Title: ADJUSTABLE STABILIZING BELT ATTACHMENT ASSEMBLY

Abstract: An adjustable stabilizing belt attachment assembly (45) is provided comprising a fixed belt containment platform (1) rotably secured by a rotating pin (36) to an adjustable belt containment platform (14) having a fixed belt containment arm (25) and an adjustable belt containment arm (18). Fixed belt containment arm (25) and adjustable belt containment arm (18) are adapted to secure a belt to assembly (45). Assembly (45) is closed and secured belt thereto, when the fixed belt containment platform (1) is rotated inwardly towards the adjustable belt containment platform (14) to a point where the sawtooth surface (9) of the fixed belt containment platform (14) engages the interfacing sawtooth surface (26) of adjustable belt containment arm (18). Assembly (45) is closed and locked by inserting locking pin (32) through upper receiving holes (7) of fixed belt containment platform (1) through access holes (22) of fixed belt containment arm (25) into lower receiving holes (8) of fixed belt containment platform (1).
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ADJUSTABLE STABILIZING BELT ATTACHMENT ASSEMBLY

BACKGROUND OF THE INVENTION

Field of the Invention

[0001] The present invention relates to holsters and other portable devices and more particularly to an assembly for securing such devices to a belt.

Description of Related Art

[0002] The Homeland Security Act requires an increasing number of military and law enforcement personnel to carry pistols for security purposes. In addition, thirty-eight states have approved concealed carry permits for their residents, while another eleven states are in the process of approving legislation allowing the issuance of concealed carry permits for its residents. The safety and security of personnel of government agencies and private citizens carrying pistols result from maintaining the pistol in a secure holster and, equally as important, attaching that holster to the belt worn by the carrier of the firearm.

[0003] Generally, a universal problem of securing a holster to the belt of a firearm carrier exists wherein the security of the firearm in the holster depends specifically upon the interface between the width of the belt and the width of the belt loops of the holster. The majority of holsters that are currently available to the public have only one width size to receive the belt, and very few holster manufacturers offer a second belt loop. Specifically, the problem manifests itself when a belt is worn that is even marginally narrower than the receiving interface loop of the holster. In this instance, the absence of sufficient binding surfaces between the corresponding loops of the belt and holster fails to create significant friction, thereby allowing the holster to move horizontally across the narrow belt surface as the holster is worn. Additionally, the absence of sufficient binding between the loops of the belt and the holster allows for lateral movement between the two surfaces when the pistol is drawn or re-holstered. Therefore, the holster is secured inadequately to the belt and can move forward and backward on the belt as the wearer walks. Moreover, when the wearer sits or runs, the lateral positioning of the holster on the belt can change unbeknownst to the wearer whereby access to the pistol may be hampered temporarily as the wearer must be reacquainted to the location of the holster on the belt.

[0004] Another problem faced by carriers of pistols is a gun grab of the pistol from the holster by an unauthorized user. In view of the possibility of gun grab attempts, the prevention of a holster sliding loosely across a belt is of primary importance regarding the security of the weapon in the holster and the safety of the carrier of the firearm.
[0005] A further problem exists with most conventional shoulder holsters that have no means to prevent the holster from moving in a wide arc when walking, running or if an assailant attempts to grab a pistol from the holster. A few holster manufacturers provide the means to secure a holster to the trouser fabric by a simple garter snap or loose loop. Such designs are more cosmetic than practical where security and retention of a pistol in a holster is at issue.

[0006] Finally, another problem exists with most pistol holsters that do not provide the means to remove the holster quickly from a belt. Typically, a carrier of a firearm in a holster may have to take the holster off of a belt quickly without wanting to unclasp the belt buckle and partially remove the belt from the trousers in order to remove the holster from the belt.

[0007] The object of the present invention is an adjustable stabilizing belt attachment assembly that provides a greatly improved means to secure a pistol holster or other device to a belt. It is a further object to allow a wearer of a pistol in either a hip or shoulder holster arrangement to quickly put on the holster without having to partially remove a belt in order to thread the belt through receiving loops of the holster. Furthermore, it is an object of the invention to provide an adjustable belt assembly, which can be unlocked quickly with one finger so that the holster with its pistol can be removed from the belt without unbuckling the belt. Finally, it is an object to avoid the problems associated with securing a loose-fitting holster to a belt.

SUMMARY OF THE INVENTION

[0008] The present invention is an adjustable stabilizing belt attachment assembly that allows a pistol holster to be secured to a belt of any size being worn to forego typical problems associated with securing a loose-fitting holster to a belt. Although the present invention is shown used with a holster, the adjustable stabilizing belt attachment assembly can have attached thereto other devices, such as an expandable baton, handcuffs, a radio, a cellular phone, and the like. Generally, the adjustable stabilizing belt attachment assembly includes a fixed belt containment platform pivotally secured to an adjustable belt containment platform having a fixed belt containment arm, and having an adjustable belt containment arm slidably secured thereto. The fixed belt containment platform has a sawtoothed surface and is connected by a rotating pin to the adjustable belt containment platform. The adjustable belt containment platform has a dovetailed receiving hole and an outside guide and containment slot and an inside guide and containment slot. The fixed belt containment platform and the adjustable containment platform may be in either an opened or closed position.
[0009] The fixed belt containment arm is secured to the adjustable containment platform by a threaded bolt. The adjustable belt containment arm having a dovetailed platform, is placed through the dovetailed receiving hole and is slideably secured within the inside and outside guide and containment slots of the adjustable containment platform. When the adjustable belt containment arm and the fixed adjustable belt containment arm are positioned to secure a belt, and when the assembly is closed, a sawtoothed surface on the adjustable belt containment arm engages the opposing sawtoothed surface of the fixed containment platform. The engagement of the sawtoothed surface on the adjustable belt containment arm to the opposing sawtoothed surface of the fixed containment platform locks the adjustable containment arm in place. Once the assembly is closed, the assembly is locked by inserting locking pins through the access holes in the fixed containment arm and into receiving holes in the fixed containment platform. A holster or other device can be attached to the assembly by screws received in the mounting screw holes.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] FIG. 1a shows a front view of a fixed belt containment platform;

[0011] FIG. 1b shows a right side view of the fixed belt containment platform shown in FIG. 1a;

[0012] FIG. 2a shows a front view of the fixed belt containment platform of FIG. 1a, showing hidden lines;

[0013] FIG. 2b shows a right side view of the fixed belt containment platform shown in FIG. 2a;

[0014] FIG. 3a shows a front view of the fixed belt containment platform of FIG. 1a, showing further hidden lines representing a sawtooth surface;

[0015] FIG. 3b shows a right side view of the fixed belt containment platform shown in FIG. 3a;

[0016] FIG. 4a shows a front view of a fixed belt containment platform;

[0017] FIG. 4b shows a right side view of the fixed belt containment platform shown in FIG. 4a with pin-receiving bores;

[0018] FIG. 5a shows a front view of the fixed belt containment platform of FIG. 4b;

[0019] FIG. 5b shows a front view of the fixed belt containment platform shown in FIG. 5a, with hidden lines showing a sawtooth surface and a pin received in one of the bores;

[0020] FIG. 6a shows a rear view of an adjustable belt containment platform;

[0021] FIG. 6b shows a front view of the adjustable belt containment platform shown in FIG. 6a;
FIG. 6c shows a left side view of the adjustable belt containment platform shown in FIG. 6a;

FIG. 7a shows a front view of an adjustable belt containment platform having attached thereto a fixed belt containment arm and an adjustable belt containment arm;

FIG. 7b shows a bottom view of the fixed belt containment arm as shown in FIG. 7a;

FIG. 7c shows a top view of the adjustable belt containment arm as shown in FIG. 7a;

FIG. 8 shows a rear view of a fixed belt containment platform;

FIG. 9 shows a right side perspective view of a fixed belt containment platform;

FIG. 10 shows a right side perspective view of the adjustable stabilizing belt attachment assembly in an opened position;

FIG. 11 shows a right side perspective view of the adjustable stabilizing belt attachment assembly opened as shown in FIG. 10 with a belt secured between a fixed belt containment arm and an adjustable belt containment arm;

FIG. 12 shows a right side view of the adjustable stabilizing belt attachment assembly of FIG. 11 in a closed position; and

FIG. 13 shows a right side view of the adjustable stabilizing belt attachment assembly having attached thereto a holster.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to the FIGS. 1 through 13 in which like reference characters refer to like parts throughout the several views thereof, adjustable stabilizing belt attachment assembly 45 is provided comprising fixed belt containment platform 1 pivotally secured by a rotating pin to adjustable belt containment platform 14. Adjustable belt containment platform 14 is adapted to secure fixed belt containment arm 25 and to slidably secure adjustable belt containment arm 18. For purposes of the description hereinafter, the terms “front,” “side,” “left,” “right,” “top,” “bottom” and derivatives thereof are relative terms relating to the invention as it is oriented throughout FIGS. 1 through 13. The invention may assume alternative variations, except where expressly specified to the contrary. The purpose of the invention is to provide the means to secure a pistol holster or other portable device in a carrying case, such as an expandable baton, handcuffs, a radio, a cellular phone, and the like, to a belt of any size being worn. The invention overcomes the previously enunciated problems associated with a loose fitting holster. The preferred embodiment and separate components of the adjustable stabilizing belt attachment assembly 45 are shown throughout
FIGS. 1-13. Components of the adjustable stabilizing belt attachment assembly are comprised of metal, plastic or any other composite known in the art capable of withstanding forces similar to metal.

[0033] Fixed belt containment platform 1 is shown at various stages of manufacture throughout FIGS. 1 through 5. In FIGS. 1a and 1b, fixed belt containment platform 1 is a solid structure shown having mounting screw holes 2 adapted to receive screws 41 to secure a holster to fixed belt containment platform 1. Also provided are rotating connector pin access holes 3 that transit through interface lug and arc stop 10 shown in FIGS. 2a and 2b at the bottom portion of fixed belt containment platform 1. Rotating connector pin access holes 3 are adapted to receive rotating pin 36. In FIGS. 1a, 1b, 2a and 2b, fixed belt containment platform 1 is shown prior to having sawtooth surface 9 machined thereon. Finger access groove 5 is provided for access to locking pin 32. Receiving indent 6 is provided and is adapted to receive fixed belt containment arm lug 26 of adjustable belt containment platform 14. Interface lug and arc stop 10 of the fixed belt containment platform 1 is provided to interact with counterpart lug 31, having rotating pin receiving hole 46 therethrough, of adjustable belt containment platform 14 and functions to limit rotational motion of adjustable belt containment platform 14. FIGS. 3a and 3b show front and side views of fixed belt containment platform 1 having sawtooth surface 9 machined thereon. Upper receiving holes 7 and lower receiving holes 8 are provided and are adapted to receive locking pin 32.

[0034] Front and right side views of fixed belt containment platform 1 without sawtooth surface machined thereon are shown in FIGS. 4a and 4b, respectively. Upper cotterless lynch pin storage hole 12 and lower cotterless lynch pin storage hole 13 transit through fixed belt containment platform 1, which are accessible from either side of the platform 1 to position cotterless lynch pin 39 in fixed belt containment platform 1. Grooved indents 11 for receiving ring of a cotterless lynch pin 39 are shown on the right and left side of fixed belt containment platform 1.

[0035] Front and back views of fixed belt containment platform 1 having sawtoothed surface 9 machined thereon are shown in FIGS. 5a and 5b, respectively. Cotterless lynch pin 39 is shown in upper cotterless lynch pin storage hole 12 and ring of the cotterless lynch pin 39 is received in grooved indent 11 as shown in the back perspective view of FIG. 5b.

[0036] Rear, front and left side views of adjustable belt containment platform 14 are shown in FIGS. 6a, 6b and 6c, respectively. Dovetailed receiving hole 15 is provided and is adapted for slidably receiving dovetailed platform 29 of adjustable belt containment arm 18 and communicate dovetailed platform 29 into hollow inside guide and containment slot 17.
Outside guide and containment slot 17 slidably engage dovetailed platform 27 and slidably secure dovetailed platform 29 in inside guide and containment slot 17. Access hole 19 is adapted to receive threaded bolt 21. Threaded bolt 21 secures fixed belt containment arm 25 to adjustable belt containment platform 14. Dowel access holes 20 interface between fixed belt containment arm 25 and adjustable belt containment platform 14 and are adapted to receive dowel pins 23.

[0037] A front view of adjustable belt containment platform 14 having secured thereto fixed belt containment arm 25 and having slidably secured thereto adjustable belt containment arm 18 is shown in FIG. 7a. A bottom view of fixed belt containment arm 25 is shown in FIG. 7b. A top view of adjustable belt containment arm 25 is shown in FIG. 7c. Access holes 22 are provided in fixed belt containment arm lug 26 of fixed belt containment arm 25 and receive locking pin 32. Threaded bolt 21 is shown in FIG. 7a securing fixed belt containment arm 25 to adjustable belt containment platform 14. Mating indent 24 of fixed belt containment arm 25 is shown in FIG. 7b that receives upper portion of adjustable belt containment platform 14 within mating indent 24. Dowel pins 23 are inserted in dowel access holes 20 to provide additional stabilization between fixed belt containment arm 25 and adjustable belt containment platform 14 before threaded bolt 21 secures fixed belt containment arm 25 to adjustable belt containment platform 14. Mating indent 24 creates a lateral movement brace between fixed belt containment arm 25 and adjustable belt containment platform 14. Fixed belt containment arm lug 26 of fixed belt containment arm 25 is provided as shown in FIGS. 7a and 7b. Indents 27 are provided in the bottom side of fixed belt containment arm 25 and the top side of adjustable belt containment arm 18, which provide additional friction against belt 35 compressed between fixed belt containment arm 25 and adjustable belt containment arm 18 and enhance the lateral traction capabilities of the assembly 45 on the belt. Interfacing sawteeth 28 of adjustable belt containment arm 18 interface, at any position, when aligned with corresponding sawtooth surface 9 of fixed belt containment platform 1. The location of the interface on sawtoothed surface 9 depends on the width of the belt being captured between adjustable belt containment arm 18 and fixed belt containment arm 25.

[0038] During assembly, dovetailed platform 29 of adjustable belt containment arm 18 is inserted through dovetail receiving hole 15 of adjustable belt containment platform 14 prior to bolting fixed belt containment arm 25 to adjustable belt containment platform 14 with threaded bolt 21. Once inserted through dovetail receiving hole 15, dovetailed platform 29 of adjustable belt containment arm 18 is slidably secured to adjustable belt containment
platform 14 in a slot created by outside guide and containment slot 16 and inside guide and containment slot 17. Fixed belt containment arm 25 is then secured to adjustable belt containment platform 14 by threaded bolt 21 and received in receiving indent 6 of fixed belt containment arm 25. When fixed belt containment arm 25 is secured to adjustable belt containment platform 14, adjustable belt containment arm 18 cannot be removed because adjustable belt containment arm 18 contacts fixed belt containment arm 25. Fixed belt containment arm 25 does not allow captured dovetailed platform 29 to exit from uppermost portion of dovetail receiving hole 15.

[0039] A rear view and a right side perspective view of fixed belt containment platform 1 having sawtooth surface 9 is shown in FIGS. 8 and 9, respectively. Finger access groove 5 is provided that allows for access to locking pin 32. Interfacing lug and arc stop 10 is provided having rotating pin access holes 3, which are adapted to receive rotating pin 6. Receiving indent 6 is provided and is adapted to receive fixed belt containment arm lug 26 of adjustable belt containment platform 14. Additionally, upper receiving holes 7 and lower receiving holes 8 are provided to receive locking pin 32. Upper cotterless lynch pin storage hole 12 is shown housing cotterless lynch pin 39 in a storage position. Cotterless lynch pin 39 can be stored in four ways in upper 12 and lower 13 storage holes.

[0040] FIGS. 10 through 13 show the assembly 45 with fixed belt containment platform 1 having sawtooth surface 9 pivotally connected to adjustable belt containment platform 14 by rotating pin 36. Rotating pin 36 is inserted through rotating connector pin access holes 3 of interface lug and arc stop 10 of fixed belt containment platform 1 and rotating pin receiving hole 46 in counterpart lug 31 of adjustable belt containment platform 14. Rotating pin 36 allows fixed belt containment platform 1 and adjustable belt containment platform 14 to be pivoted between an opened position as shown in FIGS. 10 and 11 and in a closed position as shown in FIGS. 12 and 13.

[0041] Specifically, a right side perspective view of adjustable stabilizing belt attachment assembly 45 in an opened position is shown in FIGS. 10 and 11. Rotating pin 36 is shown inserted through rotating connecting pin access holes 3 of interface lug and arc stop 10 of fixed belt containment platform 1 and rotating pin receiving hole 46 of counterpart lug 31 of adjustable belt containment platform 14, thereby pivotally securing fixed belt containment platform 1 to adjustable belt containment platform 14. Fixed belt containment arm 25 is shown having fixed belt containment arm lug 26 with access holes 22. Adjustable belt containment arm 18 is shown having interfacing sawtooth surface 28 and series of indents 27.
Upper receiving holes 7 and lower receiving holes 8 of fixed belt containment platform 1 along with grooved indents 11 and opposing sided dowels 34.

[0042] A right side perspective view of adjustable stabilizing belt attachment assembly 45 partially opened with belt 35 secured between fixed belt containment arm 25 and adjustable belt containment arm 18 is shown in FIG. 11. Locking pin 32 with locking pin flats 33 is shown inserted into upper receiving holes 7. Lower receiving holes 8 are also shown without locking pin 32 inserted therein. Locking pin flats 33 are machined on locking pin 32. Rotating pin is shown pivotally securing fixed belt containment platform 1 to adjustable belt containment platform 14. Access holes 22 of fixed belt containment arm 25 and guide locking pin 32 are shown.

[0043] Assembly 45 is shown in the closed position in FIGS. 12 and 13. Prior to closing the assembly 45, adjustable belt containment arm 18 must be pushed upwardly to compress belt 35 to a maximum point. Once belt 35 is fully compressed, fixed belt containment platform 1 is pivoted inwardly to adjustable belt containment platform 14 into a closed position, whereby the fixed belt containment arm lug 26 is received in receiving indent 6 of fixed belt containment platform 1. During the closing of assembly 45, interfacing sawtooth surface 28 on adjustable belt containment arm 18 engages opposing sawtooth surface 9 of fixed belt containment platform 1 and secures adjustable belt containment arm 18 in place to prevent upward and downward slidable motion. Then, assembly 45 is locked by locking pin 32 that is inserted in upper receiving holes 7 of fixed belt containment platform 1 through access holes 22 of lug 26 and into lower receiving holes 8 in fixed belt containment platform 1. After locking pin 32 is fully inserted and flats 33 are in position to receive dowel pins 34, locking pin 32 will no longer be able to be fully withdrawn, thereby securing locking pin 32 in place. Once in this position, fixed belt containment arm lug 26 cannot be unlocked until locking pin 32 is removed to an upward position where lower portion of locking pin 32 is free from upper surface of fixed belt containment arm lug 26.

[0044] A right side view of closed adjustable stabilizing belt attachment with belt embraced by fixed belt containment platform 1 and adjustable belt containment arm 18 is shown in FIG. 12. Interfacing sawteeth 28 of adjustable belt containment arm 18 are shown engaged with opposing sawtooth surface 9 of fixed belt containment platform 1. Locking pin 32 is shown in place within access holes 22 of fixed belt containment arm lug 26 and upper receiving holes 7 and lower receiving holes 8 of fixed belt containment platform 1.

[0045] A right side view of adjustable stabilizing belt attachment assembly 45 in use having attached thereto a holster is shown in FIG. 13. Holster body 37 is secured to fixed
belt containment platform 1 by screws 41. Cotterless lynch pin 39 is shown in access hole 40 on the bottom of holster. Although FIG. 13 shows a holster secured to assembly 45, other devices in a carrying case can be secured to the assembly 45, such as an expandable baton, handcuffs, a radio, a cellular phone, and any other portable device.

[0046] Although the present invention has been described with reference to the preferred embodiment, this disclosure is illustrative and exemplary of the present invention, and is made merely for purposes of providing a full disclosure of the invention. Other embodiments of the invention can achieve the same result. Accordingly, other embodiments, adaptations, variations, modifications, and equivalent arrangements will be apparent to those skilled in the art.
I CLAIM:

1. A stabilizing belt attachment assembly for securing a portable device to a belt, comprising a fixed belt containment platform pivotally attached to an adjustable belt containment platform, the adjustable belt containment platform having a fixed belt containment arm and having an adjustable belt containment arm secured thereto.

2. The stabilizing belt attachment assembly of claim 1, wherein the fixed belt containment platform has a sawtoothed surface on a rear surface thereof.

3. The stabilizing belt attachment assembly of claim 1, wherein the fixed belt containment platform has upper receiving holes and lower receiving holes that align with access holes on the adjustable belt containment platform to receive a locking pin.

4. The stabilizing belt attachment assembly of claim 1, wherein the fixed belt containment platform has mounting screw holes to receive mounting screws to secure a carrying case for a portable device.

5. The stabilizing belt attachment assembly of claim 4, wherein the portable device is selected from the group consisting of a holster, expandable baton, handcuffs, a radio, a cellular phone and the like.

6. The stabilizing belt attachment assembly of claim 1, wherein the adjustable belt containment platform comprises a dovetailed receiving hole in communication with an outside guide and containment slot and an inside guide and containment slot.

7. The stabilizing belt attachment assembly of claim 1, wherein the fixed belt containment arm is secured to the adjustable belt containment platform by a threaded bolt and is stabilized by dowel pins that communicate between the fixed belt containment arm and the adjustable belt containment platform.

8. The stabilizing belt attachment assembly of claim 1, wherein the fixed belt containment arm has access holes for receiving a locking pin.
9. The stabilizing belt attachment assembly of claim 1, wherein the fixed belt containment arm has a series of indents on a bottom surface.

10. The stabilizing belt attachment assembly of claim 1, wherein the adjustable belt containment arm has a dovetailed platform that interfaces with a dovetail receiving hole and an outside guide and containment slot and an inside guide and containment slot of an adjustable belt containment platform, wherein the dovetailed platform provides slidable securement to adjustable belt containment arm.

11. The stabilizing belt attachment assembly of claim 1, wherein the adjustable belt containment arm has a sawtooth surface that can interface with a sawtooth surface of fixed belt containment arm.

12. The stabilizing belt attachment assembly of claim 1, wherein the adjustable belt containment arm has a series of indents on a top surface.

13. A stabilizing belt attachment assembly for securing a portable device to a belt comprising a fixed belt containment platform pivotally attached to an adjustable belt containment platform by a rotating pin, the adjustable belt containment platform having a fixed belt containment arm secured thereto, the fixed belt containment platform also having an adjustable belt containment arm slidably secured by a dovetailed platform to the adjustable belt containment platform and slot arrangement, the adjustable belt containment arm having interfacing sawteeth that engage a sawtooth surface of the fixed belt containment platform, a belt secured between the fixed belt containment arm and the adjustable belt containment arm, the fixed belt containment platform securable to the adjustable belt containment platform by a locking pin, and the fixed belt containment platform having mounting means for securing a portable device thereto.