

dye
DSR MECHANICAL FRAME
DESIGNED FOR THE ART OF WINNING

DSR Mech Frame Manual



DESIGNED IN THE REPUBLIC OF CALIFORNIA

With offices in:

USA, Germany, Taiwan, Russia, and South Africa

For the most updated information go to

DYEPAINBALL.COM

Please visit

<https://shop.dyepaintball.com/pages/dyeprecision-com-patents>
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Made in Taiwan



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WARNING

IMPORTANT SAFETY INSTRUCTIONS AND GUIDELINES

- This Product is not a toy. Misuse may cause serious injury or death. Paintball safety rules must be followed at all times.
- Please read, understand and follow the directions in the owner's manual.
- Eye protection that is designed specifically for paintball and meets ASTM/CE standards must be worn by user and persons within range.
- Recommend 18 years or older to purchase. Person under 18 must have adult supervision.
- Always treat the Paintball marker as if it were loaded and able to fire.
- Do not exceed 850 psi input pressure.
- Only use .68 caliber paintballs that meet ASTM/CE standards.
- Ensure all air lines and fittings are tightened and secured before gassing up the paintball marker.
- Always chronograph the paintball marker before playing paintball.
- Never shoot the marker at velocities in excess of 300 feet per



WARNING

IMPORTANT SAFETY INSTRUCTIONS AND GUIDELINES

- Never look down the barrel or into breech area of the paintball marker.
- Compressed gas is dangerous, do not allow compressed gas to come in contact with your skin or try to stop a leak by covering it with your hand.
- Always fit a barrel blocking device to your paintball marker when not in use on and off the field of play.
- The owner's manual and any related warnings or instructions should always accompany the product for reference or in the event of resale and new ownership.
- Do not point the paintball marker at anything that you do not intend to shoot.
- Do not shoot at people, animals, houses, cars, or anything not related to the sport of paintball.
- Do not fire the marker without the bolt secured in the marker.
- If you read these instructions and do not fully understand them or are unsure of your ability to make necessary adjustments properly, call DYE Precision or your local pro shop for help.

DSR+ Mechanical & Single Trigger Electronic Frame Kit

The DSR+ mechanical & single trigger electronic frame kit offers industry-leading flexibility and may be used in either mechanical configuration or single trigger electronic configuration.



Get personalized help at the DYE Tech Central Facebook group

Mech Installation

STEP 1: Remove the frame

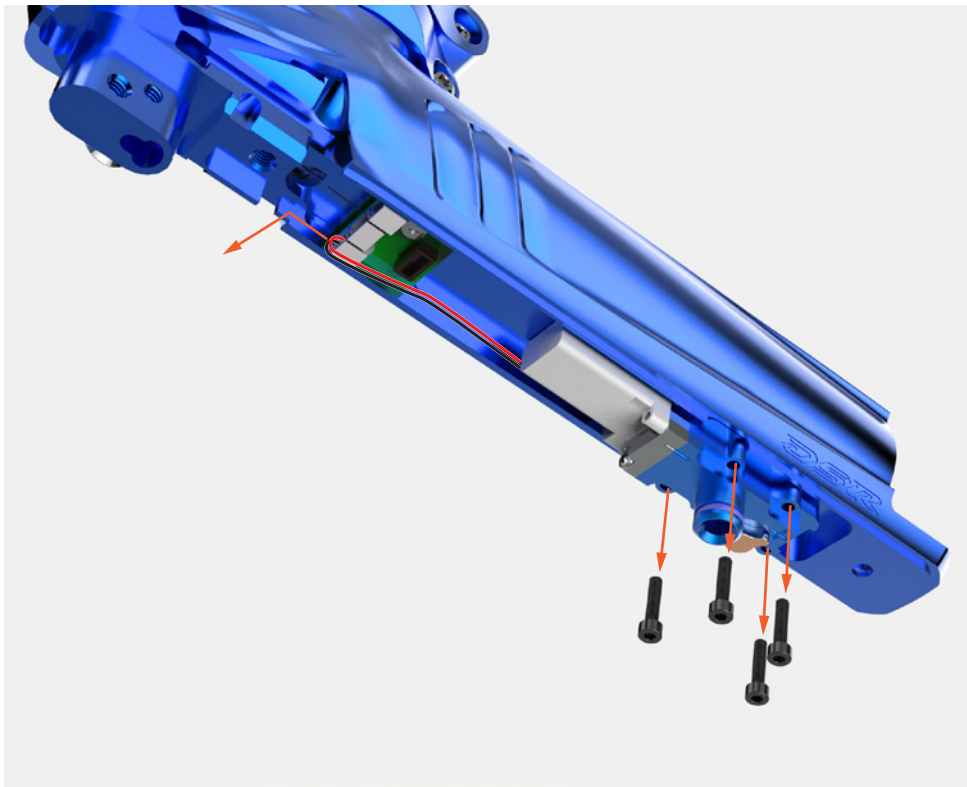
- Remove the front grip to expose the front mounting screw.
- Remove the bolt kit to expose the rear mounting screw.
- Use a 3/32" Allen wrench and remove both front and rear mounting screws.

The DSR+ utilizes a positive force connector to link the body and frame electrical components together. There are no wires to disconnect when removing the frame from the body.



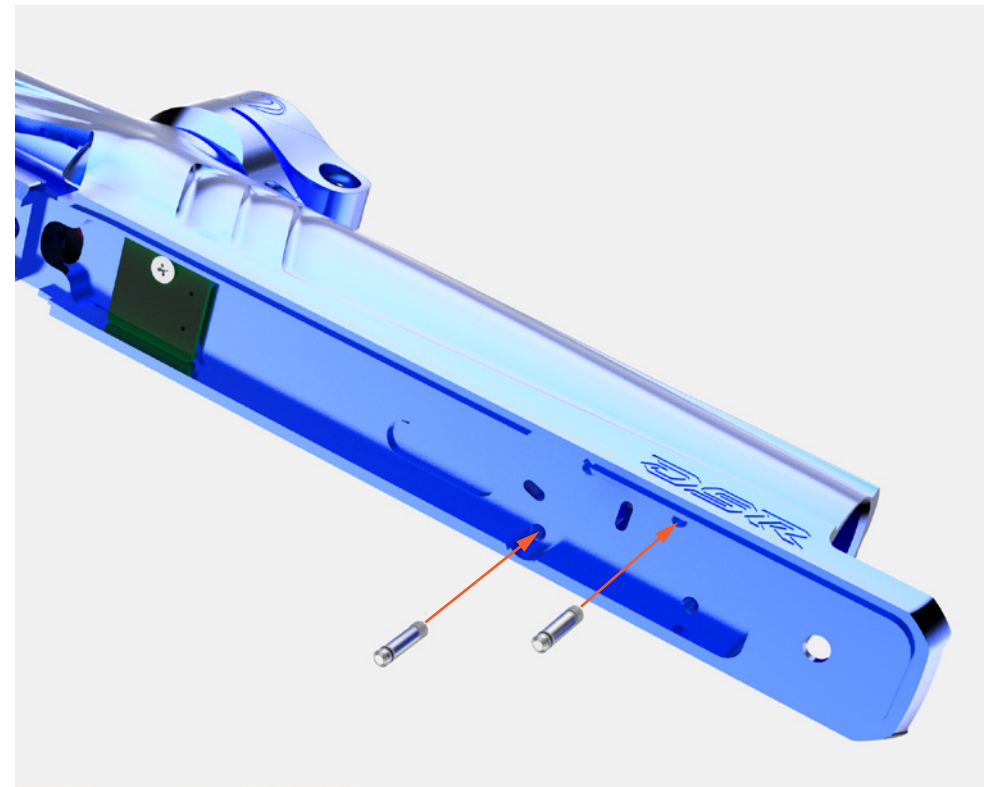
STEP 2: Remove the solenoid

- Carefully unplug the solenoid wire from the transfer board at the front of the gun. **DO NOT PULL ON THE WIRES TO DISCONNECT.**
- Use a 5/64" allen wrench to remove the 4 screws securing the solenoid to the body.



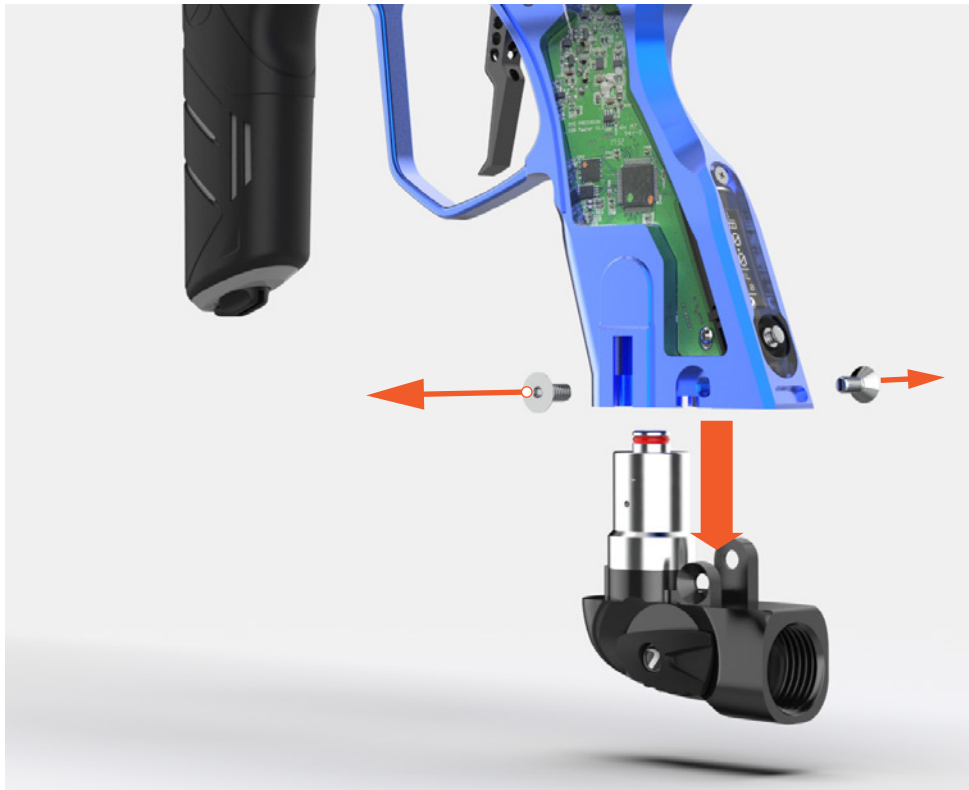
STEP 3: Install the solenoid mounting studs

- The solenoid mounting studs are designed to be used with both the Mech solenoid and Stock electric solenoid.
- Always use the mounting studs with the solenoid spacer ring (not shown).
- Ensure that the threads on the underside of the body are clean and free of debris.
- Using fingers **ONLY**, install the mounting studs in the holes shown in the image below. **DO NOT OVER TIGHTEN.**



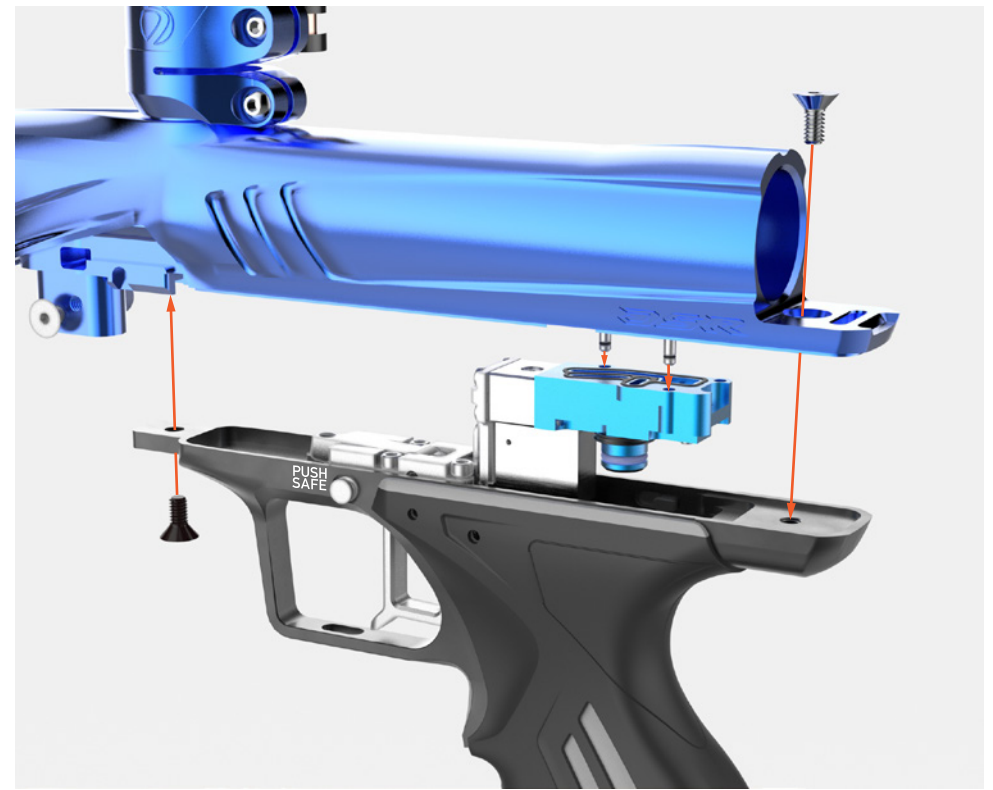
STEP 4: Transfer the Hyper 6™ to the new frame

- Remove the sticky grip panels.
- Using a 3/32" Allen wrench, unscrew and remove the 2 screws retaining the Hyper 6™ assembly. Pull down to remove it from the frame.
- Install the Hyper 6™ assembly on the new frame using the reverse of the steps above.



STEP 5: Install the new frame

- Taking care to align the holes in the top of the new solenoid to the mounting studs on the body.
- Make sure spacer ring is on solenoid body.
- Make sure the solenoid gasket is fully seated into the solenoid body.
- Push the frame into place and install the frame mounting screws removed in STEP 1.
- Reinstall the sticky grip panels and the front grip.



MECHANICAL CONFIGURATION

PUSH BUTTON SAFETY



FIG-1

The safety button (A) is located on the frame and is used to switch between safe (PUSH SAFE) and fire (PUSH FIRE). When the marker is NOT safe the button will protrude from the left side of the frame.



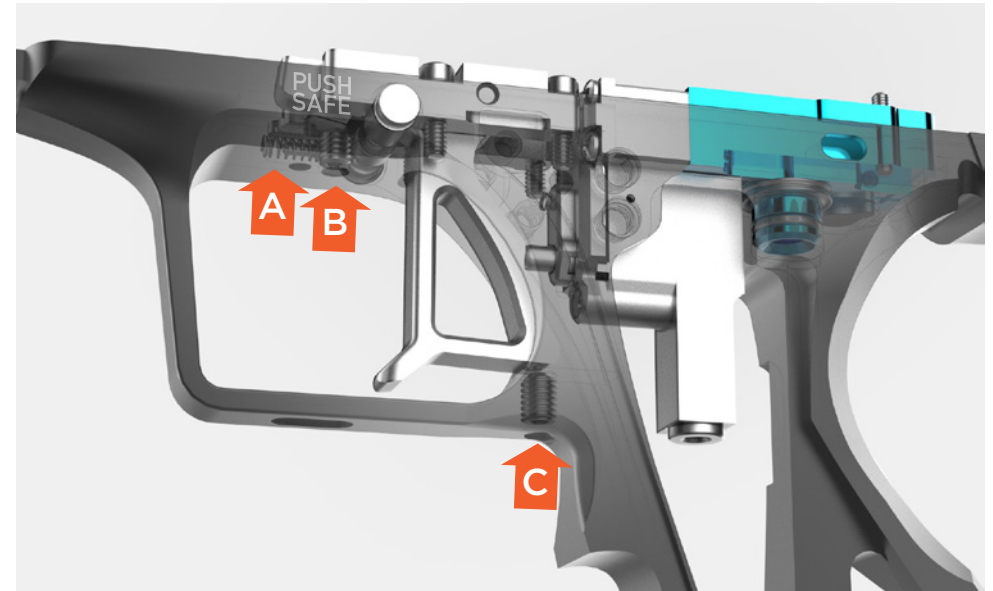
- When the PUSH SAFE is enabled the DSR Mech is still live marker until the air system has been fully removed.
- Ensure that a barrel blocking device is attached when the marker is set to safe.

TRIGGER ADJUSTMENT

- A. Pre-travel adjustment
- B. Post-travel adjustment
- C. Breakaway magnet tension adjustment

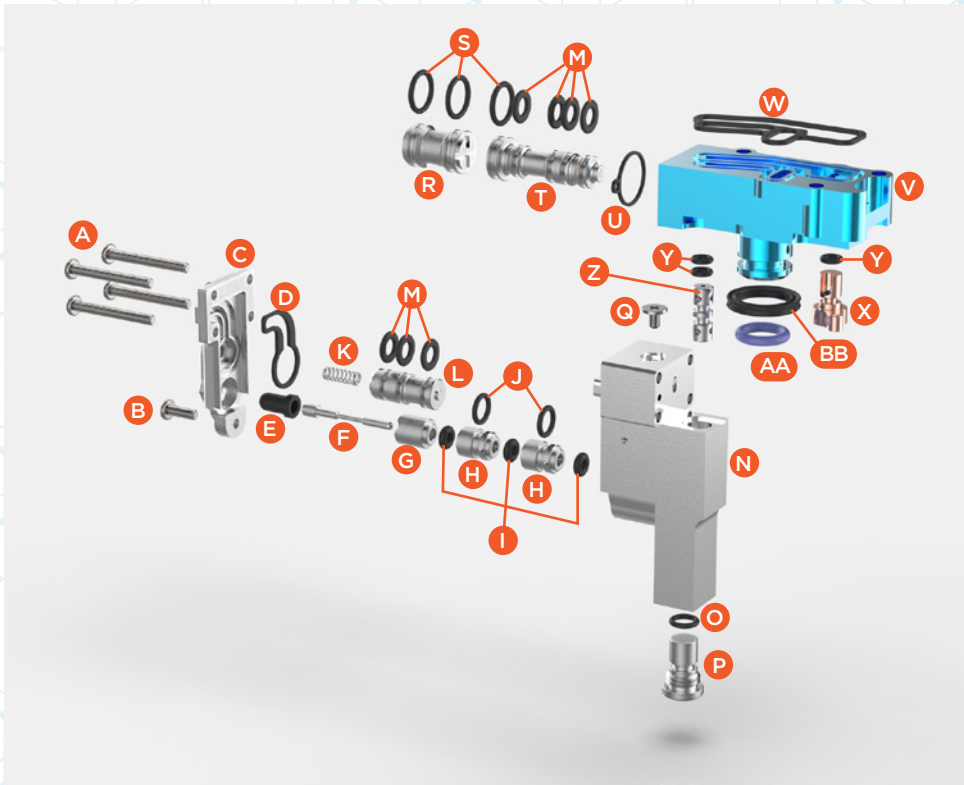
If the safety switch cannot be engaged or disengaged, adjust the magnet screw to allow more pre-travel in the trigger until the safety switch operates freely.

If the marker can be fired while the switch is set to safe, the activation-point screw needs adjusting. Turn the screw counter-clockwise to delay the activation point in the trigger pull until the marker does not fire with set to safe.



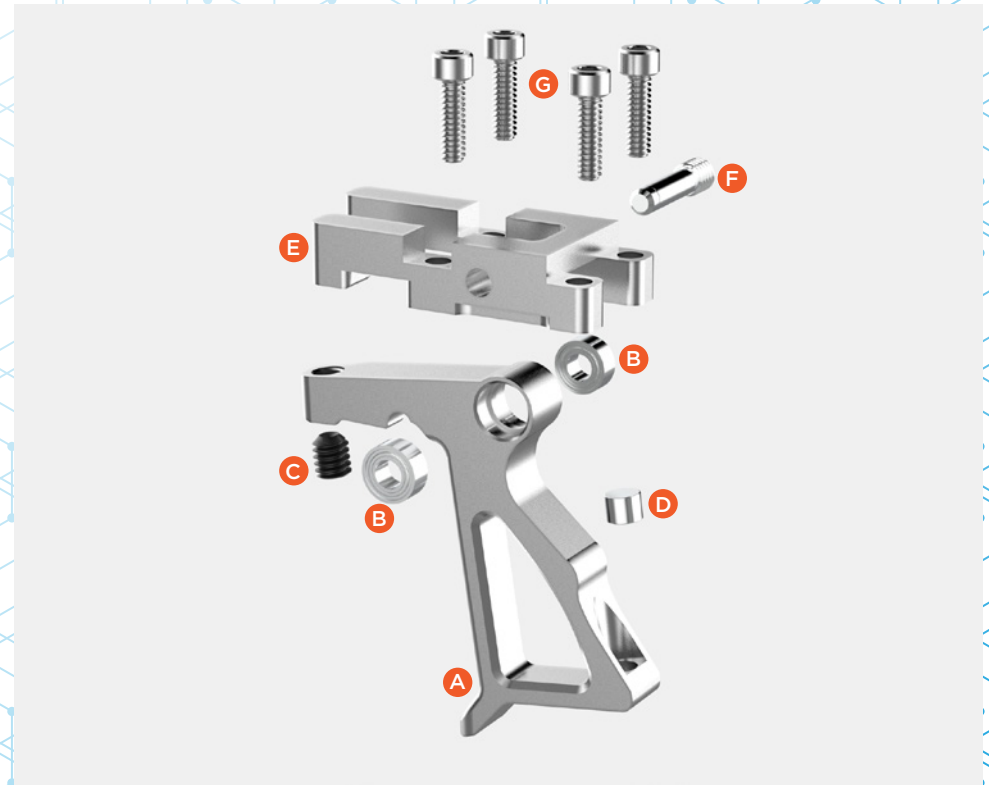
- Always make sure the marker is and de-gassed with a barrel blocking device installed and no paintballs are in the marker or loader before adjusting the trigger.
- The DSR Mech trigger has a large range of adjustability and must be adjusted with care. Adjustment of the trigger screws to the extremes of their range and incorrect adjustment may prevent the safety switch from functioning correctly.

SOLENOID COMPONENTS



- A) 4x - M2 x 18 - Pilot cover plate mounting screws
- B) M2 x 6 - Pilot cover plate lower mounting screw
- C) Pilot cover plate
- D) Pilot cover plate gasket
- E) Firing pin friction cap
- F) Firing pin
- G) Front firing pin can
- H) 2x - Rear firing pin cans
- I) 3x - #003 orings - firing pin can inner
- J) 2x - 4 x 1mm orings - firing pin outer
- K) Pilot timing spring
- L) Pilot timing spool
- M) 7x - #6 DYE spool seals (custom)
- N) Mechanical DSR+ pilot body
- O) 3.5 x 1mm oring - pilot chamber plug seal
- P) Pilot chamber plug
- Q) M2 x 3 - pilot plug screw (do not remove)
- R) Banjo plug
- S) 3x - 4 x 1mm oring - solenoid spool & banjo plug
- T) Mechanical DSR+ solenoid spool
- U) Submanifold interface gasket
- V) DSR+ mechanical solenoid manifold
- W) DSR+ mechanical solenoid manifold gasket
- X) SFR
- Y) 3x - 2 x 1mm orings - SFR & banjo transfer tube
- Z) Banjo transfer tube
- AA) #010 Purple oring - air transfer post seal
- BB) #010 square - solenoid spacer ring

TRIGGER & SAFETY COMPONENTS

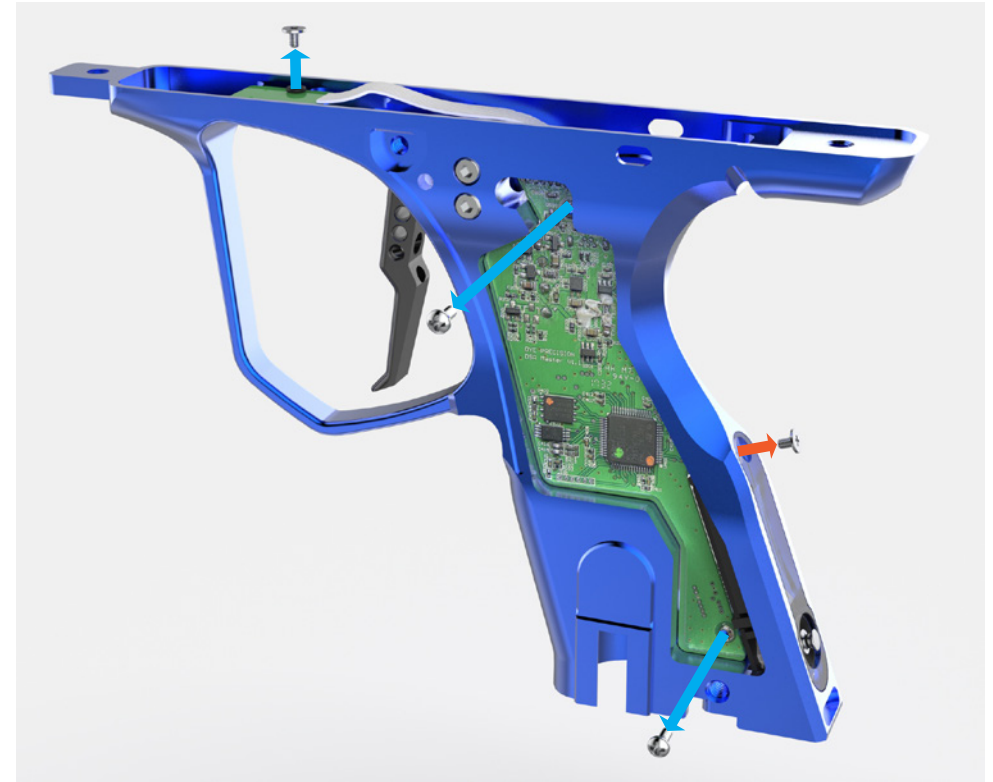


- A) DSR+ mechanical trigger
- B) 2x - Trigger bearings
- C) 8-32 x 3/16 - trigger pre-travel adjustmentset screw
- D) Trigger magnet
- E) DSR+ mechanical trigger saddle
- F) DSR+ mechanical trigger pin
- G) 4X - 4-40 x 3/8" - mounting screws

E-Trigger Installation

STEP 1: Transfer the trigger & electronic components

- A. Using a small Phillips head screwdriver, remove the screen cover at the rear of the frame. Carefully disconnect and remove the OLED screen.
- B. Remove the 3 Phillips head screws holding the electronic components in place. Carefully push the transfer board through the slot in the frame.



 STEP 1A

 STEP 1B

STEP 2: Install spring carrier and complete transfer of electrical components

- On the single trigger frame - using a Phillips head screwdriver, remove the OLED screen plug.
- Using a 3/32" Allen tool remove the mech trigger assembly and safety.
- Insert the safety hole plug.
- Insert the spring carrier into the top of the frame.
- Install e-trigger assembly with provided trigger pin and trigger travel adjustment screws. For more assembly detail refer to the DSR+ manual. Manuals can be found at <https://shop.dyepaintball.com/pages/manuals>
- Reverse the process in STEP 1 to complete the transfer of electrical components to the new frame.



STEP 3: Transfer the Hyper 6™ to the new frame

- Remove the sticky grip panels.
- Using a 3/32" Allen wrench, unscrew and remove the 2 screws retaining the Hyper 6™ assembly. Pull down to remove it from the frame.
- Install the Hyper 6™ on the new frame using the reverse of the steps above.



STEP 4: Reinstall the stock solenoid and mount the frame.

- Push the stock solenoid onto the mounting studs, taking care not to damage or pinch the solenoid gasket. The small orings on the mounting studs should provide enough friction to hold the solenoid into place.
- Make sure a solenoid spacer ring has been installed on the stock solenoid.
- Reconnect the solenoid wire to the transfer board.
- Reverse the process in STEP 1 from mechanical installation to reinstall the frame. Reinstall the sticky grip panels and front grip.



DSR+ MECH FRAME WARRANTY AND LEGAL INFORMATION

WARRANTY

DYE Precision, Inc. warrants for one year to the initial retail purchaser, from the initial date of purchase, that the DSR+ Mech frame and components are free from defects in materials and workmanship, subject to the requirements, disclaimers and limitations of this warranty. Disposable parts, normal maintenance and standard wear and tear parts such as batteries, O-rings and seals are not warrantied. The solenoid and electronic components on the marker are warrantied for six months. This warranty does not cover scratches, nicks, improper disassembly, improper re-assembly, misuse, neglect or improper storage. Modification to the product will void the warranty. The only authorized lubricant for the marker is Slick Lube™. Use of any other lubricant will void your warranty. This warranty is limited to repair or replacement of defective parts with the customer to pay shipping costs. Online warranty registration must be completed for warranty to be in effect. A copy of the original proof of purchase is needed to validate warranty. This warranty is not transferable. This warranty does not cover performance. Paintball markers are non-refundable.

TECHNICAL SUPPORT

Our Technical Support Departments are open Monday through Friday.

DYE Precision, Inc. can be reached at 858-536-5183 ext.275 from 8am to 5pm PST.

DYE Europe can be reached at +44 (0) 20-8649-6330 from 9am to 5pm GMT.

DYE Asia can be reached at 886 (0) 4-2407-9135 from 9am to 5pm GMT +8 hours.

Additional support and international contacts are available through our web site, www.dyepaintball.com or DYE Tech Central facebook group

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DYE Precision, Inc.
10637 Scripps Summit Ct.
San Diego, CA. 92131
P. 858-536-5183
F. 858-536-5191

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