## CONTENTS

| 1. Rules for Safe Marker Handling       | 1  |
| 2. Introduction and Specifications     | 1  |
| 3. Battery Replacement and Life Indicator | 1  |
| 4. Compressed Air/Nitrogen Supply      | 2  |
| 5. Basic Operation                     | 2  |
| 6. Firing the TM-15                    | 4  |
| 7. Break Beam Eyes Operation           | 4  |
| 8. Unloading the TM-15                 | 5  |
| 9. Regulator and Velocity Adjustments  | 5  |
| 10. Programming                        | 6  |
| 11. Setting Functions                  | 7  |
| 12. Trigger Adjustments                | 9  |
| 13. General Maintenance                | 10 |
| 14. Assembly/Disassembly Instructions  | 11 |
| 15. Storage and Transportation         | 14 |
| 16. Troubleshooting Guide              | 14 |
| 17. Diagrams and Parts List            | 17 |

**WARRANTY** *(Inside Back Cover)*
1. Rules for Safe Marker Handling

IMPORTANT: Never carry your TM-15 uncased when not on a playing field. The non-playing public and law enforcement personnel may not be able to distinguish between a paintball marker and firearm. For your own safety and to protect the image of the sport, always carry your TM-15 in a suitable marker case or in the box it came in.

- Treat every marker as if it were loaded.
- Never look down the barrel of a paintball marker.
- Keep your finger OFF the trigger until ready to shoot.
- Never point the marker at anything you don’t wish to shoot.
- Keep the marker on “safe” until ready to shoot.
- Keep the barrel blocking device in/on the marker’s barrel when not shooting.
- Always remove paintballs and air source before disassembly.
- After removing air source, point marker in safe direction and discharge until marker is degassed.
- Store the marker unloaded and degassed in a secure place.
- Follow warnings listed on the air source for handling and storage.
- Do not shoot at fragile objects such as windows.
- Every person within range must wear eye, face, and ear protection designed specifically to stop paintballs and meeting ASTM standard F1776.
- Always measure your marker’s velocity before playing paintball and never shoot at velocities in excess of 91.44 meters (300 feet-per-second).

READ OWNERS MANUAL BEFORE USING.

2. Introduction and Specifications

Congratulations on your selection of the TM-15 paintball marker. The TM-15 is made to provide you with many years of reliable performance. We are honored that you have chosen the TM-15 as your marker of choice and hope you enjoy using this high quality product.

The patented Valve design, Slip Stream™ Solenoid, Hall Effect Sensor Trigger, and Four Position Selector Switch set new standards for marker technology. The TM-15 is precision engineered from magnesium alloy, aircraft-grade aluminum, and composite materials. We expect you to play hard and play frequently and the TM-15 was built with this in mind.

The TM-15 operates on low pressure. The main operating pressure is 180–200 PSI. The pressure can be nominally adjusted and monitored visually via the gauge on the bottomline regulator. There is no secondary regulator to worry about.

**TM-15 Specifications**

- **Model:** TM-15
- **Barrel:** 14” Ported Barrel
- **Caliber:** .68
- **Action:** Semi Auto, PSP Burst, and NXL Full Auto
- **Air source:** Compressed Air
- **Battery:** One 9-Volt (Alkaline Only)
- **Cycle Rate:** Up to 20 BPS
- **Shell Material:** Magnesium Alloy
- **Accuracy Range:** 150ft +

 INCLUDED WITH YOUR TM-15

- 14” Barrel (.691 bore)
- Allen Wrenches
- Spare Parts Kit
- Barrel Blocking Device
- One 9-Volt Battery
- Manual
- One BT Rip-Clip™ Adapter & Adapter Screw Kit, for use with the TM Rip-Clip™ only. (TM Rip-Clip™ not included)

3. Battery Replacement and Life Indicator

The TM-15 requires a single 9-volt alkaline battery as the electronic power source. The use of long life batteries is recommended. The battery is installed by removing the magazine and inserting a 9-Volt battery into the magazine.
To remove the magazine, press in the magazine release button, which is located on the right side of the TM-15. While pressing the release button, pull the magazine down and out of the body and then insert a 9-volt battery following the polarity markings on the side of the magazine. (Fig. 1.1)

The TM-15 also has a battery life indicator. When in a firing mode (F1, F2, and F3), if the LED flashes green then the battery is good, if the LED is orange the battery is fairly depleted and you should change batteries soon, or if the LED is red then the battery should be replaced immediately.

Note: Some rechargeable batteries might be too large for the TM-15 magazine battery compartment. If they do not fit, please do not force them into the magazine.

4. Compressed Air/Nitrogen Supply
The TM-15 is designed to work with compressed air/nitrogen only. Do not use CO2, as it will damage your TM-15.

Consult the Dealer where you purchased your TM-15, or a recognized and competent air smith, for instruction in the safe handling of compressed-air cylinders before purchasing or connecting one to your TM-15.

The TM-15 utilizes a fully functional regulator at the bottom of the grip frame that doubles as an ASA (Air Source Adapter) or Receiver for a standard threaded pre-set output compressed air system. It is strongly recommended that a very high-flow “low-pressure” (350–450 psi) fixed-output system is utilized as an air source for your TM-15. Using a “high-pressure” output compressed air tank is acceptable. If you are using an adjustable output regulator system, the output pressure should be between 400–500 psi.

Before pressurizing your TM-15:
- Check to make sure that you and anyone within range are wearing eye protection designed specifically for paintball.
- Double check that all screws are tightened and no parts are loose before installing your tank.
- Ensure you have a barrel plug, barrel cover, or other specifically designed barrel-blocking device in place.
- Make sure there are no paintballs in the marker.
- The Power should be OFF and the Selector switch should be set to the Safety position.

Air can now be applied; the marker will become pressurized.

Notes:
- Remember compressed air or nitrogen systems can be extremely dangerous if misused or improperly handled. Use only cylinders meeting D.O.T. or regionally defined specifications.
- Never disassemble your tank or tank regulator. Only a qualified and trained technician should perform work on your tank and tank regulator.
- Never add any lubricants or greases into the fill adapter on your tank regulator or into the TM-15 regulator.

5. Basic Operation
Safety and safe marker handling are the most important aspects of paintball sports. Please practice each of the following steps with an unloaded marker before attempting to charge your marker with compressed air and paintballs.

- Do not install compressed air or load paintballs into your TM-15 until you feel completely confident with your ability to handle your TM-15 safely.
- Keep your finger out of the trigger guard and away from the trigger; point the muzzle of the marker in a safe direction at all times. Keep the marker turned OFF when not in use. The TM-15 uses a power switch and a selector switch for its safety devices.
- Always keep your TM-15 pointed in a safe direction. Always use a barrel plug or barrel blocking device. Always use paintball specific eye protection meeting or exceeding ASTM standards in any areas where paintball markers may be discharged.
- Remember that the ultimate safety device is you, the operator.

Feed Elbow Installation
Seat the feed elbow onto the narrow section of the top picatinny rail: about 1" forward of the feed hole on the right side of the marker (Fig. 1.2). Then push and hold in the latch button while sliding the feed elbow toward the rear of the marker (Fig. 1.3). Just before the feed elbow covers the feed hole in the right side of the marker, release the latch button and continue sliding the feed elbow until the latch locks into the rail slot. When done correctly, the feed elbow will now be unable to slide forward or backward without holding in the latch button, and the feed hole in the right side shell will not be visible from the sides of the feed elbow.

Barrel Installation
Make sure marker is degassed, hopper removed, no paintballs in the feed elbow or breech, and the TM-15 is turned off.
- While pointing marker in a safe direction, place the threaded end of the barrel into the front opening of the marker body.
- Turn the barrel clockwise until it stops (do not over tighten).
- Install a barrel blocking device. This can be a barrel plug or other such device that prevents the accidental discharge of paintballs.

Switching on your TM-15
**Warning:** Before switching on your TM-15, make sure it is pointed in a safe direction. Always use a barrel plug or barrel blocking device. Remember that the ultimate safety device is you, the operator.

To switch the TM-15 on, set the selector switch to the (S) safety position. The TM-15 will not turn on unless the selector is in the safety position. Locate the power button on the left side of the marker. Push and hold the power button for 2 seconds and the LED light will turn green and then to red. Release the button and the LED will remain red.

The TM-15 will now be on and in the (S) safety position. To make the TM-15 live, move the selector switch to the F1, F2, or F3 positions. Do not move the selector switch to a firing position until you are ready to safely use the marker.

Switching OFF your TM-15
Move the Selector Switch to the (S) safety position, push and hold the power button for 2 seconds, and the LED will turn from red to green. Release the power button and the TM-15 will switch off.

Selector Switch
The TM-15 comes equipped with a four-position selector switch which comes factory set in the recreational firing mode setting. Move the selector from position (S) safety, to positions (F1, F2, and F3) to change into a firing mode (Fig 1.4).

Selector Positions
- Safety
- Semi-Auto
- PSP Ramping
- NXL Full Auto

Automatic OFF feature
The TM-15 also has an “Automatic OFF” feature. If you accidentally leave your TM-15 powered up, it will shut itself off after approximately 1 hour of inactivity.
Eye Function
The TM-15 board is pre-programmed to activate the eye system each time the marker is powered up. See Section 7 (Break Beam Eyes Operation) for more details.

Installing a Loader and Paintballs
The TM-15 comes equipped to accept 1.03" (outer dimension) standard-gravity feed loaders as well as most agitating and force-feed loaders. Fit the loader directly into the feed elbow. It might be necessary to adjust the feed elbow clamping screw to your loader.

The TM-15 uses .68 caliber, water-soluble paintballs, readily available at paintball pro-shops, commercial playing fields, and many sporting goods stores. The paintballs are fed from the loader through the feed elbow and into the breech of the marker.

Stock Adjustment
The TM-15 stock can be adjusted by depressing the stock adjustment lever. Adjust the stock’s length by pulling or pushing on the back of the stock (Fig. 1.5).

Sight Adjustment
The front and rear sights can be moved anywhere along the top picatinny rail. They can also be folded down or completely removed when not being used. To adjust or remove the sights, loosen the screw on the base of the sight and either relocate it or remove it.

6. Firing the TM-15
Warning: Always keep your TM-15 pointed in a safe direction! Everyone within firing range should always use paintball approved eye and face protection in the presence of live paintball markers.

To turn the TM-15 on, set the selector switch to the (S) safety position, push and hold the power button for 2 seconds, and the LED light will turn green and then red and then release the button. Your TM-15 is now powered on and in the safety position.

Firing Your TM-15
• Place the empty loader onto the marker.
• Be sure that it is securely mounted in place.
• Apply the compressed gas, pressurizing the marker.
• Put the paintballs into the loader.
• Remove the barrel plug, sock, or barrel-blocking device.
• Aim the TM-15 in a safe direction.
• Turn the TM-15 on.
• Move the selector switch to the desired firing mode.
• Aim the TM-15 at the target.
• Place your finger on the trigger.
• Pull the trigger with a smooth squeezing motion.

Note: When the game you are playing is over, remember to place the barrel-blocking device onto your barrel and move the selector to the safety position.

7. Break Beam Eyes Operation
The TM-15 uses a break beam eye system to determine the absence or presence of a ball for the purposes of reduced paint breakage and optimum rates of fire. The TM-15 board is pre-programmed to activate the eye system each time the marker is powered up.
To turn the eyes off, ensure that there are no paintballs in the markers breech or feed elbow and make sure the marker is switched off. While pulling and holding the trigger, turn the marker on. When the selector is switched to a firing mode, a quick double blinking green LED will indicate that the eye system has been deactivated. To turn the eyes back on, simply press the power button one time quickly.

Notes:
- When the eyes are on, a slow consistent single-flashing green LED indicates that no ball is in the breech and a rapid flashing green LED indicates that there is a ball in the breech.
- For optimal performance of the TM-15 eyes, keep the inside of the TM-15 breech clean and clear of broken paint, paint residue, or other debris.
- Although the eyes can be cleaned via cleaning the breech of the TM-15 marker, if the eyes need to be accessed, please follow the steps outlined in the Disassembly/Assembly section of this manual.

8. Unloading the TM-15
Warning: Always keep your TM-15 pointed in a safe direction and always keep your protective eye, face, and ear wear on until marker is completely unloaded and safe.
- Be sure your finger is away from the trigger area.
- Place the barrel plug, sock, or barrel-blocking device into the end of the barrel.
- Move the selector switch to the (S) safety position.
- Turn the TM-15 off by pressing and holding the power button. The LED will change from red to green, once it changes to green, release the button. Observe the light to make sure it is no longer lit.
- Remove your pressurized gas source by slowly and carefully unscrewing it.
- If you are using an electronic loader make sure loader is completely turned off.
- Slightly tilt the marker so that the loader is lower than the body.
- Remove the loader by releasing the clamp and spinning it in a clockwise direction and gently pulling it.
- Read the pressure gauge and make sure the pressure reads 0 psi.
- Do not look down the barrel but look down the feed neck to make sure there are no paintballs in the breech.
- Remove the barrel from the marker.
- Make sure there are no more paintballs remaining in the barrel.

9. Regulator and Velocity Adjustment
The TM-15 utilizes a Bottom-line regulator that doubles as an ASA Adapter/Receiver for a standard threaded pre-set output compressed air systems or remote hose. This unique regulator system channels air through the air transfer tube, eliminating the need for external macro line and fittings. The TM-15 bottom-line regulator controls the amount of air pressure going from your compressed air system into the marker.

The TM-15 regulator should be factory pre-set at about 200 psi, as this is the best operating pressure for proper marker operation. However, if over time you do need to adjust the pressure, use the Regulator Adjuster Screw on the front of your TM-15 bottom-line regulator.

Regulator Adjustment
Note: Do not use this to adjust the velocity of the marker.

If adjustments are needed, use a 3/16” Allen wrench and insert it into the regulator adjustment screw. This is located in the front of the regulator (Fig. 1.6).

To Increase Output Pressure—Turn the regulator’s adjustment screw clockwise.
To Decrease Output Pressure—Turn the regulator’s adjustment screw counter-clockwise.
Notes:
• Always watch the gauge as you are adjusting the pressure.
• The bottomline regulator should not be disassembled.
• Never set the regulator above 200 psi.

Adjusting Velocity - At the back of the TM-15 internal body is the bolt guide cap. The holes in the bolt guide cap serve as your velocity adjuster. Confirm that the pressure on your TM-15 bottom-line regulator is at 200 PSI.

You can access the velocity adjuster by sliding the velocity adjustment cover forward and inserting a 7/64" Allen wrench into the bolt guide cap thru the bottom of the marker. Then you can increase or decrease the velocity on your TM-15 by tightening or loosening the bolt guide cap, using the included 7/64" inch Allen wrench.

To Increase Velocity - Unscrew or loosen the velocity adjustment screw by turning it counter clockwise. Rotate the velocity adjustment screw in small increments, stopping between slight turns to test velocity, until desired velocity is achieved. Do not back the adjuster out too far. Stop if you hear an air leak, and adjust back in a 1/4 turn (Fig. 1.7). A paintball specific radar chronograph should be used to accurately measure your velocity.

To Decrease Velocity - Tighten or screw-in the velocity adjustment screw by turning it clockwise. Rotate the velocity adjustment screw clockwise in small increments (1/4 turn or less), stopping between slight turns to test velocity, until desired velocity is achieved. A paintball specific radar chronograph should be used to accurately measure your velocity.

Notes:
• This marker was designed with safety and safety standards in mind. If you attempt to shoot paintballs at a higher velocity than established safety standards, the marker may not function properly.
• This marker is not designed to shoot above the safety limits established by Industry Standards, but under certain conditions it may. It is therefore important to check the velocity before using your TM-15.
• The velocity is not adjusted by inserting the Allen wrench into the velocity adjuster and rotating the Allen wrench, but by using the Allen wrench as a handle to rotate the velocity adjuster.

10. Programming

Note: In this section, you will see the phrase "Cycle the Selector Switch". To cycle the selector switch, move the selector switch from the (S) position to the (F3) position and then back to the (S) position.

Tournament Lock On/Off
The TM-15 comes with a tournament lock which will lock your marker into the firing mode currently selected. The Tournament lock button is accessed thru a small hole just in front of the trigger. The TM-15 must be turned off to change the tournament lock setting.

Carefully insert the long side of the 3/32" Allen wrench into the hole on the trigger guard and then into the hole on the body and then gently press the tournament lock button to show the current status of the tournament lock (Fig. 1.8).

- If the LED blinks green, the tournament lock is on.
- If the LED blinks red, the tournament lock is off.
To change the tournament lock, press the button once to display the current status, then press it again within 1 second and the LED will blink the new status.

**Note:** The tournament lock button is part of the markers circuit board. Only use light pressure when pressing the button.

**To Enter Programming Mode:** The TM-15 must be OFF and the tournament lock must be off to begin managing the functions. While the TM-15 is off, with the selector switch in the safety (S) position, press and hold the power button, cycle the selector switch, then release the power button to enter programming mode. If done correctly the LED will change to a solid red, which is the firing mode function.

Once in programming mode, with selector switch in the (S) position, each time the power button is pushed you will cycle to the next Function and the LED will change to a specific color per the descriptions below.

**Function’s current value:** To view a function’s current value, advance to the function you wish to check using the power button. Then simply pull and release the trigger quickly to view its current value by observing the number of flashes.

**Changing a Function’s Value:** Once you have selected the function you wish to change, move the selector switch to the (F1) position to increase the value or to the (F2) position to decrease the value. Each time the trigger is pulled it will increase or decrease the function’s value by one. If the selector switch is in the (F3) position, a single trigger pull will return a function value to its default setting. Once a function’s value is changed, move the selector switch to the (S) safety position. To check the function’s new value, simply pull and release the trigger once while the selector is in the safety (S) position and the LED will flash the new value. At this point, you can select a different function to change or exit programming mode.

**Exiting Programming Mode:** push and hold the power button, cycle the selector switch, and then release the power button.

### 11. Setting Functions

**Firing Modes**

Firing modes will be indicated by a solid red LED. The default firing mode is the recreational mode (value 5).

Note: Selector position (0) is used as a Safety in all Modes.

**Value 1: Semi-Auto** – One shot per trigger pull.

**Value 2: PSP** – The TM-15 will operate in semi-auto mode for the first 3 safety shots; then if the user maintains at least one pull per a second, the TM-15 will fire “x” number of shots per pull and release of the trigger as defined by function 6 (burst shots) at the rate of fire defined by function 2. No trigger pull within one second of the last pull will reset the mode and the user must fire three more safety shots to continue burst shots.

<table>
<thead>
<tr>
<th>Function</th>
<th>LED Color</th>
<th>Default Value</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Firing Mode</td>
<td>Solid Red</td>
<td>5</td>
<td>1-5</td>
</tr>
<tr>
<td>2 ROF (rate-of-fire)</td>
<td>Solid Green</td>
<td>11</td>
<td>1-25</td>
</tr>
<tr>
<td>3 Dwell</td>
<td>Solid Orange</td>
<td>28</td>
<td>1-45</td>
</tr>
<tr>
<td>4 BIP (ball in place)</td>
<td>Flashing Red</td>
<td>10</td>
<td>1-40</td>
</tr>
<tr>
<td>5 Ramping Point</td>
<td>Flashing Green</td>
<td>4</td>
<td>3-9</td>
</tr>
<tr>
<td>6 Burst Shots</td>
<td>Flashing Orange</td>
<td>3</td>
<td>3-9</td>
</tr>
</tbody>
</table>
**Value 3: Full-Auto/NXL** - The TM-15 will operate in semi-auto mode for the first 3 safety shots; then pull and hold trigger on the 4th shot, and the TM-15 will fire full-auto at the rate of fire value in function 2, which is defaulted to 13 shots per second for this mode.

**Value 4: Ramping/Millennium** - The TM-15 will operate in semi-auto mode until player achieves the minimum trigger pull as defined by the ramping point value in function 5, which is defaulted to 6 trigger pulls per second for this mode. At that point, and as long as 6 trigger pulls per second are maintained, the TM-15 will ramp to the rate of fire value in function 2, which is defaulted to 12 shots per second for this mode.

**Value 5: Recreational Mode** - Selector Switch Position (1) - Standard Selector Switch Position (F1) - Semi-automatic; see value 1. Selector Switch Position (F2) - PSP; see value 2. Selector Switch the (F3) Position - NXL full auto; see value 3.

**Notes:**
- If you activate the tournament lock on your TM-15 while in recreational mode, all three firing modes will still be active.
- It is possible to raise or lower both the rate of fire and ramping point values if rules change.
- Selector the (S) position is used as a safety in all firing modes.

**Max Rate of Fire (ROF)**
Max Rate of Fire (ROF) will be indicated by a solid green LED. The default Max ROF is 6 flashes (13 BPS).

<table>
<thead>
<tr>
<th>Flashes/ROF</th>
<th>Flashes/ROF</th>
<th>Flashes/ROF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Flash = 8 BPS</td>
<td>10 Flash = 12.5 BPS</td>
<td>19 Flash = 17 BPS</td>
</tr>
<tr>
<td>2 Flash = 8.5 BPS</td>
<td>11 Flash = 13 BPS</td>
<td>20 Flash = 17.5 BPS</td>
</tr>
<tr>
<td>3 Flash = 9 BPS</td>
<td>12 Flash = 13.5 BPS</td>
<td>21 Flash = 18 BPS</td>
</tr>
<tr>
<td>4 Flash = 9.5 BPS</td>
<td>13 Flash = 14 BPS</td>
<td>22 Flash = 18.5 BPS</td>
</tr>
<tr>
<td>5 Flash = 10 BPS</td>
<td>14 Flash = 14.5 BPS</td>
<td>23 Flash = 19 BPS</td>
</tr>
<tr>
<td>6 Flash = 10.5 BPS</td>
<td>15 Flash = 15 BPS</td>
<td>24 Flash = 19.5 BPS</td>
</tr>
<tr>
<td>7 Flash = 11 BPS</td>
<td>16 Flash = 15.5 BPS</td>
<td>25 Flash = 20 BPS</td>
</tr>
<tr>
<td>8 Flash = 11.5 BPS</td>
<td>17 Flash = 16 BPS</td>
<td></td>
</tr>
<tr>
<td>9 Flash = 12 BPS</td>
<td>18 Flash = 16.5 BPS</td>
<td></td>
</tr>
</tbody>
</table>

**Dwell Setting**
Dwell Setting will be indicated by a solid orange LED. The Dwell setting determines how long the Slip Stream™ Solenoid is open. The Dwell is defaulted at setting 28 and is adjustable from 1–45.

**Note:** If the Dwell Setting is adjusted too high or low, the TM-15 will not function correctly.
Ball in Place Delay (BIP)
Ball in Place Delay (BIP) will be indicated by a flashing red LED. The BIP is defaulted at 10 ms (each Flash = 1 millisecond). BIP is adjustable from 1–40 milliseconds.

Note: If you are not using a force-feed loader, it is recommended that you use a higher BIP setting.

Ramping Point
Ramping Point will be indicated by a flashing green LED.

The default ramping point is 4 (4.5 BPS). Ramping Point is adjustable from 4–9.5 BPS. Please see chart for corresponding flashes and BPS settings.

<table>
<thead>
<tr>
<th>Ramplng Point Flashes/PTR (Pulls to Ramp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Flashes = 3 BPS</td>
</tr>
<tr>
<td>7 Flashes = 3.5 BPS</td>
</tr>
<tr>
<td>8 Flashes = 4 BPS</td>
</tr>
<tr>
<td>9 Flashes = 4.5 BPS</td>
</tr>
<tr>
<td>10 Flashes = 5 BPS</td>
</tr>
<tr>
<td>11 Flashes = 5.5 BPS</td>
</tr>
<tr>
<td>12 Flashes = 6 BPS</td>
</tr>
<tr>
<td>13 Flashes = 6.5 BPS</td>
</tr>
<tr>
<td>14 Flashes = 7 BPS</td>
</tr>
<tr>
<td>15 Flashes = 7.5 BPS</td>
</tr>
<tr>
<td>16 Flashes = 8 BPS</td>
</tr>
<tr>
<td>17 Flashes = 8.5 BPS</td>
</tr>
<tr>
<td>18 Flashes = 9 BPS</td>
</tr>
</tbody>
</table>

Burst Shots
Burst Shots will be indicated by a flashing orange LED. The Burst shot value is defaulted to 3 and is adjustable from 3–5.

Programming Example: If you are in the default recreational firing mode and want to go to semi-auto firing mode. Push and hold the power button, cycle the selector switch, then release the power button and the LED will be a solid red. Move the selector switch to position (F2) which will decrease the value and pull the trigger four times and then move the selector switch back to the (S) position. Pull the trigger while in the (S) position to check the changed value. The LED will now flash 1 time, to show that the firing mode has been changed to semi-auto.

Factory Board Reset
To reset all the functions to the defaults, turn off your TM-15, then carefully insert the long side of the 3/32" Allen wrench into the tournament lock access hole and then gently press the button in for 5 seconds. Once an orange LED flashes to confirm the reset, release the button.

12. Trigger Adjustments
The TM-15 features a Hall Effect Sensor Trigger. There is no trigger switch to worry about, clog with paint, or break. The TM-15 trigger can be adjusted by the four set screws in the trigger.

When a trigger pull is recognized, the LED will quickly flash a dim Red for each trigger pull. If no trigger pull is recognized, the LED flashes normally based on the status of the eyes and battery power level. If the trigger is held in, the dim red LED will stay illuminated.

Before making any trigger adjustments, de-gas the TM-15, make sure the gauge reads 0 psi, then switch ON the TM-15 with eyes turned off to easily monitor the current activation point.

You will notice four (4) set screws in your trigger (Fig. 1.9). These can be adjusted with a 1/16" Allen wrench. Make small adjustments and check that the trigger is activating the solenoid.

• The first (1) set screw adjusts the trigger activation point. For best results, the activation point should be set right in the middle of the total trigger movement from front to back.
• The Second (2) set screw adjusts forward movement, and forward stop point.
• The Third (3) set adjusts the trigger return spring tension. Turn it clockwise to increase the spring tension and counter clockwise to decrease the spring tension.
• The Fourth (4) set screw adjusts the rear movement range, and rear stop point.

Notes:
• If any of the set screws are over adjusted in any direction the TM-15 may not fire.
• If the trigger travel is adjusted too short, the TM-15 may fire on its own, repeatedly and/or uncontrollably.

13. General Maintenance

CAUTION: Before attempting to perform any maintenance operations, make sure that all paintballs and propellant sources have been removed from the marker and that the regulator gauge reads 0 psi. Install a barrel blocking device, move the selector switch to the off position and push power button and hold for over 2 seconds until the LED light changes from Red to Green, and keep the TM-15 power off.

Keep your TM-15 clean and lubricated to eliminate the friction that would prevent reliable operation. Clean and lube the marker before each use.
Do not use oil or petroleum-based lubricants in the lubrication of this marker. Teflon or silicon (non-spray only) lubricants designed for use on O-Rings may be used for lubrication for the bolt, bolt guide and poppet area only. Dow 33 or the include grease is recommended.

Internal Cleaning & Greasing

The TM-15 is designed to allow you to access the bolt guide assembly without separating the shells. On the back of the TM-15, there is a removable panel which is taken off to allow easy access to the bolt guide assembly for cleaning and maintenance.

• Remove the two panel screws, using a 7/64" Allen wrench and lift the panel off.
• Lift out the stock assembly, stock cover, and the velocity adjuster cover.
• Once the panel is removed, use a 1/8" Allen wrench to remove the bolt guide retention screw.
• Insert a 7/64" Allen wrench into one of the velocity adjuster holes or into the slot and pull the bolt assembly straight back. Stop when it hits the shell.
• Rotate the bolt guide counter clockwise, about 1/4 turn. This will allow you to pull the bolt guide assembly out.
• Once the bolt guide assembly is out, use a BT battle swab to clean the inside of the body, and then clean and re-grease the bolt guide assembly as described in Section 14.

To install the bolt guide assembly, reverse the above steps, making sure the stock, stock cover, and velocity adjuster cover are sitting in the right side shell correctly. Also check that the bolt guide retention screw is all the way in, before putting the removable panel back on.

External Cleaning

Use a clean cloth, dampened with water, to clean the outside of the
TM-15. Do not use any chemicals, as you may damage the protective finish. If a full cleaning is needed, we recommend that you fully disassemble the TM-15; doing so will allow you to rinse the shells with hot water to remove dirt and paint buildup.

Warning: Do not rinse the TM-15 under water without fully disassembling the marker, as you may damage the markers electronics.

14. Assembly/Disassembly Instructions

CAUTION: Before attempting to perform any marker disassembly, make sure that all paintballs and propellant sources have been removed from the marker and that the regulator gauge reads 0 psi. Install a barrel-blocking device, move the selector switch to the safety (S) position, and make sure the TM-15 is turned off.

Disassembly Tips
• Make sure you have a clean area to work on your marker.
• Do not remove the air transfer tube from the body and regulator; these parts are assembled tightly at the factory to prevent leaks.
• When separating the shell for the first time, locate the trigger and trigger spring, notice their position for easy reassembly.
• Make sure the main spring is installed correctly on the bolt, as it needs to be installed in the right direction.
• After reassembling the TM-15 recheck your trigger activation settings.

Visit PaintballSolutions.com for additional information.

Feed Elbow
To remove the feed elbow, push and hold in the latch button while sliding the feed elbow forward and lift off the elbow when it reaches the narrow section of the top rail. The Feed elbow does not slide off the front of the rail.

Note: Make sure that when the feed elbow is reinstalled it lines up with the hole on the right side of the shell.

Magazine
To remove the magazine, press in the magazine release button located on the right side of the TM-15 and pull the magazine down and out of the shell.

Front and Rear Sights
Using a 7/64" Allen wrench, loosen the screws at the base of both the front and rear sights, and remove.

Removable Shell Panel
The removable shell panel can be removed to access the internal assembly for basic cleaning and maintenance by removing the two panel screws with a 7/64" Allen wrench and then lifting the panel off.

Stock Assembly
The stock assembly can be removed from the shell once the removable shell panel has been removed.

Grips
Using a 5/64" Allen wrench, remove the four 6-32 button head screws holding the grips in place. Notice that the lower screws are longer than the top grip screws.

Selector Arm
It is not necessary to remove the selector arm when disassembling the TM-15. Using a 1/16" Allen wrench, remove the flat head screw which holds the selector arm to the selector shaft.

Barrel
It is recommended that the barrel be removed before and other maintenance or disassembly is performed. Simply turn the barrel counter clockwise to remove. Use warm water and a barrel cleaning device to keep the barrel in top condition.
Note: The selector arm is keyed into the selector shaft. Make sure they are aligned before reinstalling the selector arm screw.

Magazine Release Assembly
Remove the magazine release screw, using a 5/64" Allen wrench. Lift the spring cap and spring out of the right side shell; and then push the magazine release arm out of the left side shell.

Separating Shell
Once the parts above have been removed, the shell can now be separated. The shell is separated by loosening all the shell screws.

- Using a 7/64" Allen wrench, loosen all the socket head screws in the left side shell.
- Also loosen the two flat head screws, located under the grips with a 5/64" Allen wrench.
- The left side shell can now be separated from the right, by lifting it off.

Note: It is not necessary to remove the picatinny side rails to separate the shells.

Trigger
The trigger can be removed by simply lifting it out of the right side shell. When reinstalling it, make sure the trigger spring is seated correctly. See the picture below for correct installation.

Trigger spring
The trigger spring serves as a dual purpose spring. It holds the selector switch in position and gives the trigger a spring return. (See Fig. 2.0 for correct installation).

Selector Shaft
The selector shaft sits in the right side shell on a post and connects to the selector switch arm, when fully assembled. You will notice, on one side of the shaft four keys that sit into the trigger spring. Make sure these keys line up before putting the shell back together.

Removing the Body from the Shell
Warning: Before removing the body assembly from the shell it will be necessary to unplug the battery harness or lift out the battery harness holder.
- Separate the shells as described.
- Remove the two body retaining screws using a 7/64" Allen wrench.
- Lift the body assembly from the right side shell

Removal, Installation and Cleaning of Ball Detents
- Use a 5/64" Allen wrench and turn counter-clockwise to remove the ball detent assembly.
- Clean the detents with a damp cloth and apply a small amount of grease to the outer sides of the detents if sticking is an issue.
- Installation is the reverse of the removal. Do not over tighten the ball detent covers!

Note: Be careful not to lose any of the detent parts as they are small.

Removal of Bolt Guide Assembly
Caution: Make sure the TM-15 is completely empty of air before removing the Bolt Guide Assembly.

- Either take off the removable panel or separate the shells as described.
- Using a 1/8" Allen wrench, insert it into the rear retention screw, turn the Allen wrench counter-clockwise and completely remove the screw (Fig. 2.1).
- Insert a 7/64" Allen wrench into one of the velocity adjuster holes or into the slot and pull the bolt assembly straight back. If the assembly does
not easily slide out, insert a BT barrel swab into the front of the body and push out the bolt and bolt guide assembly.

**Note:** You can remove the bolt guide assembly for maintenance and cleaning by taking off the removable shell panel only. It is not necessary to separate the shells.

**Maintenance of Bolt and Bolt Guide**
- Inspect the o-rings on both the bolt and bolt guide for any wear or damage. Replace damaged or worn o-rings if necessary.
- Lubricate all o-rings on bolt and bolt guide with the supplied grease or Dow 33. Only a small amount of grease is needed.

**Maintenance of Poppet**

**Note:** Notice how far the bolt guide cap is into the bolt guide. When reinstalling the bolt guide cap make sure it is at about the same location. This will help keep your velocity settings.

- Use a 7/64” Allen wrench and insert it into the side of the bolt guide cap. Turn counter clockwise until bolt guide cap is completely removed.
- Remove the poppet spring, being careful not to lose it.
- Use 1/8” Allen wrench and carefully insert it into the front of the bolt guide. Push the poppet out the back of the bolt guide. Be careful not to damage the poppet front sealing face.
- Inspect and lubricate poppet o-ring and be careful not to lubricate the front poppet seal.

**Replacing the Poppet Seal**
If there is a slight air leak evident coming through the bolt area, the poppet seal may be worn and need to be replaced. With the poppet removed, grab the poppet seal with pliers and unscrew the poppet by hand from the poppet seal. Do not grab the poppet with pliers or put in a vice as it may damage the brass. Install the new poppet seal by hand. Once tightened by hand, the poppet will hold the poppet seal in place and it should not come apart during operation.

**Re-Installation of Poppet and Bolt Guide Cap**
- Place poppet into the back of the bolt guide and gently push forward. If installed properly the poppet will be all the way forward resting on the bolt guide internal face (Fig. 2.2).
- Install the poppet spring back into the back of the poppet.
- Using the 7/64” Allen wrench, screw the bolt guide cap clockwise back into the bolt guide. Screw the bolt guide cap all the way in to help seat the poppet and then turn it out one turn. Further adjustment over a chronograph will be needed to achieve desired velocity.

**Re-Installation of Main Spring, Bolt and Bolt Guide Assembly**
- Slide the main spring onto bolt, and then the bolt onto bolt guide, so it is one assembly. You will notice, one end of the spring is smaller and will lock onto the bolt (Fig. 2.3).
- Insert bolt assembly back into the body.
- Line up the alignment hole on the guide with the alignment pin on the body and slide the bolt assembly fully forward to the body.
- Holding the bolt assembly tight into the back of the body with one hand, reinstall the bolt guide retention screw and tighten using the 1/8” Allen wrench.

**Circuit Board Removal**
The circuit board should only need to be removed to clean the break beam eyes.

- Remove the body assembly from the shell.
- Using a 5/64” Allen key, remove the two circuit board screws and carefully remove the circuit board.
- Gently wipe the eye sensors with a damp cloth. Do not use chemicals
to clean the eye sensors. Only use a damp cloth with water.

Regulator
Warning: Do not take the regulator apart; it is not designed to be user serviceable. Damage to regulator will not be covered under warranty.

15. Storage and Transportation
IMPORTANT: Never carry your TM-15 uncased when not on a playing field. The non-playing public and law enforcement personnel may not be able to distinguish between a paintball marker and firearm. For your own safety and to protect the image of the sport, always carry your TM-15 in a suitable marker case or in the box in which it was shipped.

• Your TM-15 must be clear of all paint and propellant when not being used.
• Make sure the TM-15 marker is off. Push the power button and hold for 2 seconds until the LED light changes from red to green.
• Put the barrel blocking device in its place. Make sure the marker is clean.
• Store your TM-15 in a clean, cool, dry place.
• Keep your TM-15 away from unauthorized and unsafe users.
• It may be a good idea to remove the battery when storing your TM-15 to prevent unauthorized use.

Your TM-15 must be clear of all paint and any source of propellant during transportation to and from the playing field. Keep your barrel blocking device in place. Keep the TM-15 Marker switched off. Protect your TM-15 from excessive heat during transportation.

Observe and obey all local, state and federal laws concerning the transportation of paintball markers. For information concerning any of the laws in your area, contact your nearby law enforcement agency.

If you must ship your TM-15 for any reason, the box in which you purchased the marker should be used to protect your marker against rough handling during transport.

Never ship pressurized gas cylinders!

16. Troubleshooting Guide
Note: If you are experiencing any problems and you are using any aftermarket parts, it is necessary to re-install the factory parts and re-test before attempting any troubleshooting, as non-factory aftermarket parts are not designed by BT Paintball to work in the TM-15, and they may be the cause of the problems. Do not contact BT Paintball until you have returned the TM-15 to factory stock condition and tested.

This is not a toy. Misuse may cause serious injury or death. Eye Protection designed specifically for paintball must be worn by the user and persons within range. Recommend 18 years of age or older to purchase. Persons under 18 years of age must have adult supervision.
### Does not turn on
- Be sure selector is on “S” position.
  - Marker will not turn on unless the selector is on “S” position.
- Be sure you have a fresh battery.
  - If you have tried several different batteries, check to make sure the battery harness is plugged in to the board properly. If it is, unplug the battery from the harness for 5 minutes, then plug back in and try again.

### Does not fire
- Make sure marker is turned on.
  - Check the LED light on the side of the marker. The LED should be rapidly blinking green when a paintball is present.
- Make sure you have a paintball in the chamber.
  - The anti-chop eye system prevents the marker from firing unless a ball is present. Never put anything other than a paintball down the feed neck of the TM-15.
- Trigger may need to be adjusted.
  - Check the LED light on the side of the marker. While holding in the trigger, the LED should stay red in the background, and not be red when the trigger is released. If it is not that way, then the trigger may need to be adjusted. See the “Adjusting your trigger” section earlier in the manual.

### Does not fire with eyes turned OFF
- Trigger may need to be adjusted.
  - Check the LED light on the side of the marker. While holding in the trigger, the LED should stay red in the background, and not be red when the trigger is released. If it is not that way, then the trigger may need to be adjusted. See the “Adjusting your trigger” section earlier in the manual.
- Solenoid may not be connected properly.
  - Check to make sure the solenoid is connected properly to the sensor board. If it is, the solenoid may need to be reset.
- Solenoid may need to be reset.
  - To reset the solenoid, with the eyes OFF, pull the trigger repeatedly until the solenoid makes a loud clicking sound again with each trigger pull, but do not pull the trigger more than ten times, as this can damage the solenoid. If after ten pulls the solenoid still doesn’t click, it may need to be serviced.

### Leaks constantly through the chamber
- Solenoid may need to be reset.
  - To reset the solenoid, with the eyes OFF, pull the trigger repeatedly until the solenoid makes a clicking sound again with each trigger pull, but do not pull the trigger more than ten times, as this can damage the solenoid. If after ten pulls the solenoid still doesn’t click, it may need to be replaced.
- Poppet seal may be worn.
  - Replace poppet seal.

### Leaks constantly through the chamber
- Multiple balls fired from only one shot
  - Ball detents may be sticking open.
  - Loader forcing paintballs too hard into marker.
  - Try a different loader, such as the Empire Magna Drive Loader. If using a Halo series or Empire Reloader B series loader, try installing an Empire Magna Clutch Upgrade Kit.
- Multiple balls fired from only one shot
  - Replace both ball detent covers and clean the ball detents with a cloth. You may also add some grease to the outer surface of the detents to make sure they are not sticking within the covers.

### Leaks constantly through the chamber
- Balls fired from only one shot
  - Ball detents may be sticking open.
  - Replace ball detent covers and clean the ball detents with a cloth.
- Loader forcing paintballs too hard into marker.
  - Try a different loader, such as the Empire Magna Drive Loader. If using a Halo series or Empire Reloader B series loader, try installing an Empire Magna Clutch Upgrade Kit.
- Balls fired from only one shot
  - Replace both ball detent covers and clean the ball detents with a cloth. You may also add some grease to the outer surface of the detents to make sure they are not sticking within the covers.

### Leaks constantly through the chamber
- Regulator leaks from bottom plug
  - Air tank is not screwed all the way into the TM-15’s regulator ASA.
  - The plug on the underside of the regulator is an over-pressurization relief. If it is leaking, most likely the regulator is set to too high of a pressure and needs to be lowered. If the regulator is set to 200 psi or less and the over-pressurization relief is still leaking, it is possible to turn the plug cap just a small amount in the clockwise direction, until the leak stops.
- Regulator leaks from bottom plug
  - Air tank is not screwed all the way into the TM-15’s regulator ASA.
  - If during rapid firing the first ball comes out of the barrel at full velocity and following shots decrease substantially, watch the gauge on the TM-15 regulator to see if the needle drops down significantly and is slow to come back to the set pressure. This is typically the result of not screwing your air tank in enough. When screwing your air tank into the TM-15’s regulator ASA, it is important to not stop as soon as the marker pressurizes, but to continue turning until the air tank stops. It is also acceptable to install the air tank when it is empty, then have it filled by a professional while it is installed. This will ensure that you get the maximum air flow from your air tank.

### Leaks constantly through the chamber
- Loader forcing paintballs too hard into marker.
  - Try a different loader, such as the Empire Magna Drive Loader. If using a Halo series or Empire Reloader B series loader, try installing an Empire Magna Clutch Upgrade Kit.
- Loader forcing paintballs too hard into marker.
  - Try a different loader, such as the Empire Magna Drive Loader. If using a Halo series or Empire Reloader B series loader, try installing an Empire Magna Clutch Upgrade Kit.
<table>
<thead>
<tr>
<th>Regulator pressure spikes</th>
<th>Breaks paint in chamber</th>
<th>Ball detents may be dirty or worn.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulator adjusted too high.</td>
<td>Eyes are turned off.</td>
<td>Clean the ball detents. If necessary, apply a small amount of grease around the outer surface to reduce friction inside the ball detent covers. Replace if tips are worn down.</td>
</tr>
<tr>
<td>Low quality or brittle paintballs.</td>
<td>Only fire paintballs with the marker's eyes on.</td>
<td></td>
</tr>
<tr>
<td>Loader pushing too hard.</td>
<td>Do a paintball drop test. On a level and smooth, hard, outdoor surface, such as concrete or asphalt pavement, drop ten paintballs one at a time from about five feet high. Don't toss them up or throw them at the ground, just drop them straight down. If more than three paintballs out of ten break, the paintballs are bad and should not be used in the TM-15. In the case of higher-end tournament-grade paintballs, it may be possible to tune the TM-15 to successfully fire brittle paintballs. Since all conditions are different, it is best to ask for help with this from your local pro shop.</td>
<td></td>
</tr>
<tr>
<td>Bolt or bolt guide o-rings may be worn.</td>
<td>Air blowing past worn o-rings can easily break paintballs in the feed neck. Replace the bolt o-rings and the smaller 3-bolt guide o-rings and apply fresh grease.</td>
<td></td>
</tr>
<tr>
<td>Bolt front seal may be missing.</td>
<td>Make sure the bolt front seal is in place and has a light application of grease to reduce friction.</td>
<td></td>
</tr>
<tr>
<td>Check valve may be missing.</td>
<td>Make sure the check valve is in place. Without the check valve, the forward force on the bolt is too great and can be too hard on the paintballs.</td>
<td></td>
</tr>
<tr>
<td>Regulator pressure spikes</td>
<td>Cycles very slowly</td>
<td>Bolt or bolt guide o-rings may need grease.</td>
</tr>
<tr>
<td>Regulator pressure may be set too high.</td>
<td></td>
<td>Clean off old grease from the bolt and bolt guide o-rings, as well as the bolt front seal, and apply fresh grease.</td>
</tr>
<tr>
<td>Loader may not be feeding fast.</td>
<td></td>
<td>Raise rate-of-fire setting.</td>
</tr>
<tr>
<td>Inconsistent velocity</td>
<td></td>
<td>Loader may not be feeding fast.</td>
</tr>
<tr>
<td>Pressure may be set too low.</td>
<td></td>
<td>Check your loader's batteries or use a faster loader.</td>
</tr>
<tr>
<td>Marker may need to be greased.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dwell may be set too low or too high.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check valve may be missing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pressure may be set too low.</td>
<td></td>
<td>Low pressures have difficulty supplying enough volume to maintain a constant velocity. Do not lower your TM-15's regulator pressure below 180 psi.</td>
</tr>
<tr>
<td>Marker may need to be greased.</td>
<td></td>
<td>Clean old grease from the poppet, the bolt and bolt guide o-rings and apply fresh grease. Do not use too much, as it will prevent the moving parts from cycling smoothly.</td>
</tr>
<tr>
<td>Dwell may be set too low or too high.</td>
<td></td>
<td>Reset the dwell setting to the factory default.</td>
</tr>
<tr>
<td>Check valve may be missing.</td>
<td></td>
<td>Make sure the check valve is in place.</td>
</tr>
</tbody>
</table>
Inconsistent velocity
Battery may be low.

Replace battery with a fresh brand name alkaline 9-volt.

Poppet o-ring may be worn.

Replace poppet o-ring and apply fresh grease.

Velocity drops off when firing multiple shots
Air tank is not screwed all the way into the TM-15’s regulator ASA.

If during rapid firing the first ball comes out of the barrel at full velocity and following shots decrease substantially, watch the gauge on the TM-15 regulator to see if the needle drops down significantly and is slow to come back to the set pressure. This is typically the result of not screwing your air tank in enough. When screwing your air tank into the TM-15’s regulator ASA, it is important to not stop as soon as the marker pressurizes, but to continue turning until the air tank stops. It is also acceptable to install the air tank when it is empty, then have it filled by a professional while it is installed. This will ensure that you get the maximum air flow from your air tank.

Scratches on bolt
Spring may be damaged.

This can cause negative performance. The main spring should be repaired by a trained technician or it can just be replaced.

Leaks at times while shooting multiple shots
Poppet may be sticking open.

Clean the old grease from the poppet o-ring and apply fresh grease. If that doesn’t help, replace the poppet o-ring and apply fresh grease.

Battery may be low.

Replace battery with a fresh brand name alkaline 9-volt.

Solenoid may be sticking open.

If the solenoid is sticking open occasionally, the regulator pressure may be set too high. If the pressure is set to 200 psi or less, then the solenoid may be filled with dirt and/or grease. See Maintenance section for instructions on how to clean the solenoid.

Selector switch not working
Selector may be installed incorrectly

Check to be certain that the selector switch is installed with keys facing down toward the trigger spring.

### 17. Diagrams and Parts List

<table>
<thead>
<tr>
<th>Schematic #</th>
<th>Description</th>
<th>SKU#</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CHECK VALVE (air restricter)</td>
<td>17531</td>
</tr>
<tr>
<td>2</td>
<td>BOLT RUBBER TIP</td>
<td>17533</td>
</tr>
<tr>
<td>3</td>
<td>BOLT / BOLT GUIDE LARGE O-RING</td>
<td>17534</td>
</tr>
<tr>
<td>4</td>
<td>SPRING MAIN</td>
<td>17535</td>
</tr>
<tr>
<td>5</td>
<td>BOLT GUIDE SMALL O-RING</td>
<td>17537</td>
</tr>
<tr>
<td>6</td>
<td>BOLT GUIDE CAP O-RING</td>
<td>17538</td>
</tr>
<tr>
<td>7</td>
<td>POPPET O-RING</td>
<td>17540</td>
</tr>
<tr>
<td>8</td>
<td>BALL DETENT ASSEMBLY (complete)</td>
<td>17541</td>
</tr>
<tr>
<td>9</td>
<td>REGULATOR CAP SET SCREW (4-48 x .125 cup point)</td>
<td>17599</td>
</tr>
<tr>
<td>10</td>
<td>TRIGGER SET SCREW ( 6-32 x .250 flat point)</td>
<td>17602</td>
</tr>
<tr>
<td>11</td>
<td>POPPET SPRING</td>
<td>17623</td>
</tr>
<tr>
<td>12</td>
<td>POPPET ASSEMBLY (with replaceable tip)</td>
<td>17628</td>
</tr>
<tr>
<td>13</td>
<td>POPPET SEAL</td>
<td>17629</td>
</tr>
<tr>
<td>14</td>
<td>SELECTOR SCREW (flat head 4-40 x .5)</td>
<td>17650</td>
</tr>
<tr>
<td>15</td>
<td>CIRCUIT BOARD SCREW (button head 6-32 x .157)</td>
<td>17652</td>
</tr>
<tr>
<td>16</td>
<td>GRIP SCREW-TOP (button head 6-32 x .250)</td>
<td>17653</td>
</tr>
<tr>
<td>17</td>
<td>GRIP SCREW-BOTTOM (button head 6-32 x .438)</td>
<td>17654</td>
</tr>
<tr>
<td>18</td>
<td>PICATINNY RAIL SCREW (socket head 6-32 x .5)</td>
<td>17655</td>
</tr>
<tr>
<td>19</td>
<td>FOLDING SIGHT HEX NUT (6-32 .25 wide x .092 thick)</td>
<td>17657</td>
</tr>
<tr>
<td>20</td>
<td>SOLENOID SCREW (button head 10-24 x .250)</td>
<td>17658</td>
</tr>
<tr>
<td>21</td>
<td>BOLT GUIDE RETENTION SCREW (custom)</td>
<td>17659</td>
</tr>
<tr>
<td>22</td>
<td>BOLT</td>
<td>17661</td>
</tr>
<tr>
<td>23</td>
<td>BOLT GUIDE CAP</td>
<td>17664</td>
</tr>
<tr>
<td>24</td>
<td>SOLENOID ASSEMBLY (complete)</td>
<td>17665</td>
</tr>
<tr>
<td>25</td>
<td>SOLENOID SPACER (brass)</td>
<td>17670</td>
</tr>
<tr>
<td>26</td>
<td>REGULATOR ASSEMBLY (complete)</td>
<td>17671</td>
</tr>
<tr>
<td>27</td>
<td>REGULATOR GAUGE (plain 300 psi)</td>
<td>17672</td>
</tr>
<tr>
<td>28</td>
<td>MAIN BODY</td>
<td>17677</td>
</tr>
<tr>
<td>29</td>
<td>CIRCUIT BOARD</td>
<td>17679</td>
</tr>
<tr>
<td>Schematic #</td>
<td>Description</td>
<td>SKU#</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>30</td>
<td>SOLENOID AIR TRANSFER O-RINGS</td>
<td>17682</td>
</tr>
<tr>
<td>31</td>
<td>LIGHT PIPE</td>
<td>17770</td>
</tr>
<tr>
<td>32</td>
<td>POWER BUTTON</td>
<td>17712</td>
</tr>
<tr>
<td>not shown</td>
<td>BATTERY HARNESS</td>
<td>17715</td>
</tr>
<tr>
<td>33</td>
<td>RUBBER GRIP</td>
<td>17717</td>
</tr>
<tr>
<td>34</td>
<td>CLAMPING FEED ELBOW (complete)</td>
<td>17757</td>
</tr>
<tr>
<td>35</td>
<td>QUICK RELEASE SCREW (button head 8-32 X 1.250)</td>
<td>17759</td>
</tr>
<tr>
<td>36</td>
<td>LEVER QUICK RELEASE</td>
<td>17760</td>
</tr>
<tr>
<td>37</td>
<td>NUT QUICK RELEASE</td>
<td>17761</td>
</tr>
<tr>
<td>38</td>
<td>SEAT QUICK RELEASE</td>
<td>17762</td>
</tr>
<tr>
<td>39</td>
<td>SPACER QUICK RELEASE</td>
<td>17763</td>
</tr>
<tr>
<td>40</td>
<td>SHELL SCREW (socket head 6-32 x .625)</td>
<td>17810</td>
</tr>
<tr>
<td>41</td>
<td>FRAME SCREW (flat head 6-32 X .625)</td>
<td>17811</td>
</tr>
<tr>
<td>42</td>
<td>MAGAZINE RELEASE SCREW (button head 4-40 x .250)</td>
<td>17812</td>
</tr>
<tr>
<td>43</td>
<td>TRIGGER ACTIVATION SET SCREW (w/magnet)</td>
<td>17813</td>
</tr>
<tr>
<td>44</td>
<td>TRIGGER SET SCREW (6-32 X 1.00 cup point)</td>
<td>17814</td>
</tr>
<tr>
<td>45</td>
<td>BODY RETENTION SCREW (socket head 6-32 x .750)</td>
<td>17815</td>
</tr>
<tr>
<td>46</td>
<td>14 INCH BARREL</td>
<td>17816</td>
</tr>
<tr>
<td>47</td>
<td>SHELL LEFT SIDE</td>
<td>17817</td>
</tr>
<tr>
<td>48</td>
<td>SHELL RIGHT SIDE</td>
<td>17818</td>
</tr>
<tr>
<td>49</td>
<td>SHELL ACCESS PANEL</td>
<td>17819</td>
</tr>
<tr>
<td>50</td>
<td>PICATINNY SIDE RAIL (removable)</td>
<td>17820</td>
</tr>
<tr>
<td>51</td>
<td>STOCK COVER PLATE</td>
<td>17821</td>
</tr>
<tr>
<td>52</td>
<td>VELOCITY ADJUSTER COVER</td>
<td>17822</td>
</tr>
<tr>
<td>53</td>
<td>BATTERY HARNESS HOLDER</td>
<td>17823</td>
</tr>
<tr>
<td>54</td>
<td>MAGAZINE</td>
<td>17824</td>
</tr>
<tr>
<td>55</td>
<td>MAGAZINE RELEASE ARM</td>
<td>17825</td>
</tr>
<tr>
<td>56</td>
<td>MAGAZINE RELEASE ARM SPRING</td>
<td>17826</td>
</tr>
<tr>
<td>57</td>
<td>MAGAZINE RELEASE ARM SPRING CAP</td>
<td>17827</td>
</tr>
<tr>
<td>58</td>
<td>SELECTOR SWITCH ARM</td>
<td>17828</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Schematic #</th>
<th>Description</th>
<th>SKU#</th>
</tr>
</thead>
<tbody>
<tr>
<td>59</td>
<td>SELECTOR SWITCH SHAFT (complete with magnets)</td>
<td>17829</td>
</tr>
<tr>
<td>60</td>
<td>SINGLE TRIGGER ASSEMBLY</td>
<td>17830</td>
</tr>
<tr>
<td>61</td>
<td>SINGLE TRIGGER GUARD</td>
<td>17831</td>
</tr>
<tr>
<td>62</td>
<td>TRIGGER SPRING</td>
<td>17832</td>
</tr>
<tr>
<td>63</td>
<td>TM-15 AIR TRANSFER TUBE</td>
<td>17833</td>
</tr>
<tr>
<td>not shown</td>
<td>MAIN WIRING HARNESS</td>
<td>17834</td>
</tr>
<tr>
<td>64</td>
<td>CARBINE STOCK ASSEMBLY (complete)</td>
<td>17835</td>
</tr>
<tr>
<td>65</td>
<td>FRONT SIGHT (complete w/hardware)</td>
<td>17843</td>
</tr>
<tr>
<td>66</td>
<td>REAR SIGHT (complete w/hardware)</td>
<td>17844</td>
</tr>
<tr>
<td>not shown</td>
<td>BT SHELL JEWEL</td>
<td>17849</td>
</tr>
<tr>
<td>67</td>
<td>SIGHT BODY SCREW (socket head 6-32 x 1.125)</td>
<td>17850</td>
</tr>
<tr>
<td>68</td>
<td>BOLT GUIDE (fits TM-15 and TM-7)</td>
<td>17851</td>
</tr>
<tr>
<td>not shown</td>
<td>TM-15 RIP-CLIP™ ADAPTER PLATE (Rip-Clip™ not included)</td>
<td>17852</td>
</tr>
<tr>
<td>not shown</td>
<td>TM-15 RIP-CLIP™ RAIL LOCKING SCREW KIT (Rip-Clip™ not included)</td>
<td>38445</td>
</tr>
</tbody>
</table>

**ACCESSORIES & PARTS KITS**

<table>
<thead>
<tr>
<th>SKU#</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT TM-15 TEAM PARTS KIT</td>
</tr>
<tr>
<td>BT TM-15 PLAYER PARTS KIT</td>
</tr>
<tr>
<td>TM-15 DOUBLE TRIGGER KIT</td>
</tr>
<tr>
<td>BT FOLDING FOREGRIP (TM-7 Style)</td>
</tr>
<tr>
<td>BT IRON SIGHT SET</td>
</tr>
</tbody>
</table>
TM-15 Limited Lifetime Warranty

LIMITED LIFETIME WARRANTY INFORMATION (ORIGINAL PURCHASE RECEIPT REQUIRED)
KEE Action Sports ("KEE") warrants that this product is free from defects in materials and workmanship for as long as it is owned by the original purchaser, subject to the terms and conditions set forth below. KEE Action Sports will repair or replace with the same or equivalent model, without charge, any of its products that have failed in normal use because of a defect in material or workmanship.

KEE Action Sports is dedicated to providing you with products of the highest quality and the industry's best product support available for satisfactory play.

Purchaser should register product to activate warranty. Register your product by:
1. Online at www.paintballsolutions.com
2. Complete the product registration card (if applicable) and mail along with a copy of your receipt to Paintball Solutions, 570 Mantua Blvd., Sewell, NJ 08080.

WHAT THIS WARRANTY DOES NOT COVER
This warranty does not cover problems resulting from abuse, the unauthorized modification or alteration of our product, problems resulting from the addition of aftermarket products and scratches or minor superficial imperfections. Due to the nature of paintball products it is important that the product be maintained by the user as indicated in the product manual to remain in good operating condition. Your Limited Lifetime Warranty will be void if you fail to maintain the product as recommended in the product instruction manual. In addition, certain parts of a product may be subject to wear through regular usage. Replacement and repair of such parts is the responsibility of the user throughout the life of the product. These parts are not covered under the Limited Warranty. Examples of this type of part include (but are not limited to) goggle lens, straps, o-ring seals, cup seals, springs, ball detentes, batteries, hoses, drive belts, gears and any part of a product subject to continuous impact from paintballs. Hydrotesting of air cylinders is not covered under this warranty.

The Limited Lifetime Warranty also does not cover incidental or consequential damages. This warranty is the sole written warranty on KEE’s product and limits any implied warranty to the period that the product is owned by the original purchaser.

Some states, provinces and nations do not allow the limitation of implied warranties or of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state, province to province, nation to nation.

If you should encounter any problems with your product and you have added aftermarket parts on your product, please test it with the original stock parts before sending it in. Always unload and remove air supply before shipping markers. Do not ship your air supply tank if it is not completely empty. Shipping a pressurized air supply tank is unsafe and unlawful. Remove all batteries from products prior to shipping.

This Limited Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow the exclusion of incidental or consequential damages.

For warranty parts, service or information contact:
Paintball Solutions • www.paintballsolutions.com
E-mail: tech@paintballsolutions.com • Phone: 1-800-220-3222

May be covered by: 5,881,707; 5,967,133; 6,035,843; 6,474,326; 6,637,421 and 7,100,593, marked under license; 6,601,780; 6,925,997; 6,161,573; 6,057,750 and EPC patented.

PAINTBALL GUNS AND PAINTBALL GUN ACCESSORIES ARE NOT TOYS!
- Careless use or misuse may result in serious bodily injury or death!
- Eye protection designed for paintball must be worn by the user and all persons within range.
- Not for sale to persons under 18 years of age.
- Must be 18 years of age or older to operate or handle any paintball gun and paintball gun accessories without adult of parental supervision.
- Read and understand all cautions, warnings, and operating manuals before using any paintball gun or paintball gun accessory.
- Do not aim paintball gun at eyes or head of people or at animals.
- Paintball guns are to be used with .68 caliber Paintballs Only.
- To prevent fire or shock hazard, do not expose unit to rain or moisture.
- To prevent fire or shock hazard, do not immerse unit in liquids.
- To prevent fire or shock hazard, do not disassemble any electronic paintball device.
- Please conform to all local or state regulations with regard to battery disposal.
- Use Common Sense and have fun.