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Puscas et al.

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(54) **ADJUSTABLE DECKLID LATCH ASSEMBLY**

(71) Applicant: **Ford Global Technologies, LLC**, Dearborn, MI (US)

(72) Inventors: **Livianu Dorin Puscas**, Rochester Hills, MI (US); **Kosta Papanikolaou**, Huntington Woods, MI (US); **Manuel Santana**, Southfield, MI (US)

(73) Assignee: **Ford Global Technologies, LLC**, Dearborn, MI (US)

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E05B 81/22	(2014.01)
E05B 81/06	(2014.01)
E05B 81/34	(2014.01)
E05B 81/64	(2014.01)

(52) **U.S. Cl.**

CPC ***E05B 83/18*** (2013.01); ***E05B 63/0056*** (2013.01); ***E05B 81/22*** (2013.01); *E05B 81/06* (2013.01); *E05B 81/34* (2013.01); *E05B 81/64* (2013.01); *Y10T 70/7062* (2015.04); *Y10T 292/1082* (2015.04); *Y10T 292/68* (2015.04)

(58) **Field of Classification Search**

CPC .. E05B 85/045; E05B 15/0245; E05B 15/024; E05B 2015/0275; E05B 85/04; Y10T 292/696; Y10T 292/68; Y10T 292/705; Y10T 292/699; Y10T 292/707; Y10T 292/683; Y10S 292/55

USPC 292/197, 340–341.19

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,707,007	A	11/1987	Inoh	
4,756,565	A	7/1988	Myslicki et al.	
4,946,208	A	8/1990	Myslicki et al.	
5,193,868	A *	3/1993	O'Toole	E05B 85/045 292/341.15
5,443,292	A	8/1995	Shimada et al.	
8,029,030	B2	10/2011	Shimura et al.	
8,469,413	B2	6/2013	Novajovsky et al.	
9,004,570	B1 *	4/2015	Krishnan	E05B 83/18 292/201
2008/0197643	A1 *	8/2008	Dennis	E05B 15/025 292/340

* cited by examiner

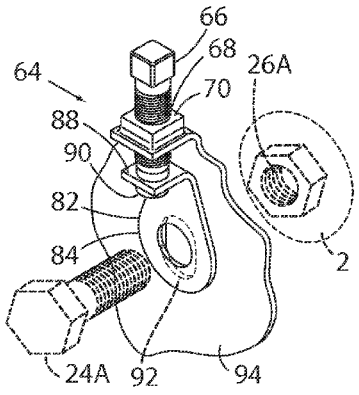
Primary Examiner — Mark A Williams

(74) *Attorney, Agent, or Firm* — Jason Rogers; Price Heneveld LLP

(57) **ABSTRACT**

A decklid assembly includes a striker that movably engages a vehicle body structure. The striker includes first and second opposed surfaces that face each other. The decklid assembly includes a decklid having a latch that releasably engages the striker. A cam is rotatably mounted to the body structure. The cam is disposed between the opposed surfaces of the striker, such that rotation of the cam in first and second directions causes the cam to engage the first and second opposed surfaces, respectively, thereby shifting the striker up and down, respectively.

17 Claims, 7 Drawing Sheets



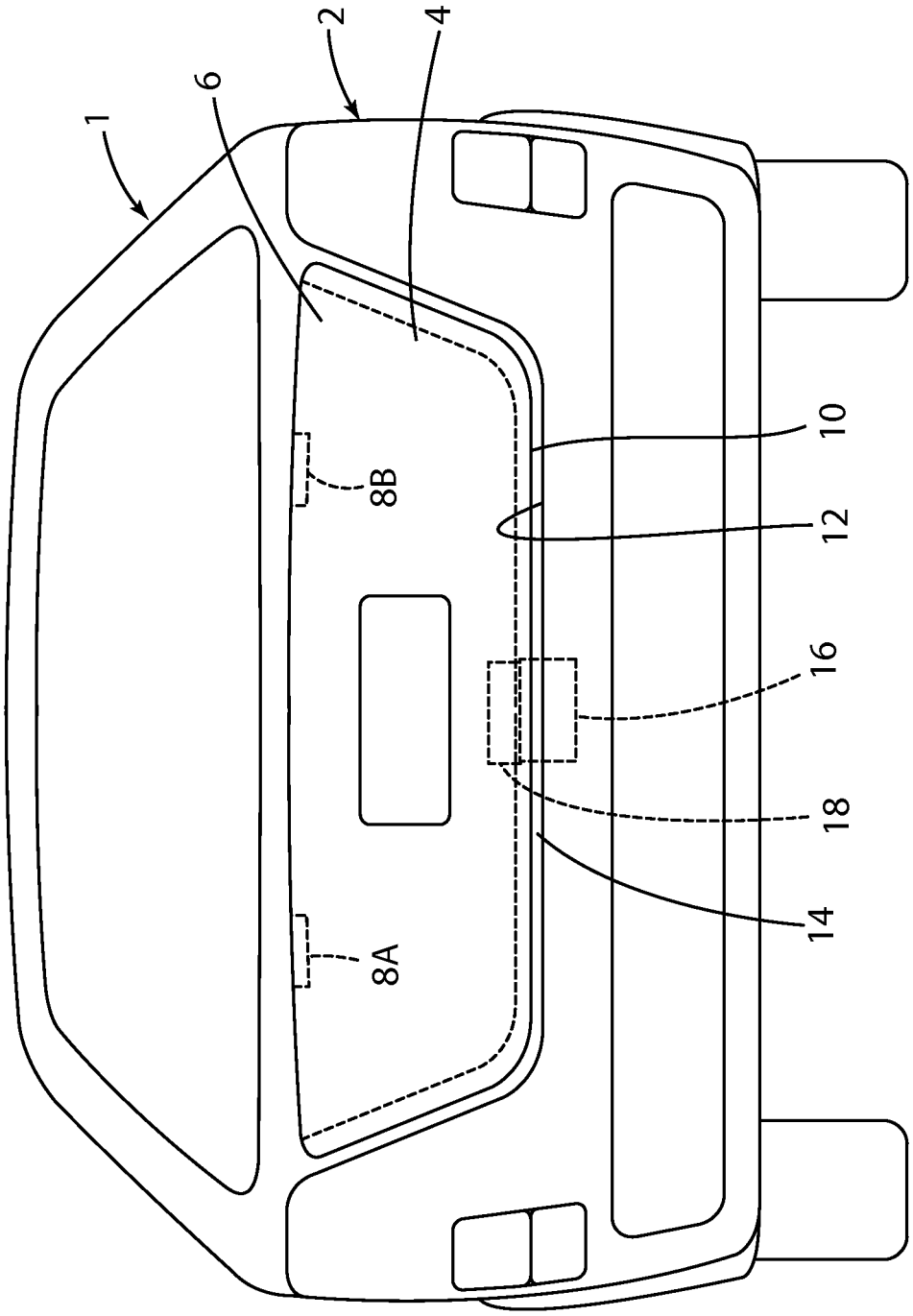
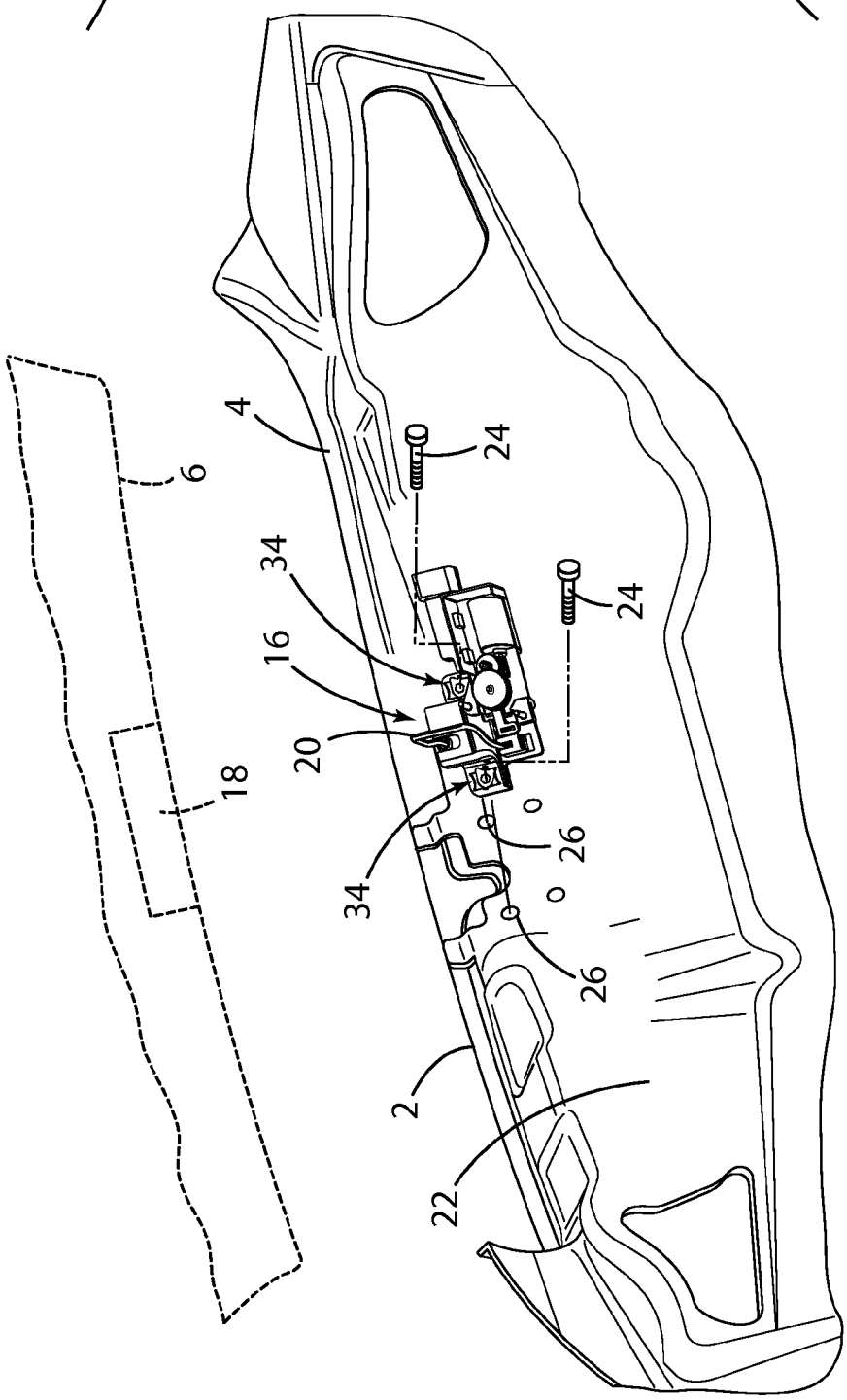


FIG. 1

FIG. 2



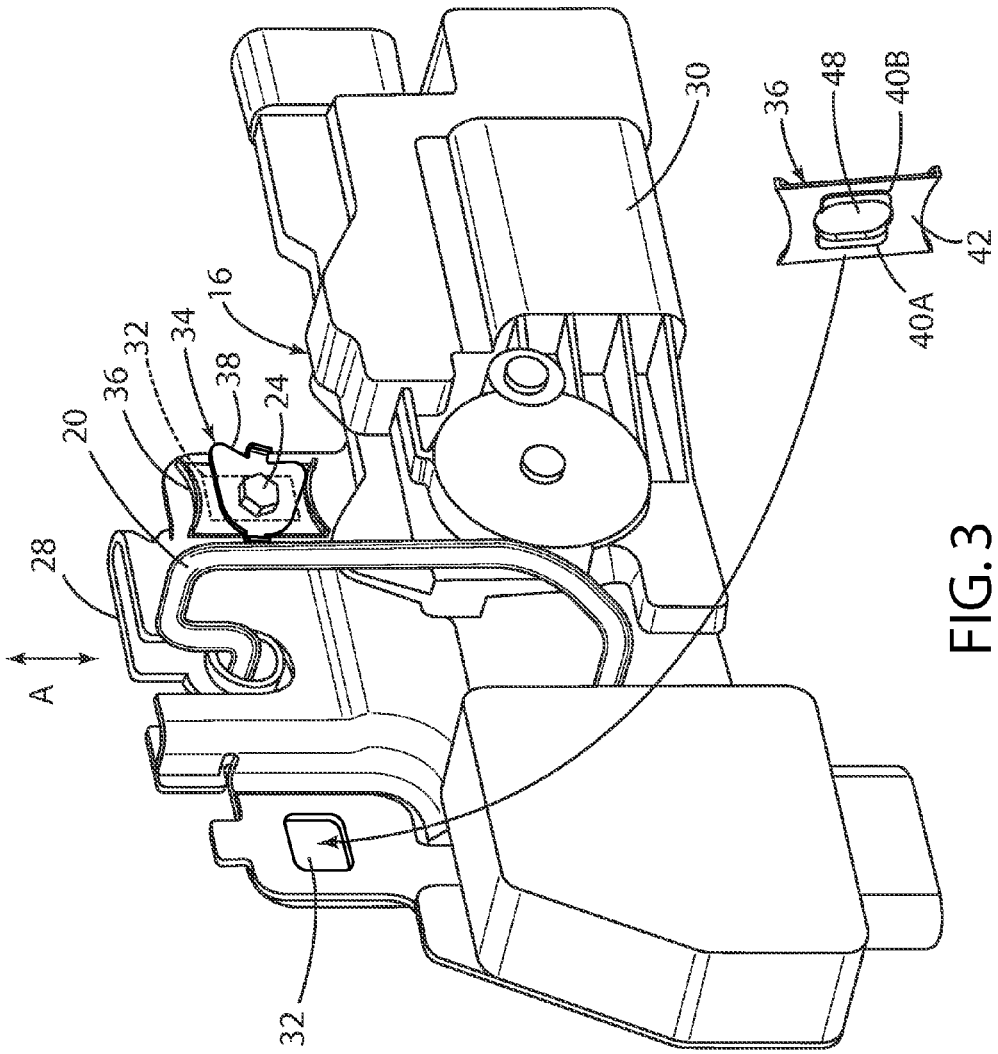


FIG. 3

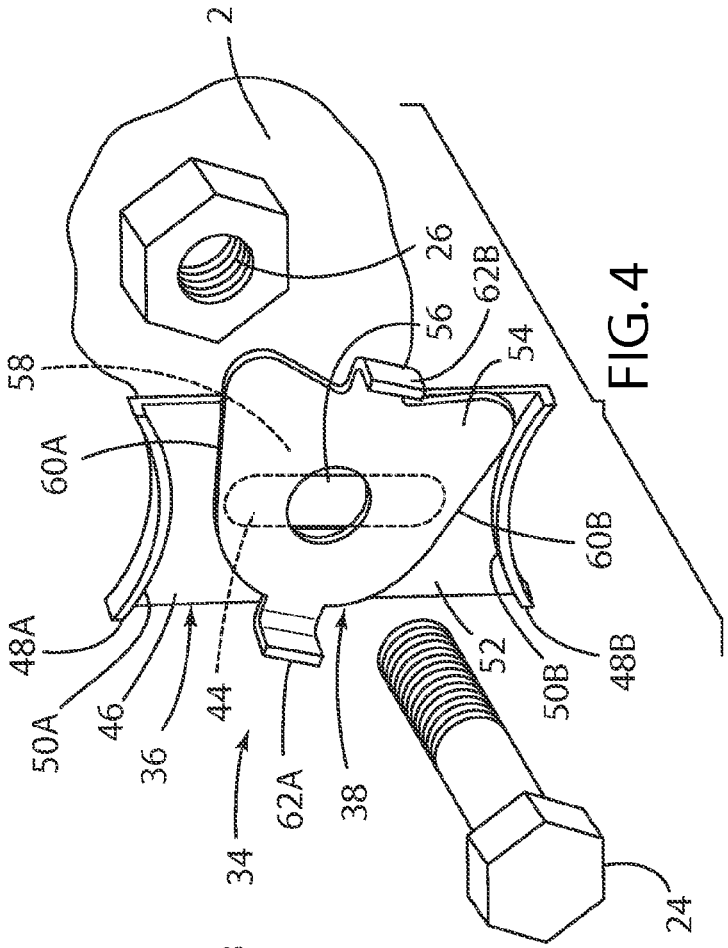

2
26
62B
56
54
58
60A
60B
48A
52
50B
48B
50A
46
44
36
62A
38
34
24

FIG. 4

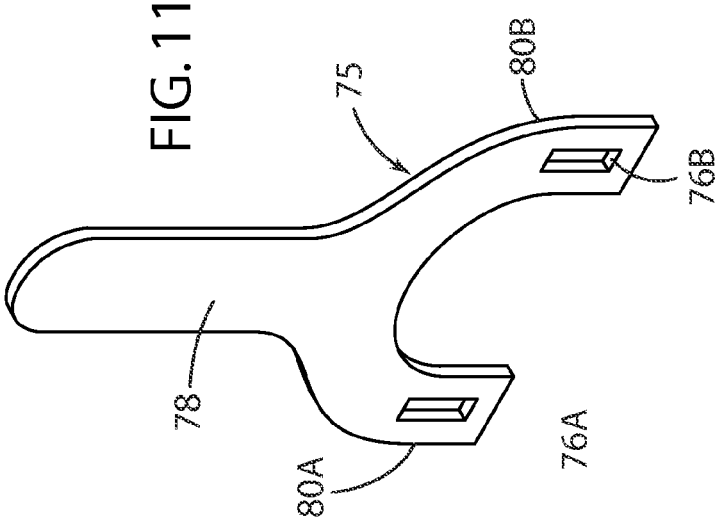

75
80B
76B
78
76A
80A

FIG. 11

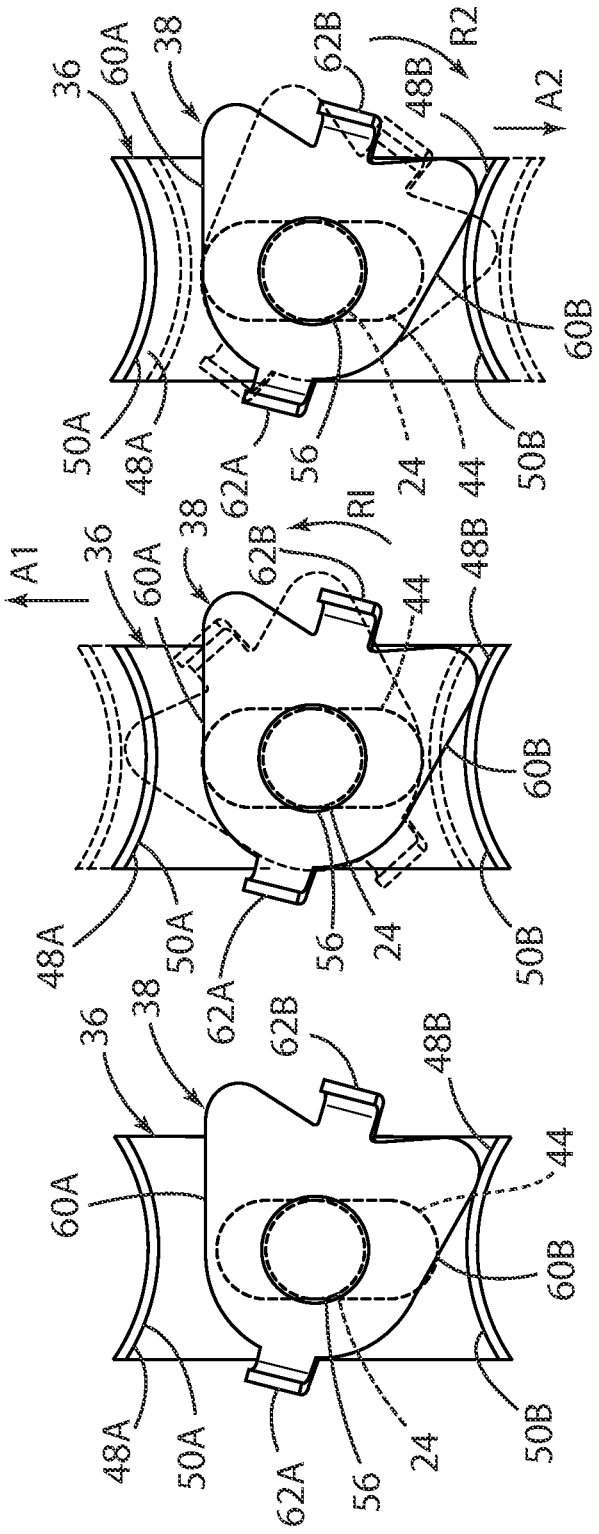


FIG. 7

FIG. 6

FIG. 5

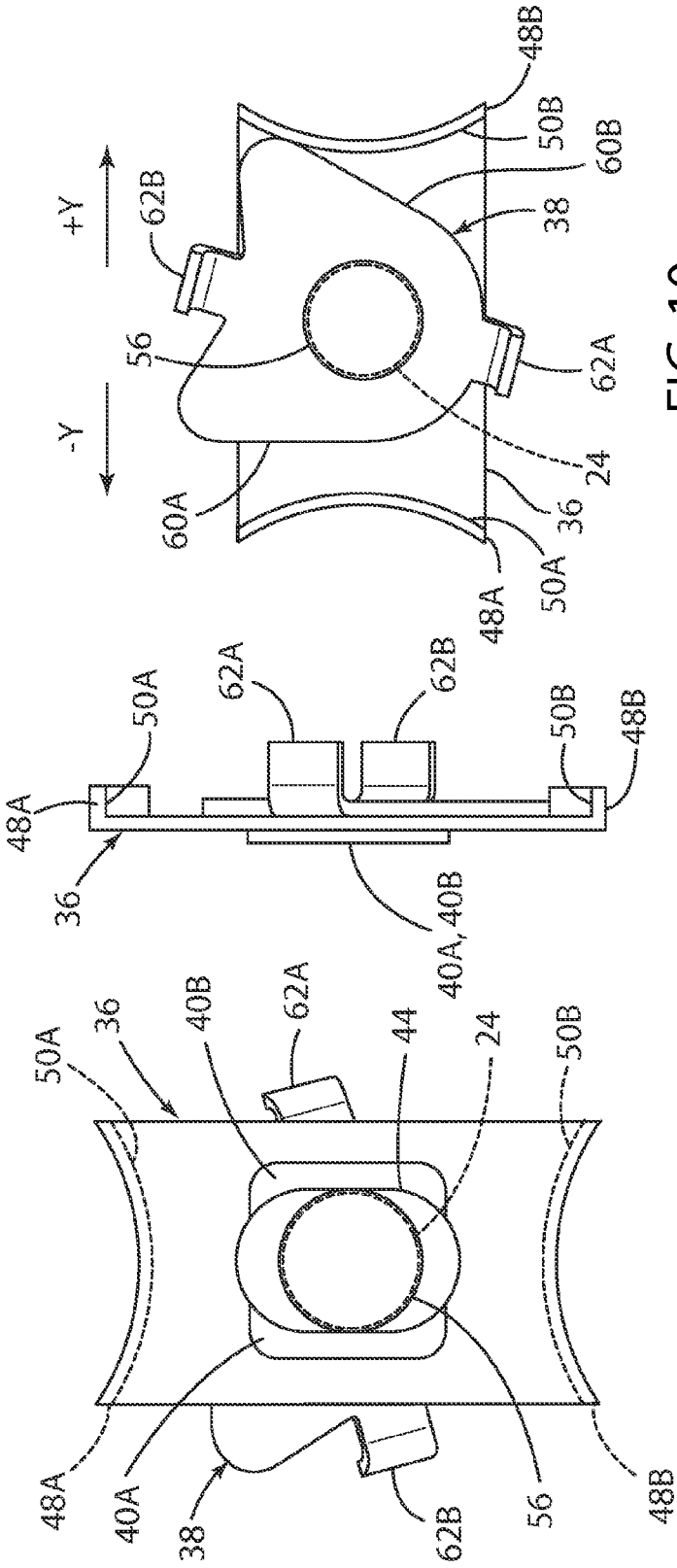


FIG. 10

FIG. 9

FIG. 8

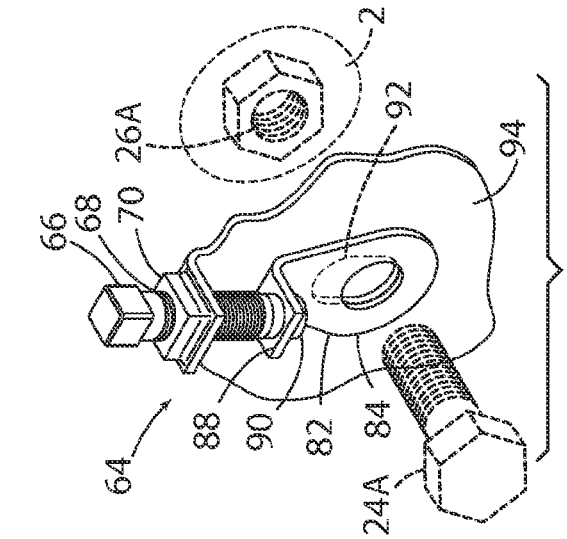


FIG. 14

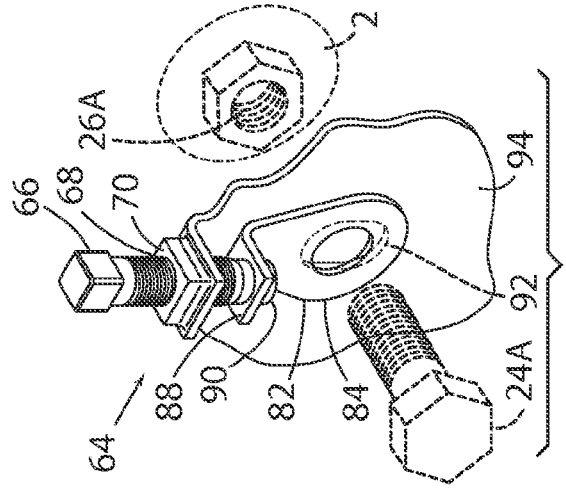


FIG. 13

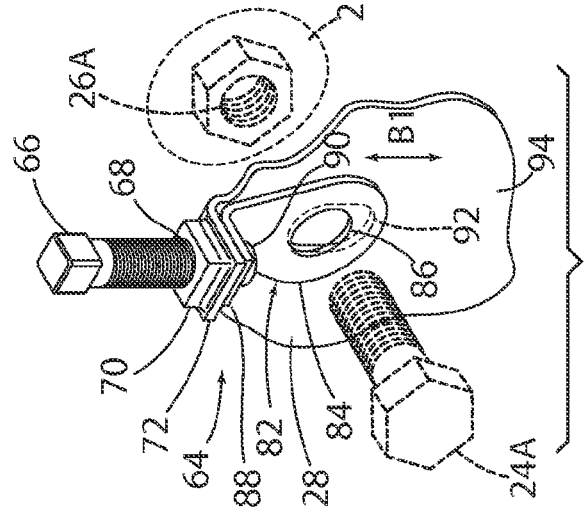


FIG. 12

ADJUSTABLE DECKLID LATCH ASSEMBLY

CROSS REFERENCE TO RELATED APPLICATION

This patent application is related to U.S. patent application Ser. No. 14/223,444 filed on Mar. 24, 2014, entitled "ADJUSTABLE LATCH ASSEMBLY," now U.S. Pat. No. 9,004,570, the entire disclosure of which is incorporated herein by reference.

FIELD OF THE INVENTION

The present invention generally relates to latches for decklids of motor vehicles, and more particularly, to a latch that can be adjusted to provide a required gap or margin between a decklid and a vehicle body structure.

BACKGROUND OF THE INVENTION

Vehicle decklid doors are typically movably mounted to a vehicle body structure for movement between open and closed positions. Decklid doors may include a latch mechanism that releasably engages a striker on the vehicle body structure to releasably retain the decklid in a closed position. The edge of the decklid is spaced apart from an adjacent body structure such as a body or bumper to define a gap or margin. Due to the tolerances of the numerous components in a typical decklid assembly, a relatively large margin or gap may result between the decklid and the fascia or other body structure. When a decklid is closed/slammed, the decklid may "over travel" beyond the closed position. Reducing the decklid margin too much can cause paint chipping due to decklid-to-fascia contact if the actual margin approaches the over travel of the decklid. However, the larger margins required due to tolerances and over travel may detract from the appearance of the vehicle. Accordingly, there is a need to provide reduced margin despite the tolerances in the components, while still preventing damage due to over travel during closing of the deck lid.

SUMMARY OF THE INVENTION

One aspect of the present invention is an adjustable latch assembly for decklids or other closure members of motor vehicles. The adjustable latch assembly includes a striker and a latch mechanism. The latch mechanism includes a latch base and a moveable latch member that is configured to releasably engage the striker member to retain a decklid in a closed position. The adjustable latch assembly further includes an adjustment mechanism including a cam member that is rotatably connected to a selected one of the striker and the latch base, and a movable base member that is connected to the other of the striker and the latch base. The movable base member includes an engagement surface slidably engaging the cam surface such that rotation of the cam member moves the base member to thereby shift the position of the striker and the latch base relative to the other of the striker and the latch base to thereby adjust the closed position of a decklid relative to a vehicle body structure.

Another aspect of the present invention is a decklid assembly including a striker that movably engages a body structure. The striker includes first and second opposed surfaces facing each other. The decklid assembly includes a decklid having a latch that releasably engages a striker. A cam is rotatably mounted to the body structure. The cam is disposed between the opposed surfaces of the striker, such that rotation of the cam in first and second directions causes the cam to engage the first and second opposed surfaces, respectively, and shift the striker up and down, respectively.

Another aspect of the present invention is a decklid assembly including a striker movably engaging a vehicle body structure adjacent a deck opening in the vehicle body structure and defining a position relative to the vehicle body structure. The decklid assembly further includes a decklid that is movably mounted to the vehicle body structure. The decklid includes a latch that is configured to releasably engage the striker. A threaded first connector operably interconnects the striker and the vehicle body structure such that rotation of the threaded connector shifts the striker relative to the vehicle body structure to thereby adjust the position of the striker relative to the vehicle body structure. A second connector is configured to fixedly connect the striker to the vehicle body structure and prevent further movement of the striker relative to the vehicle body structure after adjusting the position of the striker relative to the vehicle body structure.

These and other aspects, objects, and features of the present invention will be understood and appreciated by those skilled in the art upon studying the following specification, claims, and appended drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings:

FIG. **1** is an elevational view of a vehicle showing a decklid in a closed position;

FIG. **2** is a fragmentary exploded isometric view of a striker and vehicle body structure;

FIG. **3** is an exploded isometric view of the striker assembly of FIG. **2**;

FIG. **4** is an exploded isometric view of a cam and base member;

FIG. **5** is a plan view of a cam and base member showing the cam in a first position;

FIG. **6** is a plan view of a cam and base member showing the cam in a second position;

FIG. **7** is a plan view of a cam and base member showing the cam in a third position;

FIG. **8** shows the cam and base member of FIG. **5** viewed from the opposite side relative to FIG. **5**;

FIG. **9** is a side elevational view of the cam and base member of FIG. **5**;

FIG. **10** shows a cam member and base member oriented for side-to-side adjustment of the position of the base member;

FIG. **11** is an isometric view of a tool that may be utilized to rotate the cam member;

FIG. **12** is a fragmentary, exploded isometric view of an adjustable connector according to another aspect of the present invention in a first configuration;

FIG. **13** is a fragmentary, exploded isometric view of an adjustable connector according to another aspect of the present invention in a second configuration; and

FIG. **14** is a fragmentary, exploded isometric view of an adjustable connector according to another aspect of the present invention in a third configuration.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

For purposes of description herein, the terms "upper," "lower," "right," "left," "rear," "front," "vertical," "horizontal," and derivatives thereof shall relate to the invention as

oriented in FIG. **1**. However, it is to be understood that the invention may assume various alternative orientations, except where expressly specified to the contrary. It is also to be understood that the specific devices and processes illustrated in the attached drawings, and described in the following specification are simply exemplary embodiments of the inventive concepts defined in the appended claims. Hence, specific dimensions and other physical characteristics relating to the embodiments disclosed herein are not to be considered as limiting, unless the claims expressly state otherwise.

With reference to FIG. **1**, a motor vehicle **1** includes a body structure **2** having one or more openings that are selectively closed off by a closure member such as a hood, a door, or a decklid **6**. In the illustrated example, body structure **2** defines a rear opening **4** that is selectively closed off by a decklid **6** that is movably mounted to the body structure **2**. The decklid **6** may be movably mounted to the vehicle body structure **2** by hinges **8**A and **8**B for rotation about a generally horizontal axis in a known manner. A lower or rear edge **10** of the decklid **6** is spaced apart from an adjacent portion **12** of the vehicle **1** to define a gap or margin **14**. The body portion **12** may comprise a bumper, trim, or other portion of the vehicle **1** that is stationary, and does not move with the decklid **6**. A striker **16** (see also FIG. **2**) is mounted to the vehicle body structure **2** adjacent the rear opening **4**, and a latch mechanism **18** is mounted to the decklid **6**. In FIG. **2**, the striker **16** is shown in an exploded configuration in which the striker assembly **16** is spaced apart from the body structure **2**. Striker **16** may include a loop **20** that is releasably engaged by the latch mechanism **18** to retain the decklid **6** in a closed position. The striker **16** may comprise a conventional striker having a loop **20** that is fixedly mounted to the body structure **2**. Alternatively, striker **16** may comprise a "cinching" striker having a loop **20** that moves upon actuation of an electric motor **30** (FIG. **3**). A cinching striker is disclosed in more detail in U.S. patent application Ser. No. 14/223,444 filed on Mar. 24, 2014, entitled "ADJUSTABLE LATCH ASSEMBLY," now U.S. Pat. No. 9,004,570, the entire contents of which are incorporated herein by reference. The latch mechanism **18** may comprise a conventional latch of a known type having a releasable claw that engages the striker **16** to selectively retain the decklid **6** in a closed position. The latch mechanism **18** can be unlatched by a key, powered actuator, or other such known arrangement whereby the decklid **6** can be opened to permit access to interior space **22** through the opening **4**. As discussed in more detail below, the striker assembly **16** may be secured to the body structure **2** by one or more threaded fasteners such as bolts **24** that engage/extend through adjustment assemblies **34** and threadably engage threaded openings **26** of body structure **2**. The threaded openings **26** may comprise threaded nuts (e.g. clip nuts) or other suitable threaded connectors of a type known in the art.

With further reference to FIG. **3**, striker assembly **16** may include a base or bracket structure **28** and a loop **20** that is movably mounted to the base or bracket structure **28**. The striker assembly **16** may include a powered actuator such as an electric motor **30** and drive that shifts the loop **20** vertically as shown by the arrow "A." Alternatively, the striker assembly **16** may comprise a striker loop **20** or other suitable structure that is fixed relative to the base or bracket structure **28**. In the illustrated example, a pair of adjustment assemblies **34** engage openings **32** in base or bracket structure **28** to thereby adjustably connect the striker **16** to the vehicle body structure **2**. The adjustment assemblies **34** include a base such as base washer **36** and a cam such as cam washer **38**. Protrusions **40**A and **40**B on rear side **42** of each base washer **36** are configured to fit closely into the openings **32** of base or bracket structure **28** such that movement of the base washers **36** causes movement of the striker **16**. It will be understood that the base washers **36** may alternatively be integrally formed with the base or bracket structure **28**. As discussed in more detail below, each base washer **36** includes a vertically elongated slot or opening **48** that receives a bolt **24**.

With further reference to FIG. **4**, the base washer **36** includes a flat main web or wall **46** having a generally uniform thickness, and first and second curved flanges **48**A and **48**B that extend transversely from the main web or wall **46**. The curved flanges **48**A and **48**B have opposed, concavely curved first and second engagement surfaces **50**A and SOB, respectively that generally face each other. Elongated opening or slot **44** extends through a central portion **52** of main web or wall **46**.

Cam washer **38** includes a flat main web or wall portion **54** that is generally uniform thickness. A circular opening **56** is formed through a central portion **58** of the main wall **54**. When assembled, threaded fastener or screw **24** extends through the opening **56** of cam washer **38**, and through elongated opening or slot **44** in base washer **36**, and threadably engages threaded opening **26** which is fixed to body structure **2**. When assembled, the cam washer **38** is disposed between the engagement surfaces **50**A and SOB of base washer **36**. The cam washer **38** includes first and second cam surfaces **60**A and **60**B that are configured to engage the engagement surfaces **50**A and SOB, respectively, of cam washer **38** as the cam washer **38** is rotated. Cam washer **38** may include a pair of protrusions such as tabs **62**A and **62**B that extend transversely from the main web or wall **54** of cam washer **38**. As discussed in more detail below, a tool **75** (FIG. **11**) has a pair of openings **76**A and **76**B that engage tabs **62**A and **62**B, respectively, to thereby permit rotation of cam washer **38**. Base washer **36** and cam washer **38** may comprise steel or other suitable material.

With further reference to FIGS. **5-9**, during assembly striker **16** is initially assembled to the body structure by inserting the threaded fasteners **24** through openings **56** of cam washer **38**, and through elongated openings **44** of base washers **36**. The threaded fasteners **24** are initially not tightened, such that the cam washer **38** is rotatably supported by the threaded fastener **24**. As shown in FIG. **6**, if cam washer **38** is rotated in a first direction "R**1**," the first cam surface **60**A slidably engages engagement surface **50**A of base washer **36**, thereby causing the base washer **36** to shift in the direction of the arrow "A**1**." Because protrusions **40**A and **40**B (FIG. **3**) of base washer **36** are closely received in openings **32** of bracket structure **28**, movement of base washer **36** results in movement of loop **20** of striker **16**. The elongated opening or slot **44** in base washer **36** permits linear movement of base washer **36** in the direction of the arrow A**1**. However, the circular opening **56** in cam washer **38** constrains the cam washer **38** so it rotates about the threaded fastener **24**.

With further reference to FIG. **7**, if cam washer **38** is rotated in a second direction as shown by the arrow "R**2**," the second cam surface **60**B of cam washer **38** slidably engages the second engagement surface **50**B of base washer **36**, thereby shifting the base washer **36** in the direction of the arrow "A**2**." As discussed above, the base washer **36** includes protrusions **40**A and **40**B (FIG. **3**) that are received in openings **32** of base bracket or structure **28** of striker **16**.

Thus, movement of the base washer **36** in a second direction A**2** (FIG. **7**) causes the striker assembly **16** to also move in the second direction A**2**.

During vehicle assembly the fasteners **24** can be loosely assembled, and the latch **18** can be engaged with the striker **16**. The cam washer **38** can then be rotated to adjust (increase or decrease) the size of the gap or margin **14** (FIG. **1**) between the decklid **6** and the adjacent body portion or structure **12**.

After the gap or margin **14** (FIG. **1**) is adjusted to the desired dimension, the fasteners **24** can be tightened to thereby clamp the cam washer **38** and base washer **36** to the body structure **2**. When the cam washer **38** and base washer **36** are clamped due to tightening of threaded fastener **24**, additional rotation of cam washer **38** is not possible, and the position of the striker assembly **16** relative to the vehicle body **2** is therefore fixed due to tightening of the threaded fastener **24**.

Tool **75** (FIG. **11**) may be utilized to rotate the cam washer **38**. In the illustrated example, tool **75** has an elongated handle **78**, and a pair of extensions **80**A and **80**B having openings **76**A and **76**B, respectively, therethrough. The openings **76**A and **76**B receive the tabs **62**A and **62**B of cam washer **38**, and a user can rotate the tool **75** to thereby rotate the cam washer **38**. It will be understood that the configuration of the tool **75** may vary as required for a particular application. In particular, the handle **78** and/or other portions of the tool **75** maybe curved or bent as required to provide access to the cam washers **38**.

In FIGS. **6** and **7**, the directions A**1** and A**2** generally correspond to up and down movement, respectively, of striker **16** that provide increases and decreases, respectively of the size of gap **14**. However, as shown in FIG. **10**, the base washer **36** and cam washer **38** may also be mounted to provide side-to-side adjustment as shown by the arrows "−Y" and "+Y." Side-to-side adjustment can be utilized to adjust the size of the gaps along the sides of decklid **6**.

With further reference to FIG. **12**, an adjustment assembly **64** according to another aspect of the present invention includes a first threaded member **66** that threadably engages a threaded opening **68** of a nut **70** or the like that is secured to a tab **72** formed in the base or bracket structure **28** of striker assembly **16**. A connector member **82** includes a first portion **84** having a circular opening **86**, and a second portion or tab **88** that is rotatably connected to an end **90** of first threaded member **66** such that rotation of first threaded member **66** shifts the connector **82** in the direction of the arrow "B**1**." A threaded fastener **24**A extends through opening **86** of connector **82**, and through an elongated slot **92** in a sidewall **94** of base or bracket structure **28**. The threaded fastener **24** threadably engages a threaded opening **26**A formed in vehicle body structure **2**.

As discussed above, rotation of first threaded member **66** causes the base or bracket structure **28** to move relative to the connector **82**. The position of the connector **82** is fixed relative to the vehicle body structure **2** due to the engagement of threaded fastener **24**A with opening **86** of first connector **82**. Thus, rotation of first threaded member **66** causes movement of the striker **16** in the direction of the arrow "B**1**." Threaded fastener **24**A can initially be loosely engaged with threaded opening **26**A in vehicle body **2**. After the position of striker **16** is set by rotation of first threaded member **66** to provide the required gap or margin **14**, the threaded fastener **24**A can be fully tightened to thereby lock the position of the striker **16** relative to the body structure **2**. In FIG. **12**, the base or bracket structure **28** of striker **16** is adjusted to a lower most position. In FIG. **13**, the base or bracket structure **28** of striker **16** is adjusted to a central location relative to the body structure **2**. In FIG. **14**, the base or bracket structure **28** of striker **16** is adjusted to an upper most position relative to the body structure **2**. The length of the first threaded member **66** and the length of the elongated opening or slot **92** in sidewall **94** of base or bracket structure **28** can be varied as required to provide the desired range of adjustability with respect to the position of striker **16** relative to the body structure **2**.

In the examples discussed above in connection with FIGS. **1-14**, a pair of the adjustment assemblies **34** adjustably interconnect the striker **16** with the vehicle body **2**. However, it will be understood that the adjustment assemblies **34** may also be utilized to adjustably interconnect the latch mechanism **18** to the lid **6** to thereby adjust the margin **14**. Furthermore, it will be understood that the striker **16** may be mounted to the decklid **6**, and the latch mechanism **18** may be mounted to the vehicle body structure **2**. Still further, it will be understood that the adjustment mechanisms of the present invention are not limited to decklids. For example, the adjustment mechanisms may be utilized in connection with hoods, doors, or other closure members having releasable latch mechanisms that releasably engage a striker or other such feature to retain the closure member in a closed position. Also, as used herein, the term decklid may refer to a trunk lid, a rear hatch (e.g. with a window), a hood, or virtually any other movable member of the type that is movably mounted to a vehicle structure.

It is to be understood that variations and modifications can be made on the aforementioned structure without departing from the concepts of the present invention, and further it is to be understood that such concepts are intended to be covered by the following claims unless these claims by their language expressly state otherwise.

What is claimed is:

1. An adjustable latch assembly for closure members of motor vehicles, the adjustable latch assembly comprising:

a striker member;

a latch mechanism having a latch base and a movable latch member that is configured to releasably engage the striker member to retain a closure member in a closed position; and

an adjustment mechanism including a cam member having a cam surface, wherein the cam member is rotatably connected to a selected one of the striker and the latch base, and a movable base member that is connected to the other of the striker and the latch base, and wherein the movable base member includes an engagement surface slidably engaging the cam surface such that rotation of the cam member moves the base member transverse to the axis and shifts the position of the striker and the latch base relative to the other of the striker and the latch base to thereby adjust the closed position of a closure member relative to a vehicle body structure.

2. The adjustable latch assembly of claim **1**, including:

a pivot member configured to be mounted to a vehicle body structure adjacent an opening; and wherein:

the cam member has a central opening and the pivot member extends through the central opening such that the cam member rotatably engages the pivot member.

3. An adjustable latch assembly for closure members of motor vehicles, the adjustable latch assembly comprising:

a striker member;

a latch mechanism having a latch base and a movable latch member that is configured to releasably engage the striker member to retain a closure member in a closed position;

a pivot member configured to be mounted to a vehicle body structure adjacent an opening;

a first threaded member configured to be mounted to a vehicle body structure;

an adjustment mechanism including a cam member having a cam surface, wherein the cam member is rotatably connected to a selected one of the striker and the latch base, and a movable base member that is connected to the other of the striker and the latch base, and wherein the movable base member includes an engagement surface slidably engaging the cam surface such that rotation of the cam member moves the base member to thereby shift the position of the striker and the latch base relative to the other of the striker and the latch base to thereby adjust the closed position of a closure member relative to a vehicle body structure, wherein the cam member rotatably engages the pivot member; and wherein:

the pivot member comprises a second threaded member that is configured to threadably engage the first threaded member and clamp the cam member to prevent additional rotation of the cam member following adjustment.

4. The adjustable latch assembly of claim **3**, wherein:

the cam surface is non-circular.

5. The adjustable latch assembly of claim **3**, wherein:

the cam member includes first and second cam surfaces; and

the movable base member includes first and second engagement surfaces that are configured to engage the first and second cam surfaces, respectively, upon rotation of the cam member in first and second directions, respectively, to shift the movable base member in first and second directions, respectively.

6. The adjustable latch assembly of claim **5**, wherein:

the first and second engagement surfaces face each other; and

the cam member is disposed between the first and second engagement surfaces.

7. The adjustable latch assembly of claim **6**, wherein:

the first and second engagement surfaces are convex.

8. The adjustable latch assembly of claim **7**, wherein:

the movable base member comprises a main web having an opening through a central portion of the web;

the cam member has an opening therethrough; and

the second threaded member extends through the openings in the movable base member and the cam member.

9. The adjustable latch assembly of claim **8**, wherein:

the opening through the movable base member comprises an elongated slot.

10. A decklid, comprising:

a striker movably engaging a body structure and including first and second opposed surfaces facing each other;

a decklid having a latch releasably engaging the striker; and

a cam rotatably mounted to the body structure and engaging the first and second opposed surfaces and shifting the striker up and down when the cam rotates, the cam including a pair of transversely extending tool engagement surfaces engageable by a tool to rotate the cam.

11. The decklid assembly of claim **10**, including:

a pivot member mounted to the body structure; and wherein:

the cam rotatably engages the pivot member.

12. The decklid assembly of claim **11**, wherein:

the pivot member comprises a threaded member that threadably engages the body structure, and wherein the threaded member can be tightened to clamp the cam and prevent rotation of the cam.

13. The decklid assembly of claim **12**, wherein:

the striker includes an elongated slot, and wherein the threaded member extends through the elongated slot.

14. The decklid assembly of claim **10**, wherein:

the cam includes first and second outwardly facing cam surfaces on opposite sides of the cam that slidably engage the opposed surfaces of the striker.

15. The decklid assembly of claim **14**, wherein:

the first and second cam surfaces taper outwardly away from each other.

16. A decklid assembly, comprising:

a striker movably engaging a vehicle body structure adjacent a deck opening in the vehicle body structure and defining a position relative to the vehicle body structure;

a decklid movably mounted to the vehicle body structure and including a latch that is configured to releasably engage the striker;

a threaded first connector operably interconnecting the striker and the vehicle body structure such that rotation of the threaded connector shifts the striker relative to the vehicle body structure to thereby adjust the position of the striker relative to the vehicle body structure;

a second connector configured to fixedly connect the striker to the vehicle body structure and prevent further movement of the striker relative to the vehicle body structure after adjusting the position of the striker relative to the vehicle body structure;

a connector member having an opening; and wherein:

the vehicle body structure includes a threaded first opening;

the striker includes a threaded second opening and an opening in the form of an elongated slot adjacent the threaded second opening;

the threaded first connector having a shaft portion threadably engaging the threaded second opening and an end portion that rotatably engages the connector member; and

the second connector comprises a threaded second member extending through the opening in the connector member and through the elongated slot and threadably engaging the threaded first opening.

17. The decklid assembly of claim **16**, wherein:

the threaded second member can be tightened to clamp the connector member and the striker to the vehicle body structure.

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