

# GRIFFIN



## ***SONIC CONVERSION*** ***INSTALLATION INSTRUCTIONS***

Serial Number: \_\_\_\_\_  
Date Purchased: \_\_\_\_\_  
Dealer: \_\_\_\_\_

**ACE**  
Sports

# PRIOR TO INSTALLATION

Make sure that your Griffin is unloaded and the air supply is disconnected. Due to the various air-input locations on markers, this kit does not include the connection from the regulator to the ASA adapter. Your stock ACI Griffin bottomline hose will work with this kit.

## INSTALLATION INSTRUCTIONS

- 1) Remove all bottom line connections from trigger frame. Using the 5/32" Allen wrench remove the two screws that connect the trigger frame to the main body. Gently separate the trigger frame from main body.
- 2) Remove the striker plug and power spring, exposing the striker buffer. Remove the striker buffer (the buffer will be reinstalled with the Sonic Conversion.)
- 3) Remove the connecting pin and release the bolt from the striker. Remove the striker from the receiver. The bolt should remain in the receiver to connect to the Sonic Conversion striker.
- 4) Remove the front reservoir plug, valve spring and cup seal. You will use the stock valve spring with the Sonic Conversion.
- 5) Carefully remove the valve body from the front of the Griffin.



Figure 1

- 6) Install the new valve body and cup seal. Install the Sonic Conversion High Volume Cell (HVC) using the stock valve spring. Turn the HVC unit clockwise. The Sonic Conversion HVC has a universal positioning chamber allowing the air feed elbow to line up correctly.

- 7) Install the Sonic Conversion striker into the lower chamber of the main body. Line up the large groove of the Sonic Conversion striker and the connecting pin hole. (See Figure 2). Insert the connecting pin that connects the bolt to the striker. Slide the bolt and connecting pin back and forth insuring proper installation. The striker and bolt should move together freely in the main body. Once completed reinstall the stock striker buffer into the lower chamber of the main body.



Figure 2

- 8) Remove the stock bolt plug and install the Sonic Conversion rear bolt plug. The stock bolt plug will not allow proper installation of Sonic Conversion housing unit.
- 9) Install the Sonic Conversion piston into the lower chamber of the main body. Apply Air Lube to the piston o-ring prior to installation.

- 10) Install the Sonic Conversion housing unit into the lower chamber of the main body. (See Figure 3)



Figure 3

- 11) Install the Sonic Conversion trigger frame to the main body. Use a 5/32" Allen wrench and install the front frame screw and lock washer. Before installing the rear frame screw and washer, ensure the connecting hole of the Sonic Conversion housing unit will align with the rear frame-screw hole. Install the rear frame screw and washer locking the rear housing unit in place.

- 12) Install the air line provided into the elbows of the HVC and rear housing unit.

- 13) Plug the jack from the housing unit into the trigger frame. (See Figure 4)



Figure 4

- 14) Install the desired air supply system to the bottom regulator.

## INSTALLATION OF THE AIR SOURCE

The Sonic Conversion will operate with CO<sub>2</sub>, regulated compressed air or nitrogen. The bottom regulator controls the system pressure and velocity. Turn the adjustment screw on the front of the regulator counter clockwise before installing the air source. Once you install the air source, turn the regulator screw clockwise setting the operating pressure to approximately 500 psi.

## TIMING THE SONIC CONVERSION

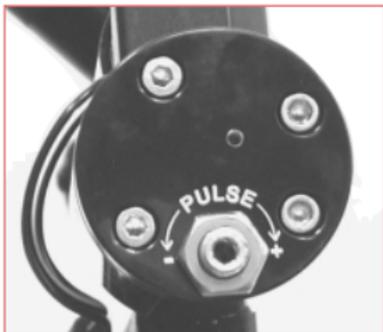


Figure 5

Loosen the lock nut on the pulse adjustment screw on the backing plate of the Sonic Conversion housing unit. **WITHOUT PAINT** inside your marker point the marker in a safe direction, away from your self, and pull the trigger. Insert the 1/8" hex wrench into the pulse adjustment screw. Turn the screw clockwise one full turn and remove allen wrench. Fir the marker and repeat until the marker rapid fires. **(Do not attempt to use the marker in the rapid fire mode!)** Turn the wrench a 1/4 turn counter clockwise and tighten the locking nut on the pulse adjustment screw. You should hear a single crisp firing with each trigger pull. (See Figure 5)

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## SETTING THE VELOCITY

Insert the 3/16" wrench into the regulator adjustment screw. Turn clockwise to increase velocity and counter clockwise to decrease velocity. Check your velocity on a reliable chronograph every quarter turn until you reach the desired velocity. (See Figure 6)



Figure 6

## TRIGGER PULL ADJUSTMENT



Figure 7

The Sonic Conversion trigger pull screw is preset from the factory. Adjustment of this screw may cause the marker to stop working. (See Figure 7)

## BATTERY REPLACEMENT

The Sonic Conversion is powered by a 9 volt alkaline battery. The 9 volt battery is located inside the trigger frame and can be replaced by remove the four grip screws and removing the grip. When installing the new battery, install the battery terminal end first. ACI recommends changing the battery every 6-8 months or as needed. (See Figure 8)



Figure 8

## THE SPORT OF PAINTBALL

The sport of paintball involves games in which opposing players attempt to shoot each other with dye-filled projectiles called “paintballs”. Paintball is a serious sport which makes rigorous demands on players’ physical and mental abilities. When played in a safe manner, it can provide a rewarding experience not available in any other sport.

There are hazards in any active sport such as paintball. Serious injuries are rare, but do occur.

A 0.68 caliber paintball moving at high velocity adds a special dimension of hazard to paintball sports. At a minimum, it can cause pain and a bruise. It can break the skin and cause bleeding. If it strikes an unprotected eye, ear, or mouth it can cause blindness, deafness, or even death. If it strikes a young child in a sensitive body area, it can cause crippling or death. This is why proper safety gear for players, isolation of spectators from the play area, and proper handling of paintball guns are absolutely essential.

The importance of always following safety rules, and the risk of serious injury, require an adult level of maturity when using paintball guns. This is why sale of the Griffin is limited to individuals 18 years of age and older.

### ACI Sports

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*For Technical Assistance please call our tech line at*

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