External Mix Talon Gun

Operations Manual

This manual is applicable to the following models:

- TLN2-XC-200
- TLN2-XC-200S
- TLN2-XG-200
- TLN2-XG-200S
- TLN2-XG-300
- TLN2-XG-300S





CORPORATE HEADQUARTERS 2030 Falling Waters Rd, Suite 350, Knoxville, TN 37922 · USA · Tel: (865) 686-5670

DISTRIBUTION AND PURCHASING 642 Barbrow Ln, Knoxville, TN 37932 · USA · Tel: (865) 684-4416

TECHNOLOGY CENTER AND MANUFACTURING

1862 Ives Ave, Kent, WA 98032 · USA · Tel (253) 854-2660 · Fax (253) 854-1666

E-mail: info@mvpind.com

For a list of international distributors, visit our website at : www.mvpind.com/mvp-international

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



△ Table of Contents

S	ection	Page
•	Table of Contents	3
•	Safety & Warning Information	4
•	Introduction	15
•	Disassembling Gun	16
•	Selecting a Chopper	20
•	Adjusting Spray Fan	21
•	Troubleshooting	21
•	Parts Drawings	24



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 https://www.osha.gov/about.html.

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.







FLAMMABLE



GROUNDING



EXPLOSIVE



DANGER



ER 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). 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	Known (Possible) Health Effect
	(Possible Target)	
Epoxy resins	Skin, lungs, eyes	Contact and allergic dermatitis,
гроху тезініз	oran, range, eyee	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
Aramid fibers	Okiii (iuligs)	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)	Okin (langs)	
Hardeners and curing agents		
Composite Component	Organ System Target	Known (Possible) Health Effect
	(Possible Target)	
Diaminodiphenylsulfone	N/A	No known effects with workplace
Diaminodiphenyisunone	14/74	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
Weta-prientylenediamine (Wi DA)	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.

- The presence of HHC solvents.
- Aluminum or Galvanized Parts.
- Equipment capable of withstanding pressure.
- 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 catalytic nature.
- 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 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:

- 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 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 (106 ohms) or less.

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

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

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



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.

During Disassembly

As you disassemble the gun, lay out the components on a clean surface in the correct order and direction to aid in reassembly. Refer to a current parts drawing for your model to ensure you have the correct part numbers if replacement parts are needed.

Requirements

You will need the following tools:

- $\frac{7}{16}$ " wrench
- 11/₁₆" wrench
- Hex wrench/Allen key set

- 8" adjustable wrench
- Flathead screwdriver
- Scribe set

You will need appropriate cleaning materials, including solvent, clean shop towels or rags, a small brush, and empty containers into which you can flush the gun. You will also need the appropriate seal kit for your gun to replace seals during reassembly. Refer to the parts drawing for your gun to obtain the correct part numbers for the O-rings and seals you need.

Gun Assemblies

This manual covers the following assemblies:

External Mix Talon Guns		
Part Number	Description	
TLN2-XC-200	Talon External Mix Chop Gun with FIT Chop Configuration - No Signal	
TLN2-XC-200S	Talon External Mix Chop Gun with FIT Chop Configuration – with Signal	
TLN2-XG-200	Talon External Mix Gelcoat Gun with FIT Gelcoat Configuration - No Signal	
TLN2-XG-200S	Talon External Mix Gelcoat Gun with FIT Gelcoat Configuration – with Signal	
TLN2-XG-300	Talon External Mix Gelcoat Gun with Airless Configuration - No Signal	
TLN2-XG-300S	Talon External Mix Gelcoat Gun with Airless Configuration – with Signal	





Disassembling Gun



WARNING

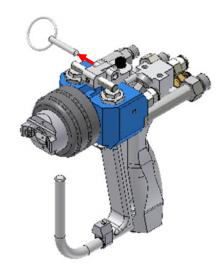
Always remove fluid and air pressure before disconnecting the gun or working on the unit.

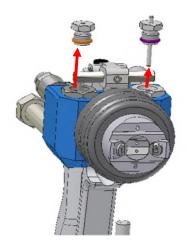
1. Remove the quick pin from the top of the trigger arm assembly and push the trigger assembly forward.

Remove Rod Seal

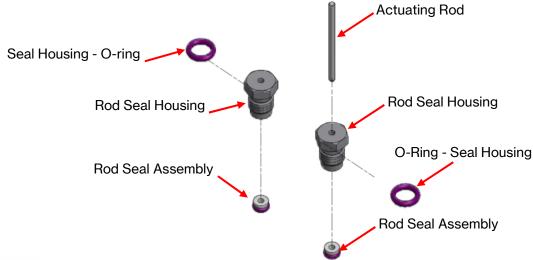
2. Use a $\frac{7}{16}$ " wrench to remove the rod seal housing(s).

Note The actuating rod will come up with the housing.





3. Remove rod seal assemblies and housing O-rings.

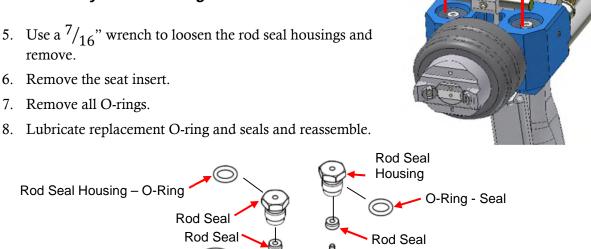


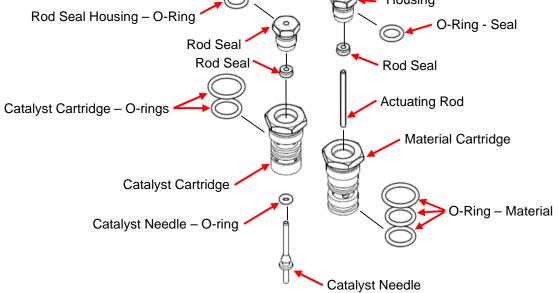


Remove Cartridge

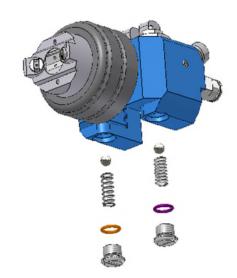
4. Use an $^{11}/_{16}$ " wrench to remove cartridge housings.

Catalyst needle will come up with the Note catalyst side cartridge.





- 9. Loosen the plugs at the bottom of the gun head and remove the spring and ball.
- 10. Clean and inspect the spring and ball and replace as needed.
- 11. Replace the O-ring on the plug body.
- 12. Reinstall the ball, spring, and plug.





Cartridge Assemblies

The following assemblies allow for quick rebuild of guns because they include everything except the ball and spring:

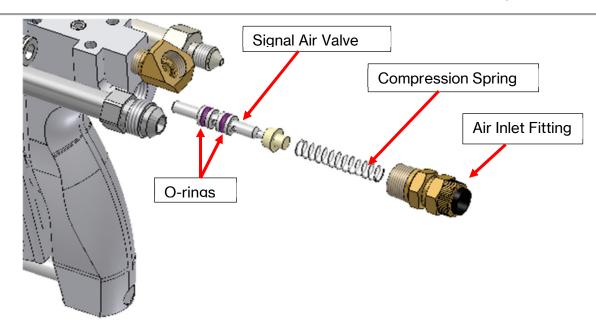
TLN-X-CTR-M (Resin/Gel Cartridge) includes:		
Part Number	Description	Quantity
O-E-011	O-ring	1
O-E-013	O-ring	2
O-E-015	O-ring	1
TLN-2016	Actuation Rod	1
TLN-2021	Rod Seal Housing	1
TLN-2028-01	Material Cartridge	1
TLN-2029	Rod Seal Assembly	1

TLN2-X-CTR-C (Catalyst Cartridge) includes:		
Part Number	Description	Quantity
O-A-007	O-ring	1
O-S-006	O-ring	1
O-S-011	O-ring	1
O-S-013	O-ring	2
O-S-015	O-ring	1
TLN2-2021	Rod Seal Housing	1
TLN2-2029	Rod Seal Assembly	1
TLN2-2048	Seat Insert	1
TLN2-2049	Needle Spring	1
TLN2-2082	Catalyst Needle	1
TLN2-2084	Catalyst Cartridge	1

Rebuild Handle Air Valve

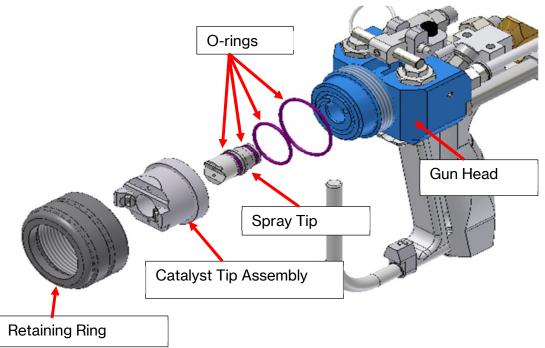
- 13. Remove the air inlet fitting from the back of the gun handle.
- 14. Remove the compression spring and signal air valve from the handle.
- 15. Replace the O-rings on the air valve.





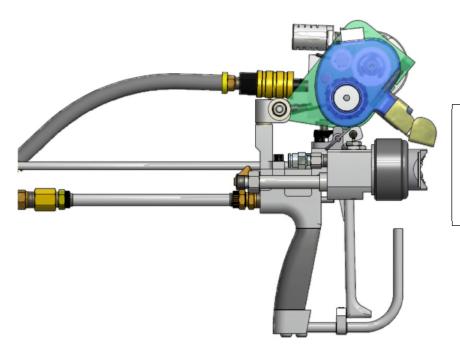
Rebuild Front of Gun

- 16. Brush solvent on the front of the catalyst tip and spray tip.
- 17. Unscrew the retaining ring from the front of the gun head.
- 18. Remove the catalyst tip from the front of the gun head.
- 19. Push the spray tip free of the catalyst tip (if it comes out with the catalyst tip).
- 20. Clean both tips.
- 21. Clean the front of the gun head.
- 22. Replace all O-rings and reassemble.

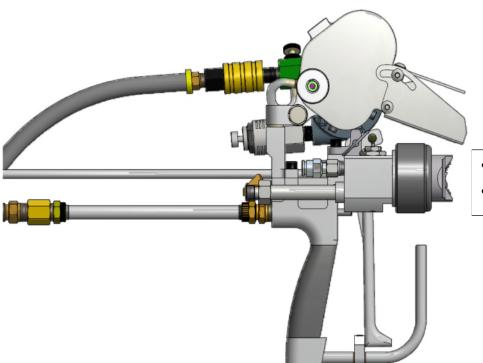




▲ Selecting a Chopper



- RC-1000-TLN-XF
- RC-2000-TLN-XF
- HTC-1000-TLN-XF
- HTC-2000-TLN-XF

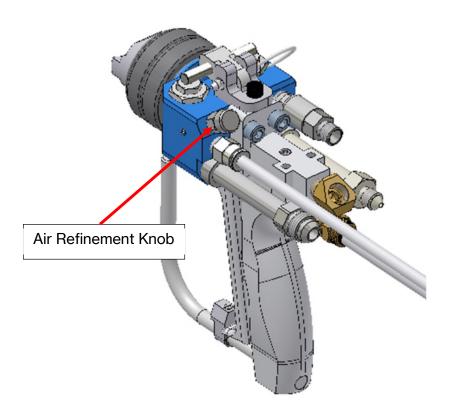


- VRC-1000-TLN-X
- VHTC-1000-TLN-X



Adjusting Spray Fan

Follow your system manual's guidance for performing a proper spray test and troubleshooting the spray pattern. To make minor adjustments to the spray pattern, turn the air refinement knob on the back of the gun head.



Troubleshooting

Catalyst Problems		
Symptom	Possible Cause	Remedy
Catalyst leaking around	Rod seal housing loose	Tighten rod seal housing
catalyst needle	Damaged rod seal assembly	Replace rod seal assembly
Catalyst fleedie	Damaged catalyst needle	Replace catalyst needle
Catalyst leaking around	Rod seal housing loose	Tighten rod seal housing
rod seal housing	Damaged O-ring on rod seal housing	Replace O-ring
Catalyat looking around	Catalyst cartridge loose	Tighten cartridge into gun head
Catalyst leaking around catalyst cartridge	Damaged O-ring on catalyst cartridge	Replace O-ring and check gun head for damage
Catalyst leaking around plug on bottom of gun head	Damaged O-ring on plug body	Replace O-ring and check gun head for damage



Catalyst Problems		
Symptom	Possible Cause	Remedy
Catalyat la aking around	Catalyst fitting loose	Tighten fitting into gun head
Catalyst leaking around catalyst fitting	Damaged O-ring on catalyst	Replace O-ring and check gun head for
Catalyst litting	fitting	damage
	Damaged O-ring inside seat insert	Replace O-ring
	Damaged or dirty ball in catalyst cartridge	Clean or replace catalyst ball as necessary
Catalyst leaking from front of gun block	Damaged compression spring	Replace compression spring in catalyst cartridge
	Damaged O-ring on seat insert	Replace O-ring and check gun head for damage
	Catalyst needle holding ball	Check that catalyst needle is moving freely
	open	and not being pressed down by handle
		Make sure atomizing air pressure is set
	No atomizing air pressure	properly
Catalyst leaking into		Make sure atomizing air hose is not blocked or kinked
atomizing air tube	Blocked catalyst tip	Clean or replace catalyst tip as needed
atomizing all tube	Blocked gun block porting	Check catalyst porting in gun block for
	Blocked guil block porting	blockage and clear
	Leaking or stuck catalyst needle	Follow solutions above for catalyst leaking
		from front of gun block
	Stuck or damaged catalyst needle	Check and repair needle as necessary
No catalyst from gun		Check catalyst ball and spring for damaged or
l re caranyer n em gan		blockage; clean or replace as needed
	Blocked catalyst tip	Clean or replace tip
	Gun head porting blocked	Check and clean gun head porting
		Check hose and fitting for blockage or
	Blocked catalyst hose or fitting	damage; clean hose/fitting or replace as needed
	Damaged or blocked catalyst check valve	Repair or replace check valve
No catalyst from gun	Catalyst pump not working correctly	Repair catalyst pump as needed
	Catalyst pump disconnected from slave drive	Connect catalyst pump to slave drive and set
		to proper percentage
		Connect salve drive to pump
	Catalyst ball valve or relief valve	Check ball valve and relief valve on catalyst
	open on catalyst manifold	manifold and close or repair as needed



Resin Problems		
Symptom	Possible Cause	Remedy
Desir leaking around	Rod seal housing loose	Tighten rod seal housing
Resin leaking around actuating rod	Damaged rod seal assembly	Replace rod seal assembly
actuating rou	Damaged actuating rod	Replace actuating rod
Resin leaking around rod	Rod seal housing loose	Tighten rod seal housing
seal housing	Damaged O-ring on rod seal housing	Replace O-ring
Resin leaking around	Material cartridge loose	Tighten cartridge into gun head
material cartridge	Damaged O-ring on material	Replace O-ring and check gun head for
material cartriage	cartridge	damage
Resin leaking around plug on bottom of gun head	Damaged O-ring on plug body	Replace O-ring and check gun head for damage
Pooin looking around	Resin fitting loose	Tighten fitting into gun head
Resin leaking around resin fitting	Damaged O-ring on resin fitting	Replace O-ring and check gun head for damage
	Damaged O-ring on spray tip	Replace O-ring and check gun head for damage
	Damaged or dirty ball in material cartridge	Clean or replace material ball as necessary
Resin leaking from spray	Damaged or dirty material seat	Remove material cartridge and check/clean
tip/front of gun block	in material cartridge	ball seat
up/none of gun block	Actuating rod holding ball open	Check that actuating rod is moving freely and not being pressed down by handle
	Stuck or damaged actuating rod	Check and repair actuating rod
	Damaged compression spring	Check and replace compression spring in material cartridge
	Blocked spray tip	Clean or replace tip
	Actuating rod not opening	Check actuating rod for damage and check
	material ball	material cartridge and ball
	Gun head porting blocked	Check and clean gun head porting
No resin from gun	Blocked resin hose or fitting	Make sure resin hose and fitting not blocked or
		damaged; clear or replace as needed
	Resin pump not working correctly	Repair resin pump as needed
	Resin return ball valve open	Close ball valve located below resin filter

General Problems		
Symptom	Possible Cause	Remedy
	Damaged O-ring on valve	Replace O-ring
Air leaking around air	Damaged O-ring on valve	Check inside handle for scratches or damage
valve	Damaged or missing	Replace compression spring as needed
	compression spring	Theplace compression spring as needed



General Problems		
Symptom	Possible Cause	Remedy
Air leaking from catalyst	Rod seal assembly leaking	Replace rod seal assembly
needle	Damaged catalyst needle	Replace catalyst needle
Resin, catalyst, or air	Damaged O-ring between	Replace O-rings
leaking around catalyst	catalyst tip and gun head	Check for damage on catalyst tip and gun
tip/retaining ring	January of the arra garrineau	head
	Air control valve not set	Slowly open air control valve to develop proper
		spray fan
	Blockage of air	Check air hose for kinks or leaks and replace
Air assist not working		as needed
All assist not working		Check elbow fitting on gun head for blockage
		and clear as needed
		Check catalyst tip for blockage or damage and
		clear or replace as needed

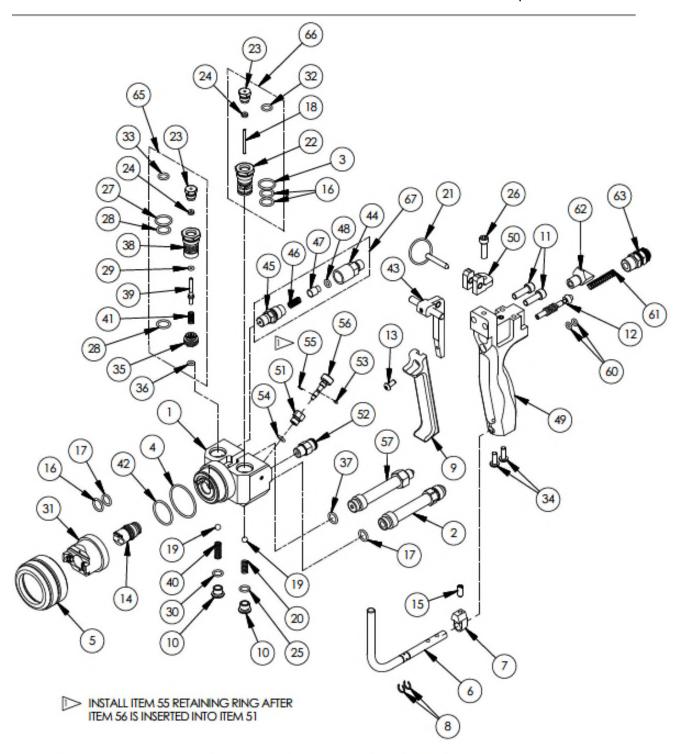


△ Parts Drawings

The following parts breakdown drawings are included for your reference:

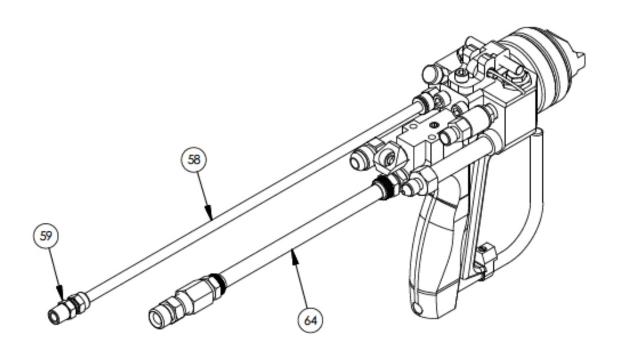
Parts Drawings		
Part Number	Description	
TLN2-XC-200	Talon External Mix FIT Chopper Assembly	
TLN2-XC-200S	Talon External Mix FIT Chopper Assy – with Signal	
TLN2-XG-200	Talon External Mix FIT Gel Gun Assembly	
TLN2-XG-200S	Talon External Mix FIT Gel Gun Assy – with Signal	
TLN2-XG-300	Talon External Mix Gel Gun Assembly	
TLN2-XG-300S	Talon External Mix Gel Gun Assembly – with Signal	
TLN-X-CTR-C	Catalyst Cartridge Assembly	
TLN-X-CTR-M	Material Cartridge Assembly	
TLN-1097-01	Talon Gun Check Valve	
TLN2-X-SK	External Mix Seal Kit	
TLN-X-TLN2-CK	Talon to Talon 2 Conversion Kit	





TALON EXTERNAL MIX CHOP GUN		TLN2-XC-200		
REV: A 08/27/2018	SHEET 1 /3	1/17/2018		





TALON EXTERNAL MIX CHOP GUN		TLN2-XC-200
REV: A 08/27/2018	SHEET 2 / 3	1/17/2018



ı			Parts	s List
1	TEM	PART NUMBER	QTY	DESCRIPTION
	1	TLN-3001-01	1	GUN HEAD ASSEMBLY
		TLN-1005-F	1	AT RESIN ATTING
4	3	O-E-015	1	O-RING
:	4	O-E-027	1	O-RING
	5	TLN-2013	1	RETAINING RING
Γ	6	TLN-2009	1	TRIGGER GUARD
r	7	TLN-2036	1	TRIGGER STOP
r	8	TLN-1031	2	RETAINING RING
r	9	TLN-2065	1	TRIGGER
r		TLN-2006	2	PLUG
r	11	F-CS-04F-12	2	CAP SCREW
h	12	TLN-2015-01-SIG	1	AIR VALVE - SIGNAL
h		F-BHCS-832-06	1	BUTTON HEAD CAP SCREW
1	14	TLN-XXXX	i	FIT TIP
H		LWG-6527	i	SPRING PLUNGER
٠	16	O-E-013	3	O-RING
-		O-E-012	2	O-RING
` -	18	TLN-2016	1	ACTUATING ROD
H		TLN-2043	2	CERAMIC BALL
ŀ		TLN-2044	1	SPRING
ŀ	_	F-QP-03-12	-	QUICK RELEASE PIN
H	21	TIN 2000 01	1	MATERIAL CARTRIDGE
ŀ	22	TLN-2028-01	1	
ŀ		TLN-2021	2	ROD SEAL HOUSING
L		TLN-2029	2	ROD SEAL ASSEMBLY
L	25	O-E-3-903	1	O-RING
L	26	F-CS-1224-12	1	CAP SCREW
L		O-S-015	1	O-RING
L		O-S-013	2	O-RING
L		O-S-006	1	O-RING
L	30	O-S-3-903	1	O-RING
L		TLN-40402-CP-F-INT	1	CATALYST TIP
٤_	32	O-E-011	1	O-RING
E		O-S-011	1	O-RING
	34	F-BHCS-1032-08	2	BUTTON HEAD CAP SCREW
Г		TLN-2048	1	SEAT INSERT
ıГ	36	O-A-007	1	O-RING
٠	37	O-S-012	1	O-RING
r	38	TLN-2084	1	CATALYST CARTRIDGE
1		TLN-2082	1	CATALYST NEEDLE
r		TLN-2047	1	BALL SPRING
1	41	TLN-2049	i	NEEDLE SPRING
ŀ		O-E-021	i	O-RING
1		TLN-2120-01	1	TRIGGER ARM ASSEMBLY
1		TLN-1097-02	1	HOUSING
L		TLN-1097-02	1	SPRING HOUSING
Г	45			

		Po	rts List	
	ITEM	PART NUMBER	QTY	DESCRIPTION
	47	CV-1097-03	1	CHECK VALVE PISTON
t	48	O-S-009A	1	O-RING
	49	TLN-3003-01	1	HANDLE
	50	TLN-2108-RC-01	1	TRIGGER MOUNT
	51	TLN-2053	1	AIR KNOB HOUSING
	52	07223	1	MALE CONNECTOR
t	53	O-E-003	1	O-RING
c	54	O-E-009	1	O-RING
	55	MEC-RR-101	1	RETAINING RING
	56	TLN-2054	1	AIR KNOB
	57	TLN-1006	1	CATALYST FITTING
	58	MS-2052-1	1	POLY TUBE
	59	7701-6-14	1	STRAIGHT POLY FITTING
c	60	O-E-008	2	O-RING
	61	04070-1	1	COMPRESSION SPRING
	62	PF-SE-02-05T-45	1	ELBOW
	63	7701-3-35	1	MALE CONNECTOR
	64	6506-1-0.5	1	POLY AIR WHIP

REPAIR KIT

* TLN2-X-SK (ASTERISKS DENOTE PARTS IN KIT)

AVAILABLE SEPARATELY

43A TLN-2120B-01 TRIGGER ARM - MODIFIED MATERIAL SIDE
65 TLN-X-CTR-C CATALYST CARTRIDGE ASSEMBLY
67 TLN-1097-01 CHECK VALVE

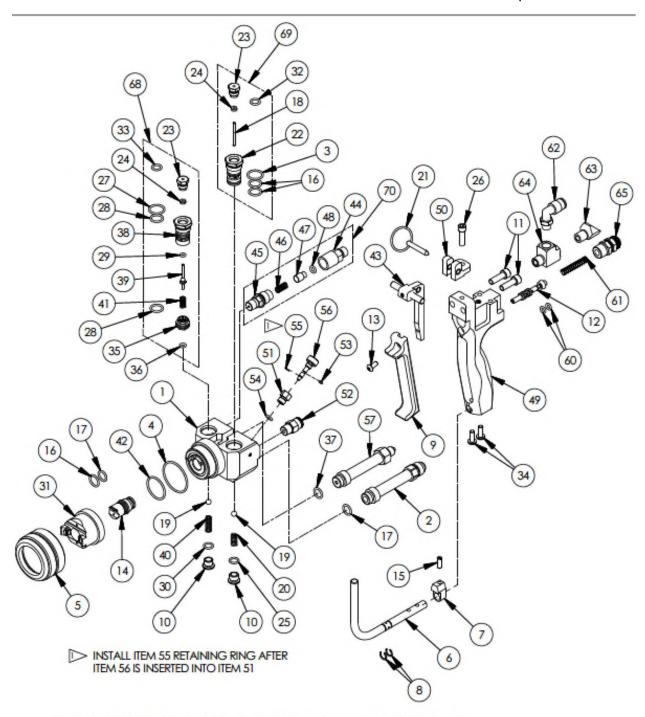
MAGNUM VENUS PRODUCTS

TALON EXTERNAL MIX CHOP GUN

REV: A 08/27/2018

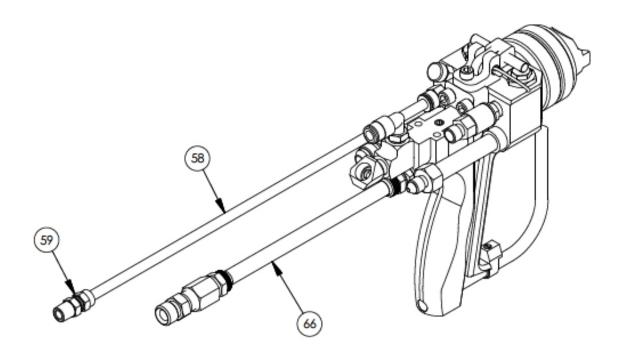
SHEET 3 / 3 1/17/2018





TALON EXTERNAL MIX FIT CHOP GUN WITH SIGNAL		TLN2-XC-200S
REV: A 08/27/2018	SHEET 1 / 3	1/17/2018





TALON EXTERNAL MIX FIT CHOP GUN WITH SIGNAL	TLN2-XC-200S
TALON EXTERNAL MIX FIT CHOP GUN WITH SIGNAL	TLN2-XC-200\$

REV: A 08/27/2018 SHEET 2 / 3 1/17/2018



			Part	s List
Ī	ITEM		OTY	
-	1	TLN-3001-01	1	GUN HEAD ASSEMBLY
[2	TLN-1005-F	1	AT RESIN ATTING
=[3	O-E-015	1	O-RING
•[O-E-027	1	O-RING
		TLN-2013	1	RETAINING RING
ſ	6	TLN-2009	1	TRIGGER GUARD
Ì	7	TLN-2036	1	TRIGGER STOP
Ì	8	TLN-1031	2	RETAINING RING
Ì	9	TLN-2065	1	TRIGGER
Ì	10	TLN-2006	2	PLUG
Ì	11	F-CS-04F-12	2	CAP SCREW
Ì	12	TLN-2015-01-SIG	1	AIR VALVE - SIGNAL
Ì		F-BHCS-832-06	1	BUTTON HEAD CAP SCREW
Ì	14	TLN-XXXX	1	FIT TIP
Ì	15	LWG-6527	1	SPRING PLUNGER
ŀ		O-E-013	3	O-RING
ł		O-E-012	2	O-RING
Ì	18	TLN-2016	1	ACTUATING ROD
Ì		TLN-2043	2	CERAMIC BALL
Ì		TLN-2044	1	SPRING
Ì		F-QP-03-12	1	QUICK RELEASE PIN
ł		TLN-2028-01	i	MATERIAL CARTRIDGE
ł		TLN-2021	2	ROD SEAL HOUSING
ł	24	TLN-2029	2	ROD SEAL ASSEMBLY
ŀ		O-E-3-903	1	O-RING
ł		F-CS-1224-12	i	CAP SCREW
ł	27	O-S-015	1	O-RING
ł	28	O-S-013	2	O-RING
ł		O-S-006	1	O-RING
		O-S-3-903	i	O-RING
1		TLN-40402-CP-F-INT	1	CATALYST TIP
ŀ		O-E-011	i	O-RING
1		O-S-011	1	O-RING
ŀ		F-BHCS-1032-08	2	BUTTON HEAD CAP SCREW
ł		TLN-2048	1	SEAT INSERT
ŀ		O-A-007	1	O-RING
	37	O-S-012	1	O-RING
ŀ		TLN-2084	1	CATALYST CARTRIDGE
ŀ			1	
ŀ	39	TLN-2082	1	CATALYST NEEDLE
1		TLN-2047	1	BALL SPRING
1		TLN-2049	1	NEEDLE SPRING
		O-E-021	1	O-RING
1		TLN-2120-01	1	TRIGGER ARM ASSEMBLY
-		TLN-1097-02	1	HOUSING
-		TLN-1097-04	1	SPRING HOUSING
1	46	CV-1097-05	1	SPRING

			Parts	List
ITE	M	PART NUMBER	QTY	DESCRIPTION
4	7 C	V-1097-03	1	CHECK VALVE PISTON
4	BC)-S-009A	1	O-RING
4	7 T	LN-3003-01	1	HANDLE
-5/	T	LN-2108-RC-01	1	TRIGGER MOUNT
- 5	I T	LN-2053		AIR KNOB HOUSING
- 5/	2 0	7223	1	MALE CONNECTOR
£ 5	3 (D-E-003	1	O-RING
5	4 ()-E-009	1	O-RING
- 5	5 N	AEC-RR-101	1	RETAINING RING
- 5	6 T	LN-2054	1	AIR KNOB
5	7 T	LN-1006	1	CATALYST FITTING
5	BA	/S-2052-1	1	POLY TUBE
5	7	701-6-14	1	STRAIGHT POLY FITTING
k 6	0 0)-E-008	2	O-RING
6	1 0	4070-1	1	COMPRESSION SPRING
6	2 N	NPH-2539	1	MALE ELBOW
6	3 P	F-SE-02-05T-45	1	ELBOW
6	4 P	F-ST-02-BR	1	TEE FITTING
6	5 7	701-3-35	1	MALE CONNECTOR
6	6 6	506-1-0.5	1	POLY AIR WHIP

REPAIR KIT

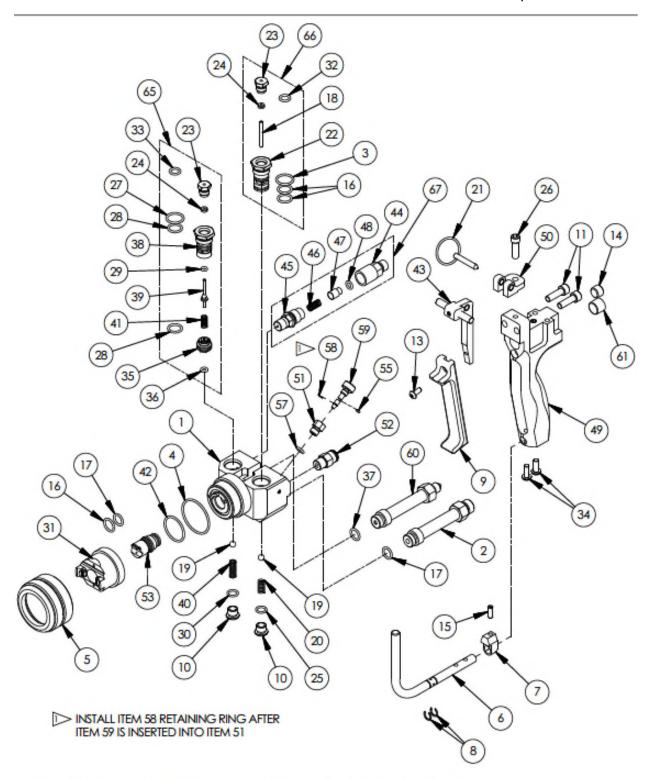
* TLN2-X-SK (ASTERISKS DENOTE PARTS IN KIT)

AVAILABLE SEPARATELY

43A	TLN-2120B-01	TRIGGER ARM - MODIFIED MATERIAL SIDE
68	TLN-X-CTR-C	CATALYST CARTRIDGE ASSEMBLY
69	TLN-X-CTR-M	MATERIAL CARTRIDGE ASSEMBLY
70	TLN-1097-01	CHECK VALVE

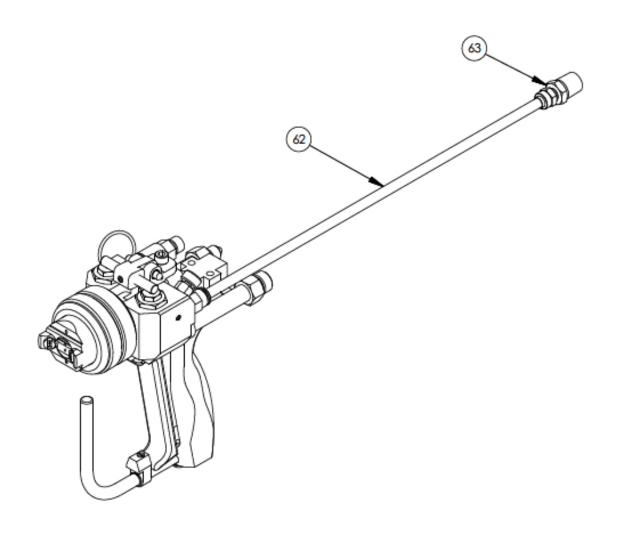
TALON EXTERNAL MIX FIT CHOP GUN WITH SIGNAL	TLN2-XC-200S	
REV: A 08/27/2018	SHEET 3 / 3	1/17/2018





TALON EXTERNAL MIX FIT GEL GUN		TLN2-XG-200
REV: A 08/27/2018	SHEET 1 / 3	1/17/2018





TALON EXTERNAL MIX FIT GEL GUN		TLN2-XG-200
REV: A 08/27/2018	SHEET 2 / 3	1/17/2018



Γ	Parts List						
h	TEM	The state of the s					
ľ	1	TLN-3001-01	1	GUN HEAD ASSEMBLY			
h		TLN-1005	1	RESIN FITTING			
e l	3	O-E-015	1	O-RING			
ď	4	O-E-027	1	O-RING			
ŀ		TLN-2013	i	RETAINING RING			
ŀ		TLN-2009	1	TRIGGER GUARD			
ŀ		TLN-2036	i	TRIGGER STOP			
ŀ	8	TLN-1031	2	RETAINING RING			
ŀ		TLN-2065	1	TRIGGER			
ŀ	10	TLN-2006	2	PLUG			
ŀ	11	F-CS-04F-12	2	CAP SCREW			
ŀ	13	F-BHCS-832-06	1	BUTTON HEAD CAP SCREW			
ŀ		PF-AP-02	1	PIPE PLUG			
ŀ		LWG-6527	1	SPRING PLUNGER			
ŀ	16	O-E-013	3	O-RING			
1	17	O-E-013	2	O-RING			
1		TLN-2016	_	ACTUATING ROD			
ŀ			2				
ŀ		TLN-2043	_	CERAMIC BALL			
ŀ	20	TLN-2044	1	SPRING			
ŀ	21	F-QP-03-12	1	QUICK RELEASE PIN			
L	22	TLN-2028-01	1	MATERIAL CARTRIDGE			
L		TLN-2021	2	ROD SEAL HOUSING			
١.		TLN-2029	2	ROD SEAL ASSEMBLY			
١.		O-E-3-903	1	O-RING			
L	26	F-CS-1224-12	1	CAP SCREW			
۱	27	O-S-015	1	O-RING			
١	28	O-S-013	2	O-RING			
۱	29	O-S-006	1	O-RING			
٤	30	O-S-3-903	1	O-RING			
ı	31	TLN-40402-CP-F-INT	1	CATALYST TIP			
٢	32	O-E-011	1	O-RING			
۲	33	O-S-011	1	O-RING			
Г	34	F-BHCS-1032-08	2	BUTTON HEAD CAP SCREW			
	35	TLN-2048	1	SEAT INSERT			
ŧГ	36	O-A-007	1	O-RING			
¢	37	O-S-012	1	O-RING			
Ì	38	TLN-2084	1	CATALYST CARTRIDGE			
t	39	TLN-2082	1	CATALYST NEEDLE			
t	40	TLN-2047	1	BALL SPRING			
t	41	TLN-2049	1	NEEDLE SPRING			
ŀ	42	O-E-021	1	O-RING			
1		TLN-2120-01	1	TRIGGER ARM ASSEMBLY			
1		TLN-1097-02	1	HOUSING			
ŀ		TLN-1097-04	1	SPRING HOUSING			
ŀ	46	CV-1097-05	1	SPRING			
ŀ	47	CV-1097-03	i	CHECK VALVE PISTON			
ŀ	48	O-S-009A	1	O-RING			
٠.		TLN-3003-01	1	HANDLE			

	Parts List					
	ITEM	PART NUMBER	QTY	DESCRIPTION		
	50	TLN-2108-01	1	TRIGGER MOUNT		
	51	TLN-2053	1	AIR KNOB HOUSING		
	52	07223	1	MALE CONNECTOR		
	53	TLN-XXXXX	1	FIT TIP		
*	55	O-E-003	1	O-RING		
*	57	O-E-009	1	O-RING		
	58	MEC-RR-101	1	RETAINING RING		
	59	TLN-2054	1	AIR KNOB		
	60	TLN-1006	1	CATALYST FITTING		
	61	PF-AP-04	1	ALLEN PLUG		
	62	MS-2052-1	1	POLY TUBE		
	63	00383	1	MALE CONNECTOR		

REPAIR KIT

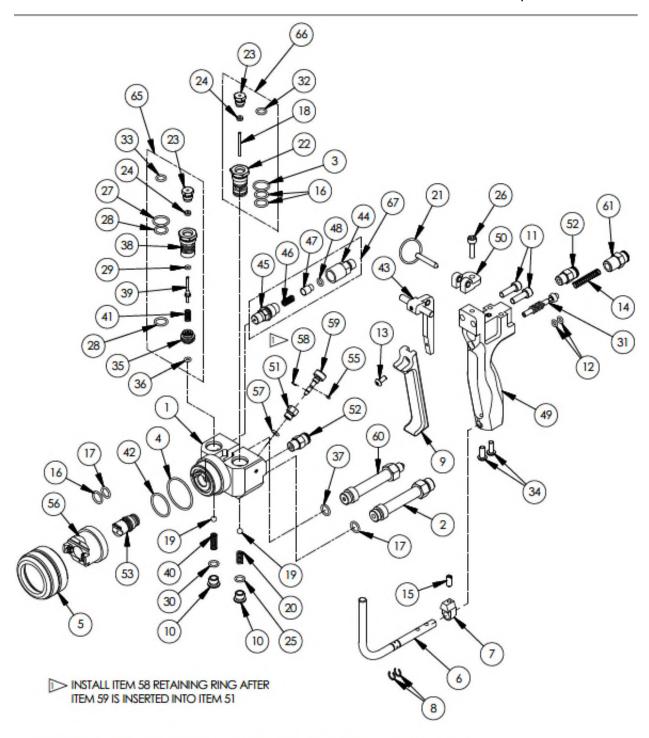
* TLN2-X-SK. (ASTERISKS DENOTE PARTS IN KIT)

AVAILABLE SEPARATELY

43A 65	TLN-2120B-01 TLN-X-CTR-C	TRIGGER ARM - MODIFIED MATERIAL SIDE CATALYST CARTRIDGE ASSEMBLY
66	TLN-X-CTR-M	MATERIAL CARTRIDGE ASSEMBLY
67	TLN-1097-01	CHECK VALVE

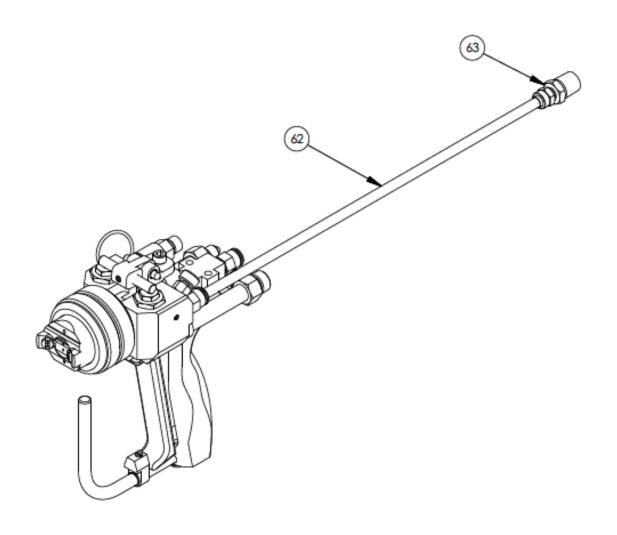
TALON EXTERNAL MIX RT GEL GUN		TLN2-XG-200
REV: A 08/27/2018	SHEET 3 / 3	1/17/2018





TALON EXTERNAL MIX FIT GEL GUN WITH SIGNAL	TLN2-XG-200S		
REV: A 08/27/2018	SHEET 1 / 3	1/17/2018	





TALON EXTERNAL MIX FIT GEL GUN WITH SIGNAL	TLN2-XG-200S	
REV: A 08/27/2018	SHEET 2 / 3	1/17/2018



Γ		I Todaya Cabi	Parts	s List
1	TEM		QTY	DESCRIPTION
	1	TLN-3001-01	1	GUN HEAD ASSEMBLY
	2	TLN-1005	1	RESIN FITTING
k	3	O-E-015	1	O-RING
k	4	O-E-027	1	O-RING
Ī	5	TLN-2013	1	RETAINING RING
r	6	TLN-2009	1	TRIGGER GUARD
h	7	TLN-2036	1	TRIGGER STOP
h	8	TLN-1031	2	RETAINING RING
t	9	TLN-2065	1	TRIGGER
h	10	TLN-2006	2	PLUG
h	11	F-CS-04F-12	2	CAP SCREW
ĸ ŀ	12	O-E-008	2	O-RING
1	13	F-BHCS-832-06	Τī	BUTTON HEAD CAP SCREW
H		04070-1	Τi	COMPRESSION SPRING
H	15	LWG-6527	ti	SPRING PLUNGER
ĸ ŀ	16	O-E-013	3	O-RING
k	17	O-E-012	2	O-RING
-		TLN-2016	1	ACTUATING ROD
H		TLN-2043	2	CERAMIC BALL
H		TLN-2044	1	SPRING
H	21	F-QP-03-12	1	QUICK RELEASE PIN
H	22		1	
H	23	TLN-2028-01 TLN-2021	2	MATERIAL CARTRIDGE
ŀ	24	TLN-2029	2	ROD SEAL HOUSING ROD SEAL ASSEMBLY
-			_	
١,	25	O-E-3-903	1	O-RING
ŀ	26	F-CS-1224-12	1	CAP SCREW
٤_	27	O-S-015	1	O-RING
4	28	O-S-013	2	O-RING
٤_	29	O-S-006	1	O-RING
k	30	O-S-3-903	1	O-RING
L	31	TLN-2015-01-SIG	1	AIR VALVE - SIGNAL
٤	32	O-E-011	1	O-RING
¢.	33	O-S-011	1	O-RING
L		F-BHCS-1032-08	2	BUTTON HEAD CAP SCREW
		TLN-2048	1	SEAT INSERT
¢.	36	O-A-007	1	O-RING
٩	37	O-S-012	1	O-RING
	38	TLN-2084	1	CATALYST CARTRIDGE
	39	TLN-2082	1	CATALYST NEEDLE
	40	TLN-2047	1	BALL SPRING
	41	TLN-2049	1	NEEDLE SPRING
٠ŀ	42	O-E-021	1	O-RING
	43	TLN-2120-01	1	TRIGGER ARM ASSEMBLY
	44	TLN-1097-02	1	HOUSING
r	45	TLN-1097-04	1	SPRING HOUSING
r	46	CV-1097-05	1	SPRING
1	47	CV-1097-03	i	CHECK VALVE PISTON
ĸ l		O-S-009A	i	O-RING

	Parts List							
ITEM	PART NUMBER	QTY	DESCRIPTION					
49	TLN-3003-01	1	HANDLE					
50	TLN-2108-01	1	TRIGGER MOUNT					
51	TLN-2053	1	AIR KNOB HOUSING					
52	07223	2	MALE CONNECTOR					
53	TLN-XXXX	1	FIT TIP					
55	O-E-003	1	O-RING					
56	TLN-40402-CP-F-INT	1	CATALYST TIP					
57	O-E-009	1	O-RING					
58	MEC-RR-101	1	RETAINING RING					
59	TLN-2054	1	AIR KNOB					
60	TLN-1006	1	CATALYST FITTING					
61	TLN-2035	1	AIR INLET FITTING					
62	MS-2052-1	1	POLY TUBE					
63	00383	1	MALE CONNECTOR					

REPAIR KIT

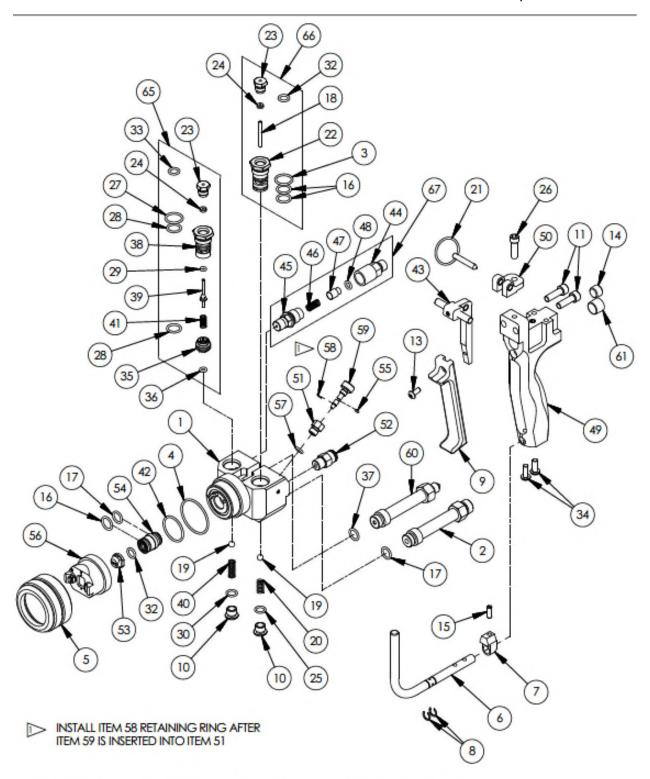
* TLN2-X-SK (ASTERISKS DENOTE PARTS IN KIT)

AVAILABLE SEPARATELY

43A	TLN-2120B-01	TRIGGER ARM - MODIFIED MATERIAL SIDE
65	TLN-X-CTR-C	CATALYST CARTRIDGE ASSEMBLY
66	TLN-X-CTR-M	MATERIAL CARTRIDGE ASSEMBLY
67	TLN-1097-01	CHECK VALVE

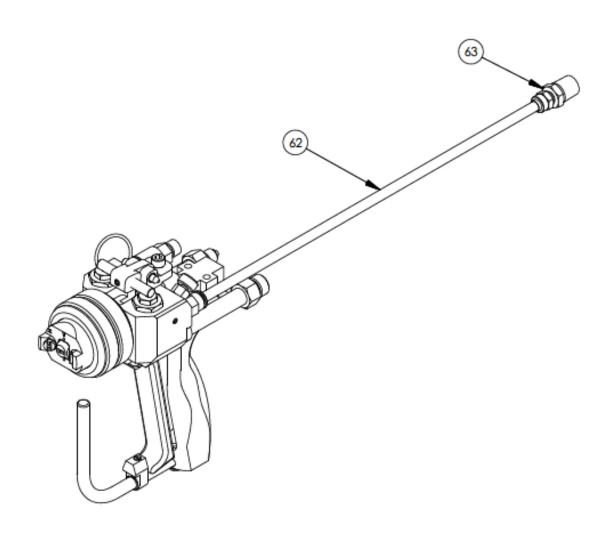
TALON EXTERNAL MIX FIT GEL GUN WITH SIGNAL	TLN2-XG-200S	
REV: A 08/27/2018	SHEET 3 / 3	1/17/2018





TALON EXTERNAL MIX GEL GUN		TLN2-XG-300
REV: A 08/28/2018	SHEET 1 / 3	1/17/2018





TALON EXTERNAL MIX GEL GUN		TLN2-XG-300
REV: A 08/28/2018	SHEET 2 / 3	1/17/2018



Ī	Parts List				
ŀ	ITEM	PART NUMBER	TOTY		
ŀ	-	TLN-3001-01	1	GUN HEAD ASSEMBLY	
ŀ	2	TLN-1005	1	RESIN FITTING	
*	3	O-E-015	1	O-RING	
*	4		-		
•		O-E-027 TLN-2013	1	O-RING	
ŀ			1	RETAINING RING	
ŀ	_	TLN-2009	1	TRIGGER GUARD	
ŀ	7	TLN-2036	1	TRIGGER STOP	
ŀ	8	TLN-1031	2	RETAINING RING	
ŀ		TLN-2065	1	TRIGGER	
ļ	10	TLN-2006	2	PLUG	
ļ	11	F-CS-04F-12	2	CAP SCREW	
ı	13	F-BHCS-832-06	1	BUTTON HEAD CAP SCREW	
l		PF-AP-02	1	PIPE PLUG	
l	15	LWG-6527	1	SPRING PLUNGER	
٤	16	O-E-013	3	O-RING	
¢	17	O-E-012	2	O-RING	
1	18	TLN-2016	1	ACTUATING ROD	
Ī	19	TLN-2043	2	CERAMIC BALL	
Ī	20	TLN-2044	1	SPRING	
Ì	21	F-QP-03-12	1	QUICK RELEASE PIN	
Ì	22	TLN-2028-01	1	MATERIAL CARTRIDGE	
Ì		TLN-2021	2	ROD SEAL HOUSING	
ď		TLN-2029	2	ROD SEAL ASSEMBLY	
ď	25	O-E-3-903	1	O-RING	
Ì	26	F-CS-1224-12	1	CAP SCREW	
ŀ	27	O-S-015	i	O-RING	
ŀ	28	O S-013	2	O-RING	
ŀ	29	O-S-006	Ī	O-RING	
	30	O.S-3-903	ti	O-RING	
	32	O-E-011	2	O-RING	
	33	O-S-011	1	O-RING	
1		F-BHCS-1032-08	2	BUTTON HEAD CAP SCREW	
ŀ		TLN-2048	1	SEAT INSERT	
ŀ		O-A-007	1	O-RING	
	_	O-S-012	_		
1	37	TLN-2084	1	O-RING	
ŀ			1	CATALYST CARTRIDGE	
ŀ	39	TLN-2082	1	CATALYST NEEDLE	
ŀ	40	TLN-2047	1	BALL SPRING	
ŀ	41	TLN-2049	1	NEEDLE SPRING	
١	42	O-E-021	1	O-RING	
ļ	43	TLN-2120-01	1	TRIGGER ARM ASSEMBLY	
ļ	44	TLN-1097-02	1	HOUSING	
ļ	_	TLN-1097-04	1	SPRING HOUSING	
l	46	CV-1097-05	1	SPRING	
	47	CV-1097-03	1	CHECK VALVE PISTON	
ŧ	48	O-S-009A	1	O-RING	
1	49	TLN-3003-01	1	HANDLE	
ı	50	TLN-2108-01	1	TRIGGER MOUNT	

	Parts List					
t	ITEM	PART NUMBER	QTY	DESCRIPTION		
	51	TLN-2053	1	AIR KNOB HOUSING		
	52	07223	1	MALE CONNECTOR		
	53	TLN-XXX-M	1	SPRAY TIP		
	54	TLN-2055	1	RESIN PORT		
*	55	O-E-003	1	O-RING		
	56	TLN-30402-CP-INT	1	CATALYST TIP		
*	57	O-E-009	1	O-RING		
	58	MEC-RR-101	1	RETAINING RING		
ſ	59	TLN-2054	1	AIR KNOB		
ſ	60	TLN-1006	1	CATALYST FITTING		
	61	PF-AP-04	1	ALLEN PLUG		
Ī	62	MS-2052-1	1	POLY TUBE		
Ī	63	00383	1	MALE CONNECTOR		

REPAIR KIT

* TLN2-X-SK (ASTERISKS DENOTE PARTS IN KIT)

AVAILABLE SEPARATELY

43A 65	TLN-2120B-01 TLN-X-CTR-C	TRIGGER ARM - MODIFIED MATERIAL SIDE CATALYST CARTRIDGE ASSEMBLY
66	TLN-X-CTR-M	MATERIAL CARTRIDGE ASSEMBLY
67	TLN-1097-01	CHECK VALVE

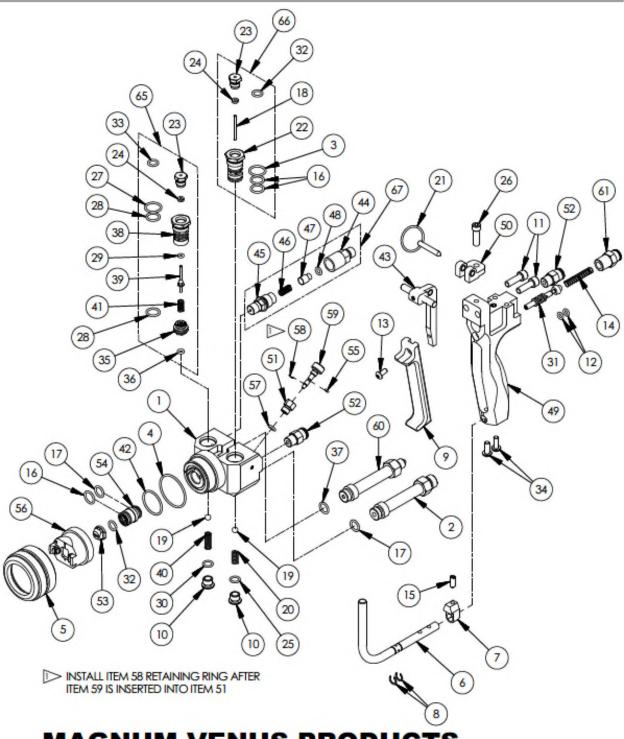
MAGNUM VENUS PRODUCTS

TALON EXTERNAL MIX GEL GUN

TLN2-XG-300



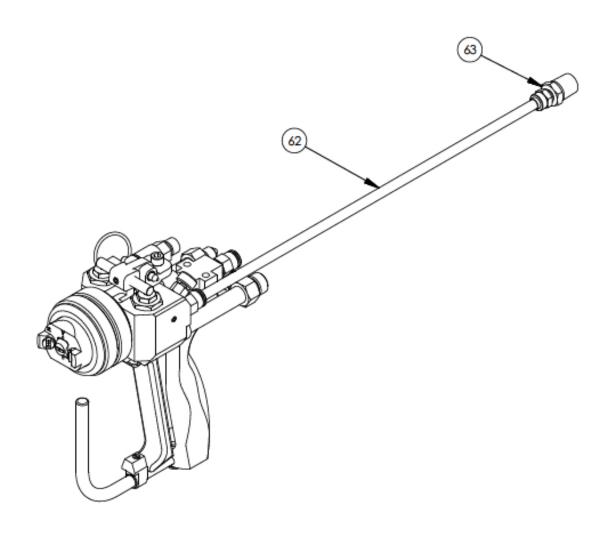




TALON EXTERNAL MIX GELCOAT GUN WITH SIGNAL TLN2-XG-300S

REV: A 08/28/2018 SHEET 1 / 3 1/17/2018





TALON EXTERNAL MIX GELCOAT GUN WITH SIGNAL		TLN2-XG-300S
REV: A 08/28/2018	SHEET 2 / 3	1/17/2018



	Parts List				
ITEM	PART NUMBER	IQIY	DESCRIPTION		
1	TLN-3001-01	1	GUN HEAD ASSEMBLY		
2	TLN-1005	1	RESIN FITTING		
3	O-E-015	1	O-RING		
4	O-E-027	1	O-RING		
5	TLN-2013	1	RETAINING RING		
6	TLN-2009	1	TRIGGER GUARD		
7	TLN-2036	ti	TRIGGER STOP		
8	TLN-1031	2	RETAINING RING		
9	TLN-2065	1	TRIGGER		
10	TLN-2006	2	PLUG		
	F-CS-04F-12	2			
11			CAP SCREW		
12	O-E-008	2	O-RING		
13	F-BHCS-832-06	1	BUTTON HEAD CAP SCREW		
14	04070-1	1	COMPRESSION SPRING		
15	LWG-6527	1	SPRING PLUNGER		
16	O-E-013	3	O-RING		
17	O-E-012	2	O-RING		
18	TLN-2016	1	ACTUATING ROD		
19	TLN-2043	2	CERAMIC BALL		
20	TLN-2044	1	SPRING		
21	F-QP-03-12	1	QUICK RELEASE PIN		
22	TLN-2028-01	1	MATERIAL CARTRIDGE		
23	TLN-2021	2	ROD SEAL HOUSING		
24	TLN-2029	2	ROD SEAL ASSEMBLY		
25	O-E-3-903	1	O-RING		
26	F-CS-1224-12	1	CAP SCREW		
27	O-S-015	1	O-RING		
28	O-S-013	2	O-RING		
29	O-S-006	1	O-RING		
30	O-S-3-903	1	O-RING		
31	TLN-2015-01-SIG	1	AIR VALVE - SIGNAL		
32	O-E-011	2	O-RING		
33	O-S-011	1	O-RING		
34	F-BHCS-1032-08	2	BUTTON HEAD CAP SCREW		
35	TLN-2048	1	SEAT INSERT		
36	O-A-007	1	O-RING		
37	O-S-012	ti	O-RING		
38	TLN-2084	+	CATALYST CARTRIDGE		
	TLN-2082	1			
39		_	CATALYST NEEDLE		
40	TLN-2047	1	BALL SPRING		
41	TLN-2049	1	NEEDLE SPRING		
42	O-E-021	1	O-RING		
43	TLN-2120-01	1	TRIGGER ARM ASSEMBLY		
44	TLN-1097-02	1	HOUSING		
45	TLN-1097-04	1	SPRING HOUSING		
46	CV-1097-05	1	SPRING		
47	CV-1097-03	1	CHECK VALVE PISTON		
48	O-S-009A	i	O-RING		
49	TLN-3003-01	1	HANDLE		
50	TLN-2108-01	1	TRIGGER MOUNT		
-10	TLN-2053	1 1	INDOCK MOUNT		

Γ	Parts List				
	ITEM	PART NUMBER	QTY	DESCRIPTION	
	52	07223	2	MALE CONNECTOR	
	53	TLN-XXX-M	1	SPRAY TIP	
	54	TLN-2055	1	RESIN PORT	
ķ.	55	O-E-003	1	O-RING	
	56	TLN-30402-CP-INT	1	CATALYST TIP	
*	57	O-E-009	1	O-RING	
	58	MEC-RR-101	1	RETAINING RING	
	59	TLN-2054	1	AIR KNOB	
	60	TLN-1006	1	CATALYST FITTING	
Ī	61	TLN-2035	1	AIR INLET FITTING	
	62	MS-2052-1	1	POLY TUBE	
ı	63	00383	1	MALE CONNECTOR	

REPAIR KIT

* TLN2-X-SK (ASTERISKS DENOTE PARTS IN KIT)

AVAILABLE SEPARATELY

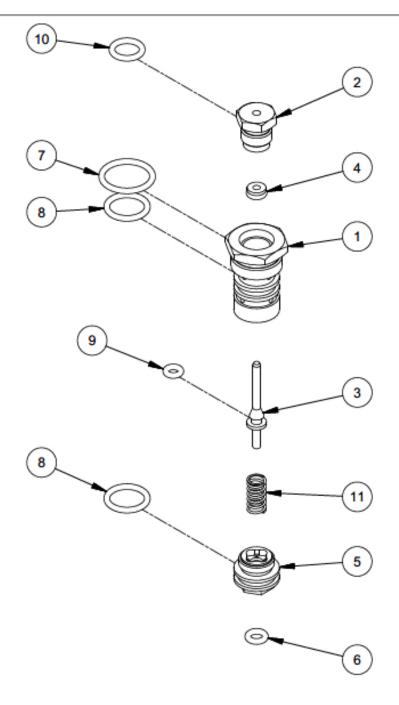
43A	TLN-2120B-01	TRIGGER ARM - MODIFIED MATERIAL SIDE
65	TLN-X-CTR-C	CATALYST CARTRIDGE ASSEMBLY
66	TLN-X-CTR-M	MATERIAL CARTRIDGE ASSEMBLY
67	TLN-1097-01	CHECK VALVE

MAGNUM VENUS PRODUCTS

 TALON EXTERNAL MIX GELCOAT GUN WITH SIGNAL
 TLN2-XG-300S

 REV: A 08/28/2018
 SHEET 3 / 3
 1/17/2018





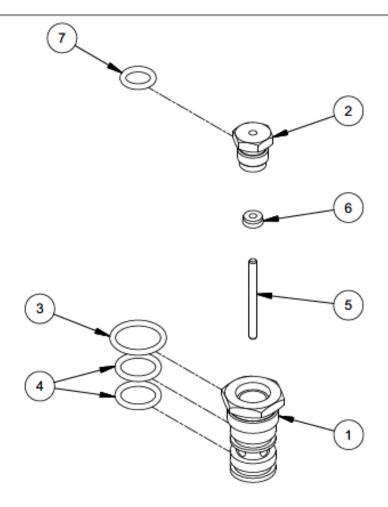
CATALYST CARTRIDGE ASSEMBLY		TLN-X-CTR-C
REV:	SHEET 1 / 2	3/6/2014



Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	TLN-2084	1	CATALYST CARTRIDGE
2	TLN-2021	1	ROD SEAL HOUSING
3	TLN-2082	1	CATALYST NEEDLE
4	TLN-2029	1	ROD SEAL ASSEMBLY
5	TLN-2048	1	SEAT INSERT
6	O-A-007	1	O-RING
7	O-S-015	1	O-RING
8	O-S-013	2	O-RING
9	O-S-006	1	O-RING
10	O-S-011	1	O-RING
11	TLN-2049	1	NEEDLE SPRING

CATALYST CARTRIDGE ASSEMBLY		TLN-X-CTR-C
REV:	SHEET 2 / 2	3/6/2014





MATERIAL CARTRIDGE ASSEMBLY		TLN-X-CTR-M
REV:	SHEET 1 / 2	3/6/2014

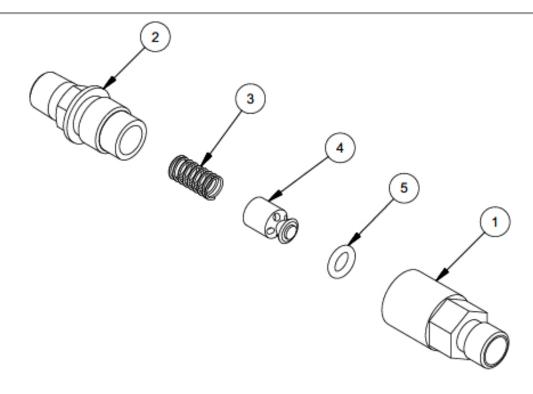


Parts List			
ITEM	M PART NUMBER QTY DESCRIPTION		DESCRIPTION
1	TLN-2028-01	1	MATERIAL CARTRIDGE
2	TLN-2021	1	ROD SEAL HOUSING
3	O-E-015	1	O-RING
4	O-E-013	2	O-RING
5	TLN-2016	1	ACTUATING ROD
6	TLN-2029	1	ROD SEAL ASSEMBLY
7	O-E-011	1	O-RING

MATERIAL CARTRIDGE ASSEMBLY	TLN-X-CTR-M







TALON GUN CHECK VALVE		TLN-1097-01
REV:	SHEET 1 / 2	12/19/2014



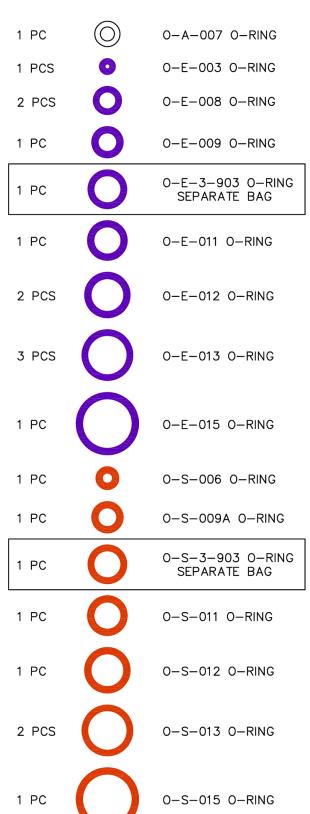
Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	TLN-1097-02	1	HOUSING
2	TLN-1097-04	1	SPRING HOUSING
3	CV-1097-05	1	SPRING
4	CV-1097-03	1	CHECK VALVE PISTON
5	O-S-009A	1	O-RING

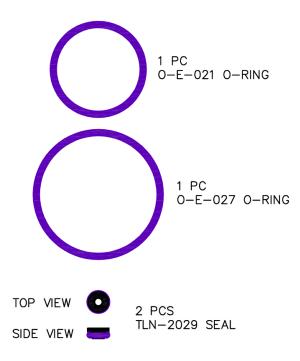
TALON GUN CHECK VALVE	TLN-1097-01
-----------------------	-------------

REV: SHEET 2 / 2 12/19/2014

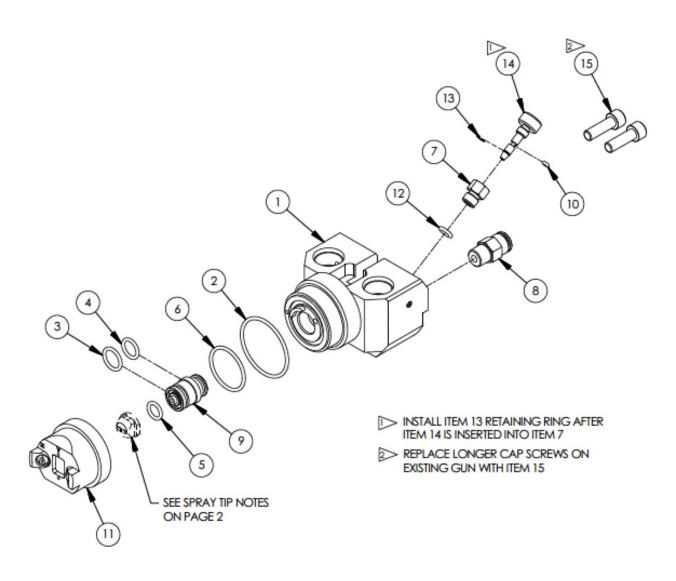


TLN2-X-SK SEAL KIT - TALON EXTERNAL MIX GUNS









TLN TO TLN2 CONVERSION KIT		TLN-X-TLN2-CK
REV: A 01/03/2018	SHEET 1 / 2	1/17/2018



Parts List			
ITEM	PART NUMBER	QTY	DESCRIPTION
1	TLN-3001-01	1	GUN HEAD ASSEMBLY
2	O-E-027	1	O-RING
3	O-E-013	1	O-RING
4	O-E-012	1	O-RING
5	O-E-011	1	O-RING
6	O-E-021	1	O-RING
7	TLN-2053	1	AIR KNOB HOUSING
8	07223	1	MALE CONNECTOR
9	TLN-2055	1	RESIN PORT
10	O-E-003		O-RING
- 11	TLN-30402-CP	1	CATALYST TIP
12	O-E-009	1	O-RING
13	MEC-RR-101	1	RETAINING RING
14	TLN-2054	1	AIR KNOB
15	F-CS-04F-12	2	CAP SCREW

TLN-XXX-M SPRAY TIP IS NOT INCLUDED IN CONVERSION KIT AVAILABLE OPTIONS FOR SPRAY TIP:

TLN-418-M	TLN-419-M	TLN-421-M
TLN-423-M	TLN-515-M	TLN-517-M
TLN-518-M	TLN-519-M	TLN-521-M
TLN-523-M	TLN-526-M	TLN-531-M
TLN-536-M	TLN-518-M	TLN-619-M
TLN-621-M	TLN-623-M	TLN-626-M
TI N-431-M		

MAGNUM VENUS PRODUCTS

TLN TO TLN2 CONVERSION KIT TLN-X-TLN2-CK

REV: A 01/03/2018 SHEET 2 / 2 1/17/2018





CORPORATE HEADQUARTERS 2030 Falling Waters Rd, Suite 350, Knoxville, TN 37922 · USA · Tel: (865) 686-5670

> DISTRIBUTION AND PURCHASING 642 Barbrow Ln, Knoxville, TN 37932 · USA · Tel: (865) 684-4416

TECHNOLOGY CENTER AND MANUFACTURING
1862 Ives Ave, Kent, WA 98032 · USA · Tel (253) 854-2660 · Fax (253) 854-1666

E-mail: info@mvpind.com

For a list of international distributors, visit our website at : www.mvpind.com/mvp-international

