

DLS Inc REVOLVER SIGHTS AND GEAR INFORMATION

CAUTION: Do not proceed with gunsmithing projects unless you possess the skills, knowledge and tools to do so. Wear eye protection ! Obtain assistance from a qualified gunsmith if you are unfamiliar with gunsmithing. Completely unload all firearms before work, and remove all live ammunition from your work area.

Be sure to only use precisely fitting screwdrivers and bits or you WILL burr your screws. Mask off all areas on the firearm that may be scratched before beginning your work. You must use the correct size punches when removing cross pins. Make sure the punch is smaller than the size of the cross pin hole or you will wedge the punch in place. DO NOT use high strength, or excessive loctite or you will bind up the workings of your revolver.

Adding DLS hard-use fixed sights to your revolver will allow for a greatly improved sight picture and snag free sight durability for your revolver. These fixed sights can be 'adjusted' into an exact zero, but not with a conventional screwdriver. Once a proper zero is achieved with your preferred ammo and at your preferred distance, you can be assured these sights will not lose that zero.

S&W REVOLVER SIGHTS:

D&L Sports inc. offers two sizes of rear sights for S&W revolvers. The larger size is compatible with K,L, N, X frame revolvers. These sights are available in a square notch, or a broader, faster to acquire U notch. These sights commonly fit the three screw pattern drilled and tapped in the top straps of modern revolvers by the S&W factory. To see if you have this three hole pattern in your top strap simply open the cylinder and look on the underside of the top strap. You will probably see three threaded holes coming through the underside of the top strap. On older revolvers (more than 30 years old) they may not have this three screw hole pattern in place. In most cases the DLS products for S&W revolvers will still fit and work in older revolvers, but your gunsmith will have to correctly drill and tap the required three 6-48 screw holes.

The smaller size DLS S&W revolver sights are commonly used for J frames, or custom projects. If your J frame already has factory adjustable sights, the fitting requirement is minimal, but a J frame three hole pattern will have to be drilled and tapped. If your J frame is a fixed sighted model, the DLS rear sight will have to be expertly machined into place, and into proper zero. Some J frames feature pin on front sights from the factory. These sights can be replaced with front pin on front sights of the correct dimensions to achieve a proper zero with the rear DLS sight. J frames with integral front sights require precision machine work for the sights to be replaced and zeroed.

Improved ramp or post front sights with black serrations, fiber optic, gold bead, and night inserts with or without colored rings can all be added to custom sight projects. The U notch in the rear sight provides a superior sight picture with round beads and inserts on the front sight because you can nest the round image on the front sight in the U notch of the rear sight. It allows for very quick sight alignment.

CAUTION - SIGHT SCREWS:

Generally speaking, the screw thread pitch used with DLS S&W sights is 6-48. However, revolver top straps can vary in thickness. You should ALWAYS open the cylinder before test fitting the screws for

proper LENGTH. Failure to do so may cause the screw to protrude through the top strap and make contact with the revolver cylinder and scratch same. The screws that come with your sight will be the proper length for most applications and will not protrude beyond the bottom of the top strap. However, take the above precaution just to be sure. In some cases the screws may have to be slightly shortened. The screw tips can then be blackened with cold blue if required.

FITTING REAR SIGHT TO THE TOP STRAP:

In most cases all you have to do to remove the factory adjustable rear sight is remove the FRONT hold down screw. Once this is done, the entire adjustable sight should slide out the rear of the top strap of the revolver. The new DLS sight tang should slide into the top strap track. However, there are occasional variations in the width of the top strap track. If the tang does not slide into the track and sit flush with the bottom of the track, you may have a revolver with a slightly narrow track. In this case, measure your track and the DLS sight tang. In some cases you may have to narrow the sight tang by .001-.002" to get the tang to fit the track. Once this is done, try to slide the DLS sight all the way into place. The hold down lug on the underside of the DLS sight, under the notch area of the sight, should fit the semi circle recess cut into the top rear of the S&W revolver's top strap frame area. If it is a snug fit, you may need to put a drop of oil on the hold down lug, then hold the sight in proper alignment while lightly tapping the sight completely into place with a small RUBBER hammer. Take care not to damage the sight serrations. Do not use excessive force. If the sight will not move into place with light taps, remove the sight and check for any interference marks on the underside of the sight. If there are any drag points, dress them down with a small file until the sight will move into place. Once the sight is in place, the three screw holes should line up. Test fit the screws for length, with the revolver cylinder OPEN before loctiting the screws into place with low to medium strength #222 or #242 loctite, or vibra-tight VC-3. Before loctiting in place, check to see how the rear of the DLS sight matches with the rear of the revolver frame. Revolver frames can vary in shelf size where the rear portion of the DLS sits on the frame. If you have excessive sight overhang of the rear of the frame you can use a 90 degree scribe and make a scribe line on the underside of the sight's overhang. Then the sight can be sanded into a contour that perfectly matches the revolver frame, then refinished. (see photo examples at www.DLSPORTS.com).

FRONT SIGHTS

S&W front revolver sights most often come in one of five designs: Pin on, integral, cross dovetail, DX style spring plunger retained, and the D&L interchangeable front revolver sight system. The DLS system includes a base and interchangeable front sight blades that are lock screwed into the base. The DLS system allows easy change of zero, while retaining the durability of fixed sights.

Caution needs to be used with the cross dovetail and plunger retained sights. Cross dovetail sights can loosen over time and shift their position. This can drastically throw off the zero of the revolver. They need to be tightly dovetailed in place, then pinned or screw retained into position once they are zeroed. Plunger retained front sights can be lost out of the revolver, especially when re-holstering. If the front of the front sight catches on the top holster lip the sight can be pushed out of the retention slot. After zeroing, plunger sights should be pinned in place to assure this does not happen.

S&W factory front sights are commonly cross pinned in place. If you have this style of front sight you

will be able to see a tiny cross pin head under the front sight blade. A tiny cup tip punch is best used to remove this pin. Great care must be used to avoid scratching your gun. Once the pin is out, if the sight is still held tightly in place you can use smooth, protected vise jaws to rotate the sight out of place. Grip the sight blade with the smooth, protected vise jaws, then rotate the upside down revolver frame upward to remove the sight.

When the sight is out of the recess, test fit mini drill bits through the cross pin hole in the barrel to assure you have the perfect drill bit size for the cross pin. (cross pins and holes do vary in size). Make sure the sight recess is completely clean before installing the correct height front sight for proper zero. The underside half moon section of the front sight is commonly a snug fit into the barrel's recess. In some cases, .001" may need to be shaved off the side of the half moon to get it to fit down into the barrel's recess. Once the sight is fully seated in the recess you will need to install the cross pin. Having a skilled machinist and or gunsmith is the safest way to put the cross pin hole in. If you are going to do it with a hand drill, the most effective way is to drill half way through from one side and half way through from the opposite side. This way you can keep the pin hole straight and meet in the middle. Take great care not to enlarge the pin through holes already in place in the barrel or otherwise damage your revolver.

ZEROING YOUR REVOLVER SIGHTS:

When the sight(s) are first installed, many people find the zero is already correct. However, if the zero is not correct for the distance and load you will be carrying, it is your responsibility to obtain a proper zero. Failure to do so may cause a missed critical shot.

Lowering the front sight will raise the point of impact on target. Raising the front sight will lower the point of impact on target. Moving the rear sight notch to the right will move the point of impact on target to the right. Moving the rear sight notch to the left will move the point of impact to the left. The same is true whether you are zeroing stand alone iron sights or you are zeroing the integral iron sights on DLS optic mounts. Precision machine work is best suited for making fine adjustments in zero. Consult a gunsmith if you need assistance with zeroing your firearm. Iron sight zeroing must be completed BEFORE you request night inserts be installed in the rear iron sight. This is because the rear notch might have to be precision milled to fine tune your exact zero. This is not possible when the night inserts are already installed. The final notch width of the rear sight can be customized to a shooters requirements. Most commonly notch width range is approximately .125" to .185" wide. The more width the notch has the more light will be on each side of the front sight in the overall sight picture. A wider notch typically means a faster to acquire sight picture.

DLS INTERCHANGEABLE FRONT REVOLVER SIGHT SYSTEM:

If your revolver has been custom fit with a DLS interchangeable front sight system the sight base will be permanently pinned into the barrel rib. The sight base accepts lengthwise dovetail base front sight blades. The pinned base accepts lock screws in both front and rear ends. If the base is already installed in your revolver you will not need to do anything with the lock screw(s) at the rear end of the base. To change sight blades you will only need to remove the one or two lock screws that enter the front end of the sight base. Depending on the length of base used on your revolver there will be one OR two lock screws in the front (muzzle end) of the sight base. If your base uses two lock screws they will both be in the same threaded hole in the front of the sight base, stacked on top of each other. Simply reach into the front threaded hole with an allen key to engage the lock screw and turn counter clockwise to back out the lock screw. Then reach back into the front sight base again to see if you can engage a second

lock screw. If so, back it out. If not, the front sight blade is ready to lift out of the sight base. The front end of the front sight blade will lift up first and the sight will rotate out of the base. There is no need to adjust or alter the lock screws that go in the rear of the sight base at all. The front sight blades can be interchanged and or shaved to adjust point of bullet impact on target. Once this is done, a night insert can be installed into the front sight blade, or various other blades can be installed in the sight base, such as fiber optic or gold bead. DO NOT over loctite the lock screws. Use ONLY a TINY dab of loctite on the tip of a toothpick on the lock screws, and ONLY use low to medium strength #222 or #242 loctite.

DLS REVOLVER OPTIC MOUNTS FOR S&W REVOLVERS:

DLS offers two styles of S&W revolver optic mounts. The both attach to the three hole screw pattern mentioned above. One mount is a mini optic mount for optics with RMR / SRO footprints, and optics that can be adapted to this footprint, like the Holosun EPS model. This mount has close-together integral iron sights. In most cases the iron sights can be used right through the optic windshield. These iron sights will have to be confirmed for zero, and possibly adjusted as described above for a perfect zero with your load. Then the optic should be properly mounted and zeroed according to manufacturer's instructions.

The other DLS optic mount features a rear sight and picatinny rail made as one solid piece of steel. This mount will allow you to mount a wide variety of optics which attach to a picatinny rail. The rail is low to the revolver's top strap, but generally does not allow co-witness of the optic and the revolver's iron sights. Using an optic which detaches when required will allow you to use the revolver's iron sights positioned at their maximum sight radius as the need arises. The iron sights will have to be confirmed for zero as mentioned above.

DLS ENHANCED CYLINDER RELEASE FOR S&W REVOLVERS:

Modern factory S&W revolvers have typically featured one of two different designs of cylinder releases. Both are compact and suitable for general use. However, both designs have sharp edges and commonly require the revolver be substantially shifted in the hand to allow activation of the cylinder release by pushing inward and forward. Substantially shifting the revolver causes time to be wasted and revolver retention to be lessened. Serious shooters always seek to save time and improve performance. Some competition oriented cylinder releases are large enough to allow improved speed, but are so large that they are a concern for daily carry and CCW. They also interfere with the shooter's weak hand thumb cocking the hammer into single action mode when it is proper to do so.

The DLS enhanced cylinder release was designed to improve speed loading by allowing shooters to be able to push the release straight forward without shifting their strong hand's firing grip. With the DLS release, flipping the revolver sideways is no longer required to open the cylinder. One handed cylinder release and opening is possible for urgent situations. The DLS design is also undercut so shooters can avoid cutting their thumb knuckle during recoil, and the release can be further melted / blended for custom projects. The release is well scalloped to allow for moon clip and speed loader use. The release is compact enough in size that it is suitable for CCW, and the compact design still allows weak hand thumb cocking of the hammer when it is proper to do so. The rear face of the release has fine serrations for ample traction, while still not being so sharp that it will cut cover garments. The enhanced release is suitable for duty, daily carry, tactical, hunting and competition use.

For shooters who use a gun safe for revolver security, instead of the revolver key lock, they will benefit from a cylinder release design that covers the key lock recess and minimizes entry of dirt and grit.

(This is not a release design for those who use the revolver's key lock on a regular basis. It is suitable for those who want to use the key lock to disable the revolver, then reattach the release, during times of long term storage).

These cylinder releases are precision machined from stainless steel, and they work well with nearly all revolver grips / stocks, including the PRG revolver grips. Available in matte or polished stainless steel.

Cylinder release installation is simple: remove the slotted cap nut that retains the factory cylinder release and replace it with the DLS enhanced release. Test operation by opening and closing the cylinder and make sure operation is smooth. If you need the latch to push further forward to get smooth cylinder release, fine file off a small amount of material from the front of the oval nub on the rear enhanced cylinder release. ONLY USE A TINY DAB of loctite on the inside threads of the slotted cap nut, applied with a toothpick tip. Use only low to medium strength loctite #222 or #242. Do not use more than a TINY dab or you will bind up the workings of your revolver !

DLS PERFORMCNE REVOLVER GRIPS / STOCKS FOR S&W REVOLVERS:

The DLS PRG grips cure the problem of S&W revolvers pointing high when a revolver shooter uses a locked wrist shooting grip, (like when shooting a 1911 autopistol). The PRG grips allow revolver sight alignment when using a locked wrist hold, and feature a beavertail and front strap finger stop, all while being a slim and compact grip. They also feature a concealed lanyard anchor. (For detailed information and photos see the PRG revolver grip section at www.DLSPORTS.com)

CRANE STOP FOR S&W REVOLVERS:

The DLS crane stop cures the problem of cranes and cylinders dropping out of S&W revolver frames due to loose, damaged or missing crane screws. Shooters need to realize that only the tip of one tiny screw is what retains the crane and cylinder in the S&W revolver when the cylinder is in the open position. Many shooters do not become aware of this issue until the crane and cylinder literally fall out of the front of their revolver frame. (For detailed information see the Crane Stop section at www.DLSPORTS.com).

DLS COLT PYTHON AND ANACONDA SIGHTS (post 2020 models) :

The DLS hard use replacement rear sight for Colt revolvers is designed to completely replace the factory adjustable sight. To remove the adjustable sight simply tap out the retaining cross pin that goes through the sight and the top strap of the revolver, and remove the sight's elevation screw completely. The adjustable rear sight will then lift out of the revolver's top strap.

There are three levels of installation for the DLS Colt sight: single screw, double screw, and double screw and cross pin. The simplest is putting the sight into the revolver's top recess and screwing the sight into place with the included 4-48 retaining screw. Be sure to have the cylinder open when testing the screw for length. Make sure the screw does not protrude through the top strap and into the cylinder window. If it does, the screw will have to be slightly shortened. No need to reinstall the adjustable sight spring when installing the new fixed sight.

Shooters who require more durability from their Colt revolver can have their gunsmith use the tiny pilot hole in the tang of the DLS fixed sight as a guide hole to put in a second screw. 6-48 in size is recommended. Drill through the sight and frame's top strap with the correct tap drill, then remove the sight, tap threads into the frame, and clearance hole and countersink the sight tang. You will then be able to use dual screws to retain the sight in the top strap. Shooters who require ultra durability can also have their gunsmith reinstall the retaining cross pin through the top strap and through the new DLS sight. This pin hole will have to be drilled at exactly the correct location through the sight.

Once the sight is installed, and proper zero is confirmed and or adjusted, the screws can be loctited as described above.

RUGER BLACKHAWK REVOLVER SIGHTS

Ruger Blackhawk adjustable rear sights are a known failure / problem point of the revolver. The heavy duty DLS fixed rear replacement sight solves these issues. To install your new sight: Drift out the cross pin from the top strap of your revolver and rear sight. Then completely remove the elevation screw from the factory adjustable rear sight. The sight will then be free from the revolver. Use caution not to lose the two small coil spring underneath the adjustable sight tang. You will not need these springs during the installation of your new DLS fixed sight. Test fit the DLS fixed sight to your Blackhawk frame top strap recessed channel. In rare cases some minor handfitting may be required. Once the sight fits into the channel and the rear blade portion of the sight is tight against the rear of the frame, use a flashlight to look down into the large screw hole in the sight to check alignment with the threaded screw hole in the top of the revolver frame. In rare cases minor alignment fitting of the sight hole and threaded frame hole may be required. The rear sight can be secured with only a single screw. Or the tiny front pilot hole in the DLS sight tang can be used to install and countersink a second 6-48 screw through the sight tang and thread into the top strap. Or the single rear screw can be supplemented by properly locating and cross drilling the DLS sight tang to accept the factory cross pin. However, two screws AND the cross pin are not possible due to area limitations. The two screw attachment method is most preferred. Degrease the screws and frame threads, and use blue #242 or similar medium strength loctite for final installation.

RUGER BISLEY FLATTOP REVOLVER SIGHTS

Current DLS Ruger Bisley flat top revolver rear sights are short tang sights. The short tang on DLS sights extends approximately 1/2" forward of the primary mounting screw hole. These sights can be single or dual screw secured. Ruger flat top revolvers can also come with a long tang cut in their top straps which extends roughly 3 / 4" forward of the primary mounting screw hole. The D&L Short tang sight will work on these long tang revolvers, but the gap in front of the short tang will need to be cosmetically addressed or a custom long tang sight will have to be fabricated.

RUGER GP100 AND REDHAWK SIGHTS

DLS Ruger GP100 and Redhawk sights can be installed with a single 6-48 screw. Simply remove the factory rear adjustable sight by removing the top strap cross pin and the adjustable rear sight's elevation screw and the sight will lift out of place. Install the DLS rear sight and screw it down with the supplied 6-48 torx screw. Once the zero is confirmed, you can loctite the screw in place with medium strength #222 or #242 loctite. DO NOT use high strength / high temp loctite.

If you want to make your sight installation extra heavy duty you can choose to re-install the cross pin OR have your gunsmith use the tiny pilot hole in the DLS rear sight tang as a pilot hole to install a second 6-48 screw. On the Ruger sights you CANNOT do both the cross pin AND the second screw because the sight tang is not long enough. Either way makes for a very heavy duty sight installation. The second screw method requires drilling and tapping so that is normally reserved for gunsmiths.

You can reinstall the cross pin by test fitting drill bits through the frame cross holes while the sight is out of the frame. Make sure you select the perfect size drill bit. Then install the rear sight, and snug down the 6-48 screw. Then carefully spot drill the sight from BOTH sides of the frame. Then remove the sight from the frame and final drill the sight half way from both sides of the sight tang and meet in the middle. This should keep your cross pin hole in proper alignment. Take care not to scratch your frame or oversize the frame's cross pin holes.

The plunger retained front Ruger sight is a simple swap out process. Make sure you test zero and make any adjustments required. The front sight can be gunsmith pinned in place if you so desire.