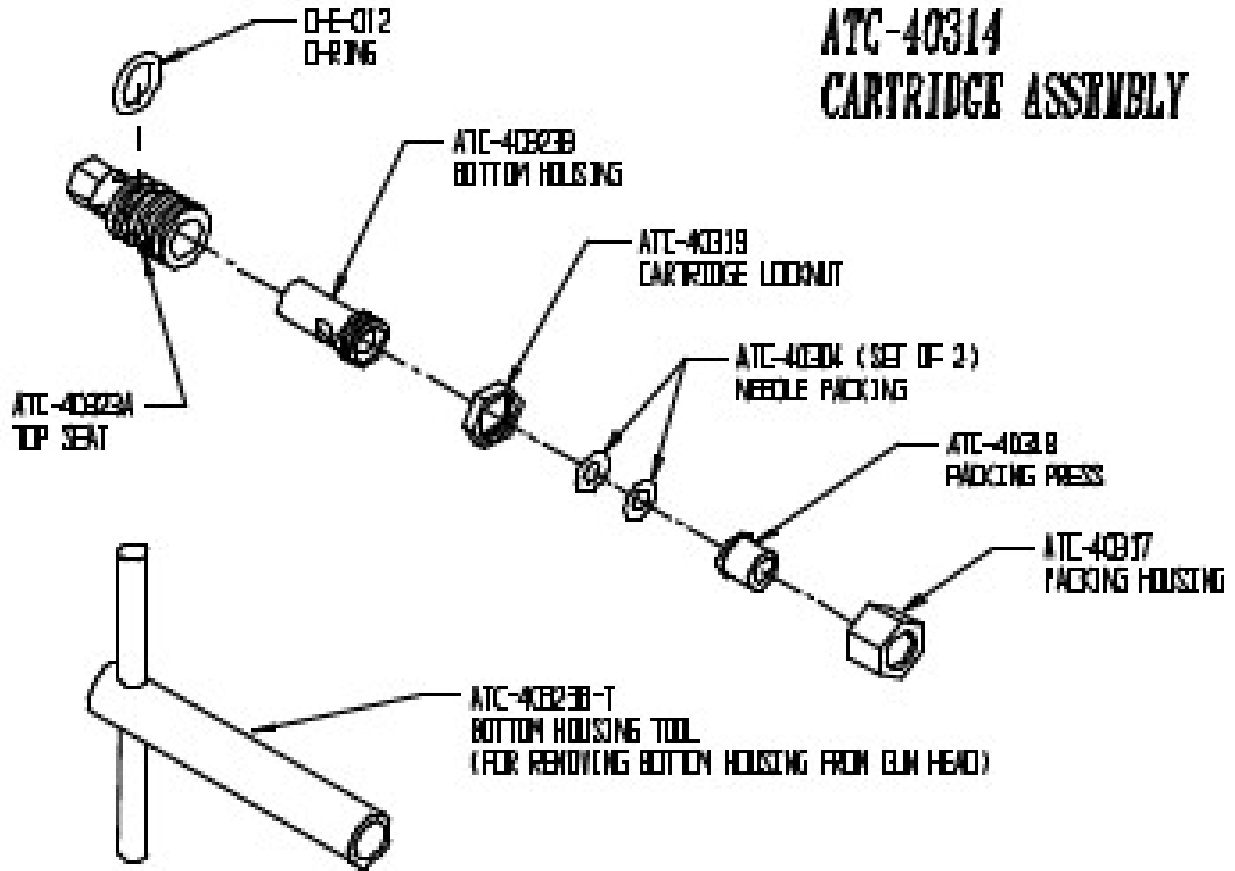
NOTE B:

TRIGGER VALVE O-RINGS ARE MADE OF EPR RUBBER AND CAN ONLY BE LUBRICATED WITH "SUPER O LUBE"

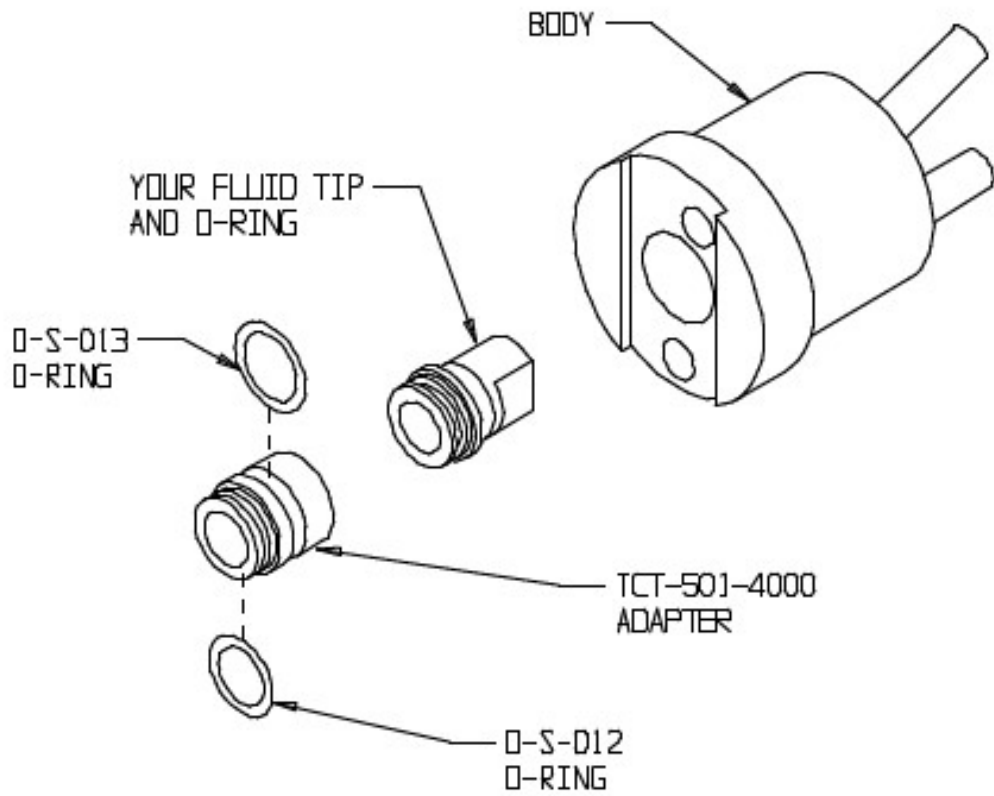
NOTE C:

ATC-4001 HEAD ASSEMBLY INCLUDES ITEM 20. ATC-40206, ITEM 9. O-S-012A, ITEM 64. F-SS-1032-02-SS, AND ITEM 65. ATC-40616

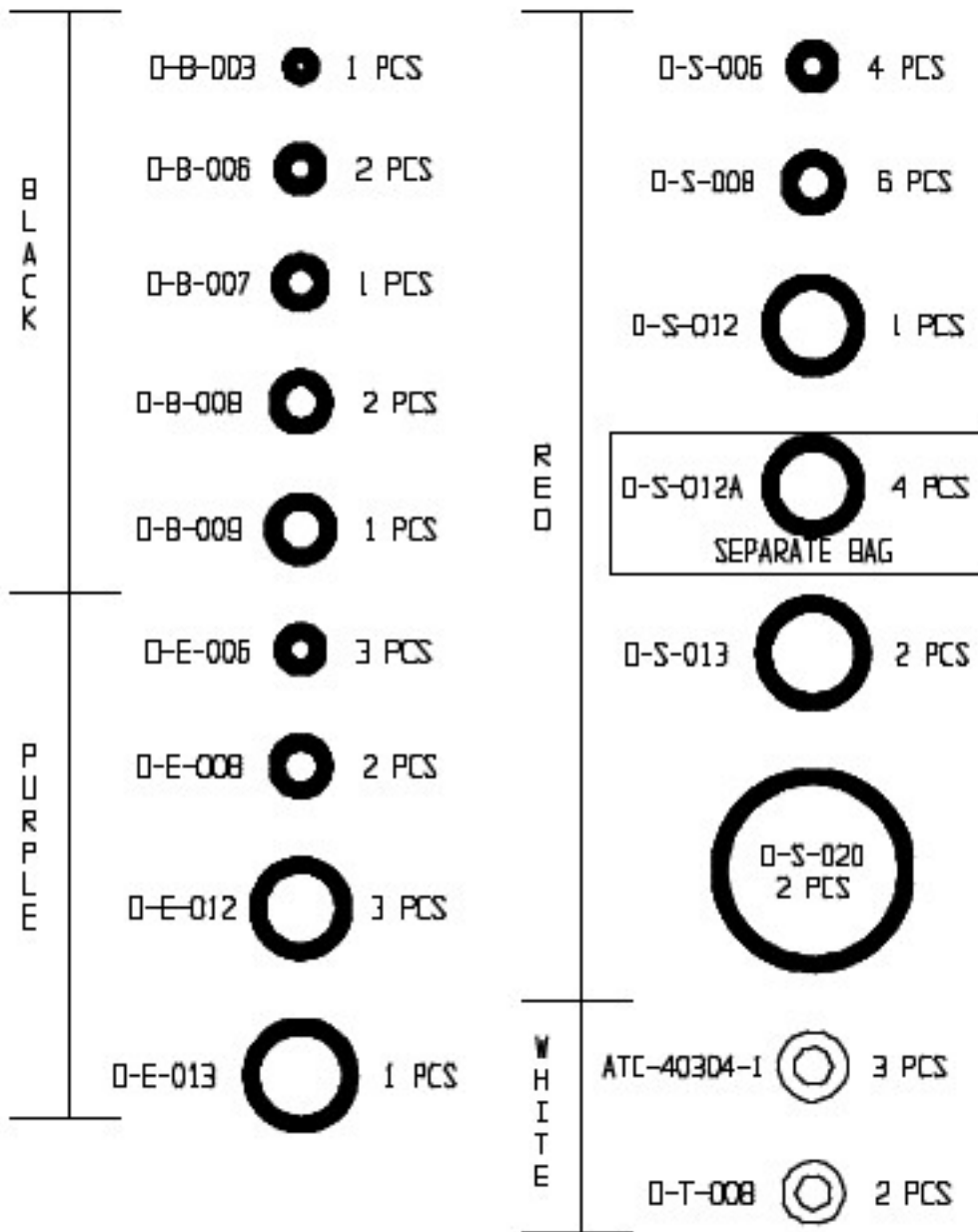
ATC-40314 CARTRIDGE ASSEMBLY



TEST CAT TIP ATC-40402-TT



AT-EXT-SK



NEVER USE PETROLEUM BASED LUBRICANTS ON PURPLE O-RINGS

MAGNUM ONLY RECOMMENDS THE USE OF MAGNUM-LUBE ON O-RINGS



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Official Distributor of MVP Range in the United Kingdom and Ireland

Unit 22a, Navigation Drive, Hurst Business Park,
Brierley Hill, West Midlands, DY5 1UT, UK.

phone: +44 (0)1384 486222
email: info@mvpeurope.co.uk
website: www.mvpeurope.co.uk