## ATTENTION! Please read this User Guide in full before attempting to operate your pistol

Models: (Included but not limited to)

Combat Special Classic II Combat Special Evolution Revolution Carry-Comp Revolution Open Scout - All Models X-O - All Models Signature - Most Models

# **PISTOLOYNAMICS**

## User Guide

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### **STOP!** PLEASE READ THIS BEFORE OPERATING YOUR PISTOL:

Pistol Dynamics handguns are highly specialized, purpose built firearms designed for use by experienced and welltrained individuals intimately familiar with the 1911 style pistol. *Our guns are not appropriate for first time handgun users*.

- If you are not totally familiar with the operation and function of the 1911 handgun do not use, manipulate or attempt to fire the pistol until you have received professional training.
- NEVER hand a firearm of any kind to an inexperienced user before they receive expert instruction.
- Before allowing anyone else to handle or fire your Pistol Dynamics handgun be sure to have him or her read this User Guide in full.
- This User Guide should not be considered an alternative to formal training, or sole source of information as it pertains to the safe handling, use, and storage of firearms.
- It is incumbent on you to familiarize yourself with, and abide by, all Federal and State laws as they pertain to the ownership, handling, transfer, safe use and storage of firearms.

Pistol Dynamics offers expert training in the safe use of firearms and can be contacted directly for information regarding this. We do not interpret law or provide legal advice of any kind.

> PISTOL DYNAMICS FIREARMS TRAINING DIVISION info@pistoldynamics.com 321.733.1266

All Pistol Dynamics Instructors and trainers are accredited and are experts in their individual fields of expertise.

## How to Use This Guide

This User Guide is designed to be a source of information from both a technical and safety standpoint. The body of the guide is presented in the font and type style you are reading here. This is general information pertaining to the use and function of your firearm. You will notice regular references to muzzle consciousness, muzzle direction and trigger finger awareness. This is necessary due to the fact that some readers may skip-read this guide and our focus on safety is paramount.



When you see the International Caution Symbol on the left, this indicates a safety warning or consideration that you should read carefully and take heed of. Other warning indicators may also be highlighted in red. It would be prudent to read everything written in red in this document first and then re-read the guide from the beginning in its entirety.



When you come across the International Information Symbol on left it indicates a tip or suggestion and/or provides technical data that you should take heed of.

Note:

As a custom and performance firearms manufacturer our product is constantly evolving with new designs and firearms configurations being offered on a frequent basis. This User Guide is a 'live' document that is constantly being updated and consequently it is impractical for us to offer it in booklet form. However, this file is a printable .PDF that is easily printed from your computer. The most recent version is available as a .PDF download from our website which you may access at any time. If you would like a free copy on CD feel free to call. Gun Safety is our main focus and it should be yours. It is incumbent on you, the owner and user, to practice safe gun handling habits. Please adhere to the traditional four LAWS OF GUN SAFETY:

- 1. The gun is ALWAYS loaded
- 2. NEVER point a gun at anything you are not prepared to destroy.
- 3. ALWAYS be sure of your target and what is behind it.
- 4. ALWAYS Keep your finger off the trigger until your sights are on the target.

More Safety Rules:

- ALWAYS wear quality ear and eye protection.
- NEVER accept a pistol from another party until you are *absolutely certain* it is unloaded.
- ALWAYS hand a pistol to another party with the magazine removed, chamber clear and slide locked back.
- NEVER point a gun at anyone. Even with the slide locked back. Always be conscious of the muzzle.
- NEVER handle a firearm if you are under the influence of drugs or alcohol.
- ALWAYS check with your doctor for clearance if you are on any medication that may impede your judgment before firing a weapon.
- Firing at hard targets such as steel plates, water, rocks etc. can result in ricochets and bodily injury.
- NEVER carry a firearm in an insecure holster.
- NEVER leave a weapon unattended.
- NEVER allow any part of your anatomy to be ahead of the muzzle for any reason at any time. Make sure your hands and fingers are well clear of the muzzle and ejection port of the pistol at all times.

## Introduction

Pistol Dynamics handguns are self-loading pistols based on the Browning designed locked breech system. Although some of our models deviate from the original 1911 design in certain aspects, the basic function and operating method is the same as it has been for the last 100 years. The fundamental difference between production versions of the 1911 and the Pistol Dynamics platform is that our guns are enhanced for purpose specific needs and hand built to exacting tolerances.

Please refer to the schematic on page 6 for an explanation of the design of Pistol Dynamics handguns as they pertain to the nomenclature we use to describe controls, feature sets and other important visual, ergonomic and cosmetic aspects of the pistol system. Please note that the firearms industry at large does not adhere to a standard with regards to the nomenclature applied to the controls or features of handguns in general. You may know certain features and controls by another name; therefore it is important that you familiarize yourself with the schematic on the following page.

Pistol Dynamics handguns are available with both internal an external extractors. The schematic below shows the placing of an external extractor. The internal extractor on Pistol Dynamics handguns is identical to those found on traditional 1911 pistols.

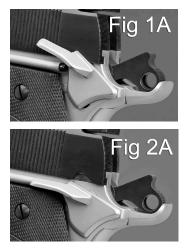


## Controls

Pistol Dynamics Handguns include traditional 1911 control sets. These include a manual thumb safety, active grip safety and slide lock. Although these controls and safeties may have been modified in ergonomic design to facilitate ease of use, the function and action of the features have not been altered from the original 1911 design.

#### Manual Thumb Safety:

The Manual Thumb Safety on Pistol Dynamics handguns may be single sided or ambidextrous. In both cases the safety should be in the up position to be engaged and active (Fig 1A) and down i.e. parallel to the plunger housing when disengaged (Fig 2A). Note: The safety cannot be applied unless the hammer is cocked. If the hammer is cocked and the safety is not in the upward position and engaged in the safety recess of the slide, the



pistol could be fired if the trigger is pressed. The safety paddle is enhanced to facilitate ease of use and positive engagement and disengagement.



ALWAYS make sure that your finger is out of the trigger guard until you are committed to engage an identified target and the sights are on that target. Be aware of everything in proximity of the target especially that which is behind the intended target. Remember, there is no calling back or redirecting a fired projectile

#### Grip Safety:

The grip safety interrupts the path of the trigger and prevents disengagement of the sear. The grip safety is active while the pistol is NOT being held by the grip in a ready to fire position. A solid and controlled grip on the pistol with the shooting hand is required to deactivate the grip safety and allow the pistol to be fired.



#### Slide Stop/Lock:

The Slide Stop/Lock is a functional safety. In order to show the pistol clear and safe for inspection, or hand off to another party, the muzzle must be pointing in a safe direction at all times. The magazine must be removed



and the slide manipulated by hand to cause a full cycle of the mechanism. This should eject any live round in the chamber. The slide should be manually locked back on the slide stop notch (Fig 3A) and a visual inspection of the chamber from the breech end should confirm that the chamber is empty.



## NEVER look down the muzzle of a firearm.

The slide stop will activate after the last round is fired with a magazine inserted. Continually and/or excessively running the pistol to a slide lock condition will accelerate wear on the slide stop notch and may cause the slide to fail to lock back on the last round over time. A worn magazine follower could also cause this condition. In either case, immediate service of the firearm is required.

#### Half-Cock Notch:

The hammer half cock notch is designed to interrupt the travel of the hammer to the firing pin should the hammer be jarred from the sear for any reason. It is essential that this safety feature remain functional. Have your pistol inspected for safety at any time it has been dropped or damaged in any way. Also, an annual safety inspection of your handgun is recommended. We offer this service at no charge except for shipping, insurance and handling to and from our facility.

#### **Disconnector:**

The disconnector is an internal safety that interrupts the connection between the trigger and sear and activates at the point at which the slide begins its rearward movement when manually manipulated or during a firing cycle. It deactivates when the slide returns to full battery. If the slide is not fully in battery for any reason the trigger mechanism will be disengaged.



If the slide is not fully forward after a normal operating cycle, do not hit the back of the slide in an attempt to seat a round. Manually eject the round and inspect it for damage. Do not attempt to fire a damaged or deformed round. Do not strike any part of the pistol in an attempt to dislodge a stuck live round or fired case. Seek professional assistance if your pistol becomes inoperable for any reason or if you have any reason to believe that there might be a mechanical issue with the unit.

#### Trigger Finger:

Your trigger finger is the most important safety with respect to gun handling. Make sure that your finger is out of the trigger guard and away from the trigger at all times. Only place your finger on the trigger when sights are aligned with an identified target and you are ready to fire the pistol.

#### Grips:

Most Pistol Dynamics handguns are delivered with a particular micarta grip set. Besides being designed specifically for our pistols to ensure enhanced ergonomics and maximum compatibility with our integral magazine wells, the material was carefully selected to optimize safety should an ammunition malfunction take place.



Ammunition malfunctions are rare with good quality production ammunition. Most 'over pressure' ammunition related failures are more common with hand loads and remanufactured ammunition.



Pistol Dynamics specifically recommends against the use of hand loaded or re-manufactured ammunition.

## Loading and Firing

#### **NEVER** lock the slide back on the slide stop notch, drop a live round in the chamber and release the slide stop in order to charge the pistol.



Charging the chamber of any firearm requires concentration and attention. The majority of unintentional discharges take place when pistols are being chambered, reloaded or unloaded; therefore, the proper safe method of accomplishing this action should be practiced and adhered to at all times.

#### Magazine Charging:

Before loading your firearm, make sure that the magazine is charged with the correct caliber ammunition for the pistol. Use only quality factory ammunition manufactured by a reputable company. Make sure that the ammunition is correctly oriented in



the magazine per the image above right. Do not attempt to load more ammunition than the magazine is designed to accept.



The amount of free travel in a magazine once fully charged is essential to efficient seating in the firearm with the slide in battery.



When storing charged magazines for extended periods of time, reduce the capacity of the unit by one round in order to minimize the pressure on the magazine spring. Top off before use if necessary.

#### Chambering a Round:

#### **Only chamber a round in a safe environment with the** *muzzle pointing in a safe direction. Never charge a chamber (load a pistol) with your hands or fingers near the muzzle, in the trigger guard or covering any part of the ejection port.*

In order to safely load your pistol, make sure that the firearm is securely held in your shooting hand with trigger finger out of the trigger guard and muzzle pointed in a safe direction.

- 1. With the slide in battery, insert a charged magazine and seat it with enough energy to properly engage the magazine catch.
- 2. Referring to image sequence 1-3 of Fig 4A below, cup your non-shooting hand over the cocking serration on the rear of the slide making sure to stay clear of the ejection port. Do not cover the ejection port with any part of your hand or body. With a solid grip on the gun (1) perform a rapid cycle of the slide releasing it by letting it slip out of your grasp as it reaches full compression of the recoil spring (2). This is called the 'slingshot' method. This action will ensure a positive feeding of a round from the magazine into the chamber (3).
- 3. Immediately following the charging sequence engage the safety until you are on target and committed to fire.



Fig 4A

After the last round is fired from the magazine, the slide will be in a locked back position. To reload from this condition, eject the spent magazine, insert a fully charged magazine and perform the same 'slingshot' action from the slide lock position. The slide travel will be much shorter and will require less effort to chamber the round, however, the technique is identical to the 'slide in battery' method.

#### Trigger:

The 1911 is a single action pistol. The trigger travel to sear letoff is substantially shorter, and generally lighter, than other trigger systems found on many self-loading pistols. It is important to familiarize yourself with the action of the trigger of each individual unit before attempting to fire live ammunition. It is equally important to make sure during the entire handling sequence that the muzzle is pointed in a safe direction and that your finger is out of the trigger guard until the pistol is aligned with the target.

#### Dry Firing:

Dry firing is an acceptable method of familiarizing yourself with the pistol and controls; however the practice should be performed in the same safe environment that is appropriate for live fire. Always be cognizant of what would happen if the pistol *was* loaded while dry firing and what the path of the bullet would be if an unintentional discharge did take place. Dry firing has limited return but is useful for learning the action of the pistol and developing correct grip and sight alignment techniques, etc. When setting up to dry-fire, make sure that there is no live ammunition in the proximity of the weapon or in easy reach. Always use colored dummy rounds in the magazine when practicing loading, chambering and firing technique. Do not dryfire the pistol without a dummy round in the chamber and make sure you point the pistol at an acceptable live fire target just in case 'gremlins' load your gun when you're not looking.



"I thought the gun was unloaded!" is <u>NEVER</u> an excuse for an unintentional discharge

#### Gripping the Pistol Dynamics 1911:

The Pistol Dynamics 1911 is an advanced ergonomic variant of the original Browning design and is configured for the 'highhold' method of grip. The grip angle of most of our pistols is a negative two degrees off original to enhance sight alignment. The high-hold technique is intended to maximize a one-hand hold for practical and tactical applications. We as practical shooters cannot rely on being able to have both hands on the pistol at all times. A correct high-hold maximizes the grip and control of the weapon by mechanically anchoring the weapon in the hand and forcing the bore axis, and therefore the sight plane, as low in the shooting hand as possible. Unfortunately, not all shooters are built the same and some individuals may not be

comfortable with locking the thumb on top of the safety while firing. Pistol Dynamics handguns are also compatible with most low-hold grip techniques.

The optimum grip on the PD 1911 requires the muzzle to be in line with the forearm axis of the shooting hand (Fig 5A). A highhold grip is accomplished by positioning the pistol in a coaxial orientation with the forearm and then locking in the grip with the



thumb on top of the manual safety. This multi-point grip anchoring method allows the shooter to be in total control of the weapon with the shooting hand while disengaging the trigger finger from the rest of the grip to afford consistent and controlled trigger manipulation.

To apply a two-hand grip utilizing the support hand, wrap the non-shooting hand around the grip of the pistol (image sequence Fig 6A) with the thumb of that hand tucked under, but parallel to, the thumb of the shooting hand. The thumbs should be pointing in the direction of the target. This will help with efficient sight/target alignment. The palm of the support hand should be in contact with the weak side grip panel of the pistol. At this point you should be covering almost all of the grip surfaces of the pistol with some part of both hands. Grip the pistol with a firm equal pressure with both hands ensuring that your trigger finger is relaxed and free to manipulate the trigger in a positive and controlled manner. Do not apply lateral pressure to the slide with the thumb of your shooting hand. This could cause a restriction to the action of the slide and lead to short cycles of the handgun and potential malfunction. Be sure to positively disengage the grip safety or the pistol will not fire.



Fig 6A

The high hold method is somewhat of an advanced grip method and should be developed and adjusted to suit your physical make up. If you are unable to comfortably hold and or control the pistol with the high hold method it would be prudent to revert to a low hold (thumb of shooting hand under safety) in order to control the weapon.

#### Firing the Pistol:

Make sure you have positive control of the weapon and that you have an unobstructed and clear view of the target. Only disengage the safety and place your finger on the trigger when the sights are aligned with the target. Never squeeze the trigger with the manual safety engaged. Once you start applying pressure to the trigger there will be a definitive take-up of pretravel before the sear is reached. This is a pre-travel zone in which it is relatively safe for you to back off the trigger should you decide not to fire. Once the second stage of the trigger is reached and you feel positive resistance from the sear you must assume that the shot will break. When the pistol fires, the selfloading mode will operate the firearm allowing you to reset the trigger for follow-up shots. When you have completed a string of fire that has not expended all rounds in the magazine and the slide is not locked back, the manual safety should be activated and the firearm secured (i.e. holstered). If the pistol is to be placed on a shooting bench (e.g. a controlled range environment) it should be unloaded and locked back on the slide stop notch with the muzzle pointing down range.



It is imperative that you stay in tune with your handgun. If you, for any reason, feel that the pistol did not function properly or if there is any sign of an ammunition malfunction such as a light load (squib), or over pressure load, stop and inspect the firearm immediately. If you suspect that you have a barrel obstruction, do not look down the muzzle of the firearm. Lock the slide back on the slide stop and run a dowel or cleaning rod down the muzzle to detect any obstruction. If there is any indication of a potential weapon or ammunition abnormality seek professional technical assistance immediately. Do not attempt any mechanical procedure on your firearm that you are not qualified to perform and do not attempt to fire the pistol until you have determined that all possible maladies have been identified and cleared.

#### Unloading:

In order to unload and make your pistol 'safe', the muzzle must be pointed in a safe direction with your finger out of the trigger guard.

- 1. Remove the magazine by pressing the magazine catch. (Avoid dropping a fully charged magazine on a hard surface).
- Referring once again to Fig 4A, cup your hand over the rear cocking serrations and draw the slide to its full rearward position but do not release the slide i.e. Do not 'slingshot' it. A live round should be ejected at this point.
- 3. While holding the slide in its rearward position, engage the slide stop by pushing it up and into the slide stop recess in the slide with the thumb of your shooting hand. The slide will be locked back at this point and a clear view of the chamber will be apparent.
- 4. Check to make sure that there is no round or case in the chamber and that the pistol is unloaded and safe.



If you have difficulty locking the slide back with the above method you can insert an empty magazine (after making sure the gun is unloaded) and draw the slide back to its full rearward position. The slide stop will engage and the slide will stay open.



Never cover the ejection port with your hand or eject a live round into your hand as part of an unloading sequence. Always holster or secure your weapon before bending down to recover ejected rounds or magazines from the ground.

## **Care and Maintenance**

All maintenance, cleaning and inspection of your pistol should be carried out in a quiet environment away from all distractions and anyone else who is not required to be present for the procedure (especially under-aged children).

Use safety eyewear and have all tools and cleaning equipment at hand. When you start any maintenance procedure on your firearm make sure you have time to complete it.



Only clean one weapon at a time. Make sure that all ammunition and magazines are safely stored in an area away from your work surface and out of easy reach.



Keep all weapons, ammunition, tools and cleaning materials out of the reach of children.



**NEVER** leave a firearm unattended under any circumstances.

#### Cleaning:

Cleaning your pistol can be as simple as field stripping the unit and wiping it down with shop towels. It is not necessary to clean the pistol after every firing, 300-500 rounds of normal range use should be sufficient.

Do not over-oil the pistol. Apply a couple of drops on each rail, barrel bushing, exterior of the chamber and the base of the hammer is sufficient. Oil the pistol after every 200 rounds of use with jacketed ammunition or when it is apparent that lubrication has burned off.

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NEVER oil magazines. Magazines should be kept absolutely dry of lubricant. If you drop a magazine in soft sand and it becomes contaminated, do not use the magazine until you have the opportunity to clean it.

If you plan to store the pistol for a long period of time make sure all surfaces are lightly oiled and the unit is safely stored in dehumidified environment. A safe with a Golden Rod is recommended.

We build guns with both internal and external extractors. Never attempt to remove an external extractor from the slide. External extractors are factory set and do not require user maintenance. Internal extractors should also be left in place and only removed for cleaning on rare occasions.

## Make sure the firearm is free of a magazine and is <u>actually</u> unloaded.



**Strong or Shooting Hand: -** For the purpose of this document, the strong or shooting hand is the one you use when firing the pistol under normal conditions. (About 90% of the population is right handed and this is their strong hand). If you are left handed and fire the pistol under normal circumstances with that hand, your left hand is then considered to be your strong hand.)

1. Remove the magazine and lock the slide back on the slide stop notch. From the chamber end, visually check to make sure there is no round in the chamber.



2. If the pistol has a full-length guide rod, place a 5/16 hex wrench in the front of the guide rod and loosen the guide extension by rotating the wrench counter clockwise. (Fig 1B)

> Always be sure to have the slide in the locked back position before removing or replacing the guide rod extension. Failure to do this could cause the rear of the guide rod to wedge under the barrel during this process and render the handgun inoperable. If this happens do not attempt to rectify this situation without first calling Pistol Dynamics for guidance.

3. Release the slide off the slide stop notch. Do not allow the slide to slam home. Assist the slide into battery with

resistance from your weak hand. *Never drop a slide from a slide lock position or slingshot a slide on an empty chamber.* 

4. Make sure the muzzle is pointing in a safe direction. Using the bushing wrench provided, place it over the bushing and anchor it in place with the thumb of your weak hand while simultaneously



applying resistance to the recoil spring plug with your strong hand. This will depress the recoil spring plug and allow rotation of the bushing. Rotate the bushing clockwise until it stops (Fig 2B).

5. Gently release pressure from the wrench while maintaining control of the recoil spring plug with your weak hand as it

separates from the slide through the spring tunnel (Fig 3B). Be aware that the recoil spring plug (cap) is under stiff spring pressure and requires concentrated effort to prevent the part from being launched.



Losing control of the recoil spring plug under pressure could cause the spring plug to be dislodged and consequently launched at a rate capable of injuring an individual or damaging property. Make sure the muzzle is pointing in a safe direction.

- 6. Place the recoil spring plug aside. At this point do not remove the recoil spring from the pistol.
- 7. Move the slide rearward until the slide stop cam meets with the stripping notch on the



slide (Fig 4B). Depress the slide stop protrusion on the right side of the pistol and remove the slide stop.

- 8. Holding the pistol up side down, separate the slide and the frame (Fig 5B). Put the frame aside.
- 9. Remove the spring guide and recoil spring from the slide as a unit and place it to the side.



- 10. Using the bushing wrench provided (if necessary) rotate the bushing counter clockwise until the keyway of the bushing aligns with the opening of the slide.
- 11. If the bushing is too snug to remove by hand, bring the barrel forward until it makes contact with the bushing and use the barrel to gently tap the bushing until it clears the slide. Place the barrel and bushing to the side.



It is not necessary to remove the grips for every cleaning cycle. Once in a while is sufficient.



The procedure to this point (short of removing the grips) is called a 'field strip' and should be the furthest that you disassemble your pistol for any reason. Pistol Dynamics, or a trained and qualified gunsmith who has graduated from a Pistol Dynamics armorer's course should perform any further disassembly.



Do not attempt to remove the extractor mechanism. Do not attempt to remove any part of the firing mechanism or ignition system.

## **Disassembly - Reverse Plug Models**

Some Pistol Dynamics handguns feature reverse recoil spring plugs. These include all bull barrel models such as the XO and Revolution Compensator models. There is no removable barrel bushing on these handguns. In order to disassemble a pistol with a reverse plug, ensure that the unit is unloaded i.e. free of a magazine and chamber clear of a round of ammunition.

- With your right hand trap the slide in a rearward position as shown in Fig 1X so that the slide stop recess of the slide is aligned with the slide stop cam.
- 2. Remove the slide stop while placing the thumb of your left hand over the spring and guide as shown in Fig 2X. This will prevent the spring and guide from dislodging. Remove the slide from the frame. At this point remove the spring and guide from the slide.
- 3. Remove the reverse recoil spring plug through the rear of the spring tunnel in the slide (Fig 3X). The barrel can then be removed from the slide.

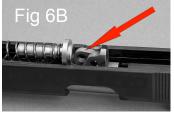






Re-assembly is essentially the reverse of the disassembly procedure.

- 1. Place the bushing on the barrel.
- 2. Insert the barrel in the slide and align the locking key of the bushing with the channel between the recoil spring tunnel and barrel tunnel. Once the barrel bushing is flush to the face of the slide, rotate the bushing clockwise until it stops.
- 3. Seat the barrel all the way into the slide making sure that the headspace extension hood of the barrel is seated in the hood keyway of the slide.
- 4. Place the slide/barrel/bushing assembly on a soft cloth upside down on the sights and feed the recoil spring and guide rod assemblies through the spring tunnel from the barrel link side.



- 5. The relationship between the link and the guide rod assembly should resemble Fig 6B.
- 6. Engage the rails of the slide and receiver assemblies and slide the receiver all the way until it stops.
- 7. Lift the unit off the table and holding it with the right hand insert the slide stop pin in the frame so that it engages the



barrel link (Fig 7B) and comes in contact with the slide stop plunger.

- 8. Referring to Fig 8B align the cam of the slide stop with the stripping notch in the slide.
- 9. Place the left thumb directly over the pin section of the slide stop and the thumb of



the right hand on the cam section of the slide stop (Fig 9B).

10. Simultaneously seat the pin of the slide stop with the left hand by applying an equal amount of inward and



upward pressure on the cam area of the slide stop to seat the unit. The slide stop should snap into position. It should never be forced or hit with anything. If the slide stop will not seat you can use a small wooden dowel or commercial 'widget' to depress the slide stop spring plunger.

- 11. Re-insert the recoil spring plug and barrel bushing in the reverse order of initial disassembly as described in steps 4 and 5 of page 21.
- 12. Manipulate the slide and controls to ensure proper function. Ensure that the guide rod is seated correctly and that slide stop engages properly. Also be sure to test the function of trigger mechanism and manual safety. The pistol should be function fired in a controlled range environment before being put into service after being disassembled.

## **Reassembly - Reverse Plug Models**

Reassembly of pistols with reverse recoil spring plugs is essentially the reverse of the disassembly procedure. However, the method by which to secure the recoil spring and guide rod in the slide prior to mating the slide and frame is important. Place the barrel in the slide and fully seat it so that the headspace extension hood is mated with the slide key-way.

- 1. Insert the reverse recoil spring plug and fully seat it in the spring tunnel of the slide.
- 2. Insert the open end of the spring and guide rod assembly into the recoil plug. This will secure the front end of the recoil spring.
- 3. Referring to Fig 4X make a bow of the spring and locate the rear of the guide rod just forward of the barrel legs.
- Press down with the thumb of your left hand and secure the recoil system as shown in Fig 5X. The slide can now be mated with the frame and the spring released once the guide rod is held within the confines of the frame dust cover.
- Fig 4x



5. Utilizing a grip similar to Fig 6X, mate the slide and frame until they bottom out and ensure that the barrel link and legs are visible through the slide stop tunnel and reinsert the slide stop.

### Compensators

Pistol Dynamics compensated handguns such as the 'Revolution' models have reverse plug/bull barrel systems and should be field stripped and assembled per the instructions pertaining to that system on page 20 with reference to extended guide rods on page

23. It is essential that no effort be made to remove the compensator housing from the barrel under any circumstances. While the compensator housings are removable for port adjustment and crush ring setting; special tools, equipment, and training are



required to perform these tasks and only Pistol Dynamics or authorized service technician should attempt the procedure.

#### **Fixed Sights:**

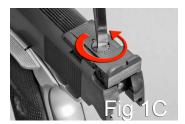
The fixed sights on your Pistol Dynamics handgun are regulated to point of aim/point of impact (POA/POI) at 18yards. This relates to the target being potentially covered at 10 yards when using a front sight with an insert such as a gold bead or fiber optic insert. To impact the center of a one-inch circle at 10yards, place the bead or front sight post in the geometric center of the circle.

In the event that you find that the sights do not impact correctly relative to your shooting style or as set from the factory, the rear sight can be drifted left and right within the rear dovetail to set windage. The front sight can be interchanged with a higher or lower unit to affect elevation. We strongly recommend that a professional gunsmith experienced with the Pistol Dynamics system perform these operations.

We recommend that you spend some time familiarizing yourself with any new firearm before rushing into adjusting sights. It is entirely likely that over time the POA/POI will shift as you become more acquainted with the trigger and recoil pattern of the handgun. Some right-handed shooters may experience a low and left bullet impact at first; as would a left handed shooter experience a low and right impact. This is usually a trigger control issue that will often resolve itself over time with proper practice.

#### Adjustable Sights:

The adjustable rear sights installed on some Pistol Dynamics handguns have two adjustment screws. Elevation is adjusted by rotating the vertical slot screw on the upper deck of the sight as



shown in Fig 1C. Windage adjustment is performed by rotating the screw on the right side of the body of the sight as shown in Fig 2C. If the bullet impact is lower than desired the vertical adjustment screw should



be rotated to the left (raised) and vice-versa. If the impact is left of center the horizontal adjustment screw should be rotated to the right and vice-versa. Always remember that in order to shoot higher or lower, left or right, the sight should be moved in that direction to gain the desired result.

### **Electronic Mini-Sights**



Pistol Dynamics installs variations of mini electronic sights the footprint of which includes the J-Point, Trijicon, FirePoint, Optima 2000 etc. We have supplied adjustment information below courtesy of one of the manufacturers that pertains to many of these sights. However, please refer to the appropriate instruction manual supplied with the particular sight installed on your firearm.

#### Adjustment:

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#### Always make sure that the gun is unloaded and the chamber is clear before any adjustments are made. Always be sure of your backstop.

In general these sights have an adjustment range of 25 inches (650mm) in windage and elevation at 20 yards (18 Meters). This is given by one full turn of the adjustment key in either direction. The supplied Micro-dial is in increments of one division each producing 1/4-inch (6.3mm) movement of the dot at 20 yards.

#### The dot is always adjusted towards the point of impact

Adjustment can be made to windage and elevation using the socket wrench supplied in conjunction with the Mini-dial. To use the dial, push the long arm of the socket wrench through the hole in the centre of the dial, with dial facing towards you. Using the short end of the socket wrench, protruding from the back of the Mini-dial, turn the right side screw clockwise, this moves the dot in the direction of the arrow indicated on the Mini-dial. Move dot left by clockwise rotation of the socket screw; move dot right by counter clockwise rotation of same screw. Move the dot **down** with a clockwise rotation of the top adjustment screw; move the **dot up** with an anti-clockwise rotation of same screw. **DO NOT force adjustment in either direction once resistance** is felt as this will damage the body. The left side sealed screw is used to set up the spring load of the adjustment system and will not require adjustment. The adjustment Allen wrench can be conveniently stored and carried in the slot in the stem of the Mini-dial. Remember -Always move the dot towards the point of impact, so if a group shot is high and right of the center of the target, move the dot up and to the right to regulate the sight.

There are certain compatibility considerations that may affect the function of your Pistol Dynamics firearm:

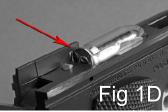
#### Ammunition:

Pistol Dynamics handguns are precise instruments designed for use with quality factory ammunition produced to SAAMI specification. Pistol Dynamics guns are not produced to compensate for out of specification, reloaded or re-manufactured ammunition. While it is likely that our pistols will function with most well made reloads and re-manufactured ammunition, we do not guarantee this.

#### Magazines:

Magazines are an integral part of the functional reliability of a pistol system. Magazines are a major variable that should be considered seriously. We have identified the best magazines for our pistols and strongly recommend that magazines of the same type and manufacture as those delivered with the pistol be used. Poor quality or incompatible magazines should be avoided.

Pistol Dynamics full size 45 caliber handguns are delivered with Wilson Government 8 round magazines (47D Series). Wilson and some other companies also produce magazines that are designed to



sit higher in the magazine well to compensate for frames in common use that do not meet traditional 1911 part print. The Wilson Elite Tactical 45 ACP magazine, while being a very fine product, has been identified to be potentially incompatible with certain Pistol Dynamics handguns. This magazine and other high seating units, could impact the ejector on insertion (Fig 1D). This may cause damage to the ejector over time, and in extreme cases, could result in ejector deformation and malfunctions occurring. A visual inspection is required when fitting new or previously unused magazines in your pistol. If the magazine, and/or the ammunition in the magazine, press against the ejector after seating, refrain from using that magazine until it is determined if it is usable or not.

The magazine, when seated, should produce a definitive space between the magazine and the ejector at full penetration (Fig 2D). This indicates a compatible magazine with respect to positioning



within the magazine well. The importance of this is driven by the fact that the most recent training methods and rules in IDPA, etc. force shooters to constantly run their guns to slide lock before reloading. This technique of reloading on an open slide leads to the potential of a magazine over penetrating and striking the ejector causing the extension of the ejector to be damaged. Further, some magazines may not be compatible with competition style belled magazine wells such as produced by Pistol Dynamics and other companies. The base pads of these magazines do not have a long enough over travel stop on the magazine base to engage the corresponding recess of the mag well to prevent over penetration of the magazine.

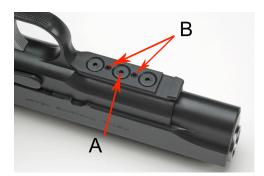


Running your pistol to slide lock over extended periods of time could result in the slide stop notch becoming deformed and failures to lock back could result.

#### **Recoil-Springs:**

We use the highest quality spring sets in our pistols. Depending on caliber and barrel length the recoil spring in your Pistol Dynamics handgun should last for many thousands of rounds. The actual life span in terms of round count depends on caliber, the length of the slide/barrel and the number of coils per inch. Fewer coils may result in shorter than expected lifespan of the spring. We include a spring card with our firearms so that you can duplicate the recoil spring should you need to. Be sure to count the coils of the spring in the pistol and trim to that number should a new spring be required.

## Light Rail



Our light rail of choice is a Dawson based unit permanently affixed to the dust cover of the receiver. The three screws (A) are anchor screws that are welded in place and no attempt should be made to remove or tighten these crews. The two remaining screws (B) are rail-tensioning screws that should only be cinched up with an appropriate Allen wrench if the rail should loosen over time. We have found that although the unit is permanently affixed and welded in place, extended use can cause the main screw sockets to wear and the rail may loosen slightly over time. The action of apposing mechanical force applied by the tensioning screws will compensate for this slight wear and will keep the rail (and attached light) rigidly secured.

## Service

#### Service:

As with all fine instruments, proper maintenance is essential to the continuous safe functioning of your custom or performance handgun. Pistol Dynamics offers free safety checks and inspections on an annual basis. Shipping and insurance of firearms to and from our facility is not included in this service. In order to take advantage of our inspection service, please contact us prior to shipping your weapon.

#### Note:

Any firearm returned to Pistol Dynamics for the aforementioned safety inspection that is found to be out of factory specification because of alteration by an unauthorized third party will be returned to factory specification at the expense of the shipper. {Note: Examples of said alterations would include, but not be limited to, the addition/use of non approved parts, springs, buffers, etc. and/or any item(s) that could affect the operation of the pistol slide.} **Legal Disclaimer:** Handling and using firearms can be a dangerous activity. Those individuals who choose to own, handle and use firearms *assume all risks and liability for their actions.* \_Pistol Dynamics, its subsidiaries, its officers or assigns, are not responsible for any personal injury or property loss resulting from the use of any products designed, distributed, or sold by Pistol Dynamics or any of its subsidiaries.

**Warranties:** Pistol Dynamics products are custom built items. They are not mass-produced and therefore, there are no warranties or guarantees (either expressed or implied) aside from the conventional warranties of fitness and merchantability.

**Intellectual Property:** All Copyrights and Intellectual Property developed and held by Pistol Dynamics and its related entities is the exclusive property of Pistol Dynamics and shall not be duplicated or used in any way without the express written consent of an authorized Pistol Dynamics Officer.