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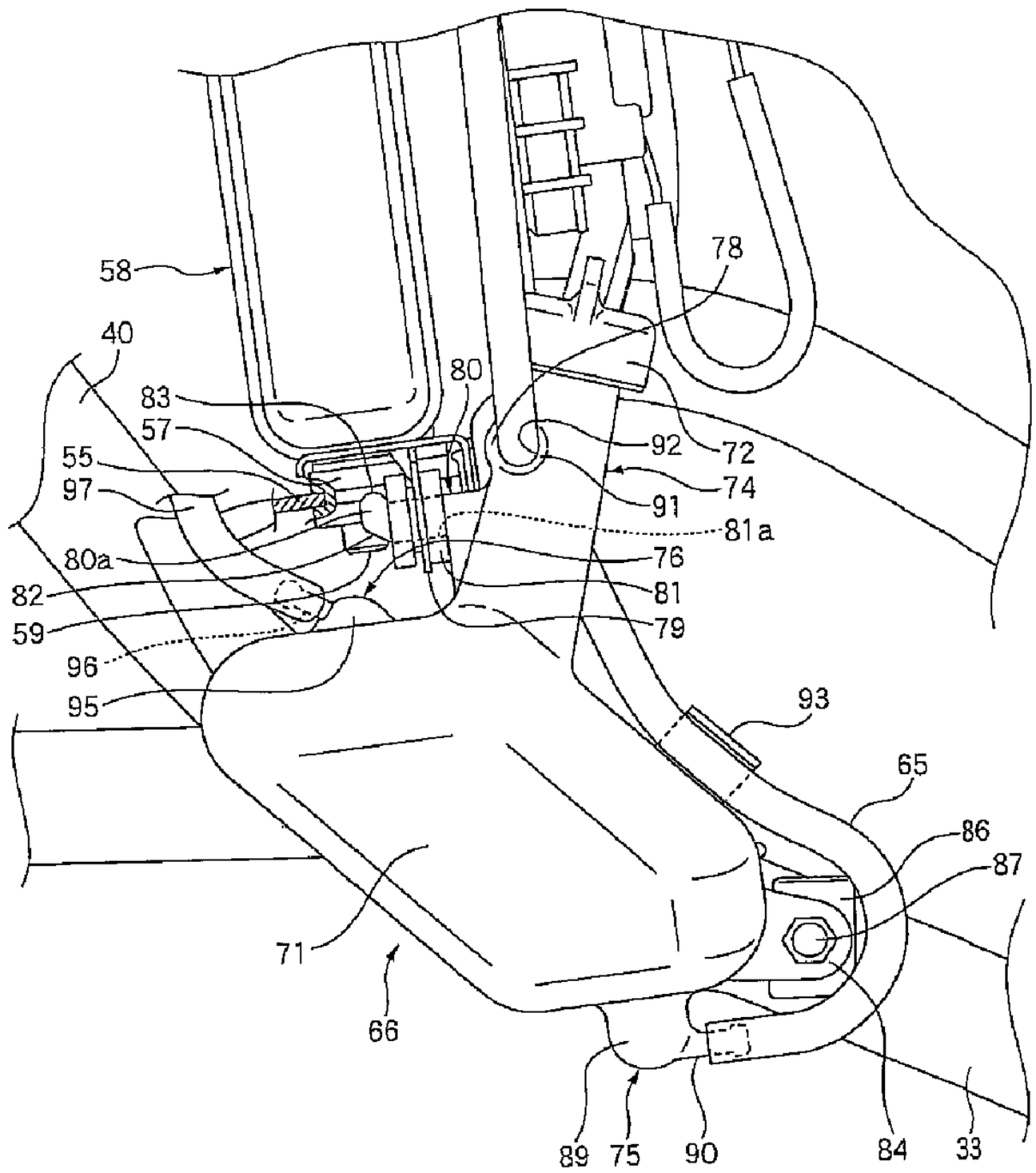
(54) Title: RESERVE TANK STRUCTURE



(57) Abrégé/Abstract:
To provide a reserve tank structure which can enhance the degree of freedom in the layout of the filling portion of the reserve tank and the mounting bracket and the degree of freedom in the layout of parts around the reserve tank. A reserve tank structure which

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(57) Abrégé(suite)/Abstract(continued):
is constituted by connecting a reserve tank to a radiator by way of a reserve hose, wherein the reserve tank includes a tank body portion which reserves a cooling water, a filling portion which extends upwardly from the tank body portion and includes a water supply port on an upper end thereof, a hose plug to which an end portion of the reserve hose is connected, and mounting brackets which support an intermediate portion of the reserve hose, and the mounting bracket is mounted on the filling portion.

ABSTRACT OF THE DISCLOSURE

To provide a reserve tank structure which can enhance the degree of freedom in the layout of the filling portion of the reserve tank and the mounting bracket and the degree of freedom in the layout of parts around the reserve tank. A reserve tank structure which is constituted by connecting a reserve tank to a radiator by way of a reserve hose, wherein the reserve tank includes a tank body portion which reserves a cooling water, a filling portion which extends upwardly from the tank body portion and includes a water supply port on an upper end thereof, a hose plug to which an end portion of the reserve hose is connected, and mounting brackets which support an intermediate portion of the reserve hose, and the mounting bracket is mounted on the filling portion.

RESERVE TANK STRUCTURE

FIELD OF THE INVENTION

The present invention relates to a reserve tank structure which is constituted by connecting a reserve tank to a radiator by way of a reserve hose.

BACKGROUND OF THE INVENTION

A radiator which cools cooling water using a traveling wind and air flow from a fan is mounted on a vehicle which mounts a water-cooled engine. Here, a reserve tank which can supply or discharge the cooling water for adjusting an amount of water is connected to the radiator by way of a reserve hose (for example, see JP-A-62-76795).

A reserve tank which is described in the JP-A-62-76795 includes a tank body portion which reserves cooling water and a filling portion which includes a water supply port formed in an upper end thereof. Further, a plurality of mounting brackets which support the reserve hose is mounted on an outer peripheral portion of the tank body portion in a projecting manner.

Here, in the structure such as a reserve tank described in JP-A-62-76795, in addition to a filling port, a plurality of mounting brackets are formed on an outer peripheral portion of the tank body portion in a projecting manner and hence, it is necessary to adopt a layout which can obviate the interference of the filling portion and the mounting brackets with each other. Accordingly, the layout of the filling portion and the mounting brackets is restricted. Further, the layout of

parts around the filling portion which are required to obviate the interference with the filling port and the mounting brackets is also restricted.

The present invention has been made under such circumferences and it is an object of the present invention to provide the reserve tank structure which can enhance the degree of freedom in the layout of a filling portion of a reserve tank and a mounting bracket and the degree of freedom in the layout of parts around the reserve tank.

SUMMARY OF THE INVENTION

The present invention is directed to the reserve tank structure which is constituted by connecting a reserve tank to a radiator by way of a reserve hose, and which is characterized in that the reserve tank includes a tank body portion which reserves cooling water, a filling portion which extends upwardly from the tank body portion and includes a water supply port on an upper end thereof, a hose plug to which an end portion of the reserve hose is connected, and a mounting bracket which supports the reserve hose, and the mounting bracket is mounted on the filling portion.

According to the present invention, the mounting bracket which supports the reserve hose is mounted on the filling portion which extends upwardly from the tank body portion and includes the water supply port on the upper end thereof and hence, it is unnecessary to adopt the layout which obviates the interference between the filling portion and the mounting bracket whereby the degree of freedom in the layout of the filling portion and the mounting bracket of the reserve tank can be enhanced. Further, it is possible to reduce the number of mounting brackets which are mounted on the tank body portion and hence, the degree of freedom in the layout of the parts around the reserve tank can be also enhanced.

An aspect of the invention is, in addition to the constitution described above, characterized in that a recessed portion is formed in an outer peripheral portion of the filling portion and the mounting bracket is mounted in the recessed portion.

According to this aspect of the invention, the recessed portion is formed in the outer peripheral portion of the filling portion and the mounting bracket is mounted in the recessed portion and hence, it is possible to suppress a projection amount of the mounting bracket from the outer peripheral portion of the filling portion to the outside. Accordingly, it is possible to further enhance the degree of freedom in layout including the arrangement of the mounting brackets close to the parts around the reserve tank.

Another aspect of the invention is, in addition to the constitution described above, characterized in that a support portion for supporting the reserve tank on a vehicle body side is arranged in the vicinity of the mounting bracket which is mounted on the filling portion.

According to this aspect of the invention, the reserve tank is supported on the vehicle body side by way of the support portion which is arranged in the vicinity of the mounting bracket which is mounted on the filling portion and hence, it is possible to effectively suppress the swinging of the filling portion and, at the same time, it is possible to effectively suppress the movement of the reserve hose.

A further aspect of the invention is, in addition to the constitution described above, characterized in that the support portion is supported on a vehicle-body-side stay and a distal end portion of the support portion includes a tapered portion which is tapered toward a tip end thereof and a removal-preventing bulging portion.

According to this aspect of the invention, the distal end portion of the support portion which is supported on the vehicle-body-side stay has a tapered shape which is tapered toward a tip end thereof and hence, the mounting of the support portion on the vehicle-body-side stay is facilitated. Further, the distal end portion of the support portion includes the removal-preventing bulging portion and hence, it is possible to make the removal of the support portion from the stay difficult. Accordingly, the support portion can be easily mounted on the

stay and, at the same time, it is possible to surely maintain a mounting state of the support portion.

Yet another aspect of the invention is, in addition to the constitution described above, characterized in that the reserve tank is arranged below the radiator and an atmospheric pressure port which is communicated with an atmosphere side and maintains a pressure in the inside of the reserve tank at an atmospheric pressure is mounted on an upper surface of the tank body portion in an obliquely and upwardly projecting manner.

According to this aspect of the invention, an atmospheric pressure port which is communicated with an atmosphere side and maintains a pressure in the inside of the reserve tank at an atmospheric pressure is mounted on the upper surface of the tank body portion in an obliquely and upwardly projecting manner and hence, even when the reserve tank is arranged below the radiator, it is possible to arrange the reserve tank close to the radiator and, at the same time, the hose can be easily pulled around when the hose is connected to the atmospheric pressure port.

BRIEF DESCRIPTION OF THE DRAWINGS

Preferred embodiments of the invention are shown in the drawings, wherein:

Fig. 1 is a side view showing a whole structure of a saddle-ride type vehicle to which the reserve tank structure according to the present invention is applied.

Fig. 2 is a perspective view showing a front cover in Fig. 1.

Fig. 3 is a perspective view showing a vehicle body frame at a front portion of the saddle-ride type vehicle.

Fig. 4 is a left side view showing the structure in the vicinity of the reserve tank with a state that a left shroud is removed.

Fig. 5 is a back view showing the structure in the vicinity of the reserve tank.

Fig. 6 is a plan view showing the structure in the vicinity of the reserve tank.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Hereinafter, one embodiment of the present invention is explained in conjunction with drawings. Here, the directions of "front", "rear", "left" and "right" in the explanation made hereinafter are assumed to be equal to the corresponding directions of "front", "rear", "left" and "right" with respect to the advancing direction of the vehicle at the time of advancing the vehicle.

Fig. 1 is a side view showing a saddle-ride type vehicle to which the reserve tank structure of the present invention is applied. The saddle-ride type vehicle 11 is an all terrain vehicle which mainly travels on the rough terrain, a so-called buggy. The saddle-ride type vehicle 11 includes a vehicle body frame 12 which constitutes a skeleton of the saddle-ride type vehicle 11 and is mainly constituted of pipe members, a water-cooled type engine 13 which is arranged at a substantially center position of the vehicle body frame 12 in the longitudinal direction, front wheels 14 which are supported on the vehicle body frame 12 in a vertically rockable and laterally steerable manner and are arranged on both left and right sides of a front portion of the vehicle body (only the left side front wheel 14 being shown in Fig. 1), and rear wheels 15 which are supported on the vehicle body frame 12 in a vertically rockable manner and are arranged on both left and right sides of a rear portion of the vehicle body (only the left side rear wheel 15 being shown in Fig. 1).

Further, the saddle-ride type vehicle 11 includes a head light 20 which is arranged at a center of the front portion of the vehicle body, a handle rod 21 which is arranged above the front side of the vehicle body so as to extend in the lateral direction for steering the front wheels 14, a fuel tank 22 which is mounted above the center in the longitudinal direction of the vehicle body, a seat 23 which

is mounted on a rear side of the fuel tank 22, steps 24 which are mounted on both left and right sides of the engine 13 and the like.

Further, in the saddle-ride type vehicle 11, a body cover 26 which constitutes a surface side of the saddle-ride type vehicle 11 includes a front cover 27 which is arranged to cover the front portion of the vehicle body from above while surrounding a periphery of the head light 20 which is arranged at the center of the front portion of the vehicle body, and rear covers 28 which are integrally mounted on the seat 23 and are arranged to cover the rear portion of the vehicle body from above. Here, the rear cover 28 includes rear fenders 29 which cover the rear wheels 15.

As shown in Fig. 2, the front cover 27 includes a front center cover 60 which extends rearwardly while covering the head light 20 from above, a left shroud 61L which is mounted on a left side of the front portion of the vehicle body and extends downwardly while covering the head light 20 from a left side and, further, extends rearwardly from a lower portion, a right shroud 61R which is mounted on a right side of the front portion of the vehicle body and extends downwardly while covering the head light 20 from a right side and, further, extends rearwardly from a lower portion, a left fender 62L which is mounted on a left side of the left shroud 61L and covers the left front wheel 14 from above and behind, a right fender 62R which is mounted on a right side of the right shroud 61R and covers the right front wheel from above and behind, and a front under cover 63 which covers the spaces between the head light 20 and the left shroud 61L and between the head light 20 and the right shroud 61R while covering the head light 20 from below.

The front cover 27 is divided into the front center cover 60, the left shroud 61L, the right shroud 61R, the left fender 62L, the right fender 62R and the front under cover 63, and is formed of an integrally molded product which is constituted of the above-mentioned members which are respectively made of a synthetic resin material.

As shown in Fig. 3, the vehicle body frame 12 includes a pair of left and right upper pipes 31 which is arranged at an upper portion of the vehicle body along the longitudinal direction and, at the same time, has a front portion thereof inclined forwardly and downwardly, a pair of left and right main pipes 32 which is arranged at a lower portion of the vehicle body along the longitudinal direction, and a pair of left and right front pipes 33 which extends in the slightly frontward and upward direction and is branched from midst portion of the pair of left and right main pipes 32. Here, front ends of the pair of left and right upper pipes 31 are connected to front ends of the pair of left and right front pipes 33.

Further, the vehicle body frame 12 includes a pair of left and right front arm pipes 34 which is arranged on an extension of the upper pipes 31 and has upper end portions thereof connected to lower sides of the pair of left and right front pipes 33 and lower end portions thereof connected to front end sides of both main pipes 32, a front cross pipe 35 which extends in the lateral direction so as to connect front end portions of both front pipes 33, and a front cross pipe 36 which extends in the lateral direction so as to connect front end portions of a pair of left and right main pipes 32.

In addition to the above-mentioned constitution, the vehicle body frame 12 includes a pair of left and right down pipes 40 which has upper end portions thereof connected to the pair of left and right upper pipes 31 at front predetermined positions above the front pipes 33 and extended rearwardly and downwardly and has lower end portions thereof connected to intermediate portions of the pair of left and right front pipes 33, and a pair of left and right front sub pipes 41 which are connected to the pair of left and right front pipes 33 and the pair of left and right main pipes 32 to be arranged on an extension of the down pipes 40.

Further, in the vehicle body frame 12, front lower arm brackets 42 for respectively supporting suspension arms not shown in the drawing for the front wheel 14 are fixed to the pair of left and right main pipes 32 in the longitudinal direction, front upper arm brackets 43 for respectively supporting suspension

arms for the front wheel 14 are fixed to the pair of left and right front pipes 33 in the longitudinal direction, and a front cushion bracket 44 which extends in the lateral direction and supports a cushion for the front wheel 14 is fixed to the upper pipes 31 at portions thereof in front of a connection positions where the upper pipes 31 are connected with the down pipes 40.

Further, in the vehicle body frame 12, a front across plate 46 which supports a steering bottom holder 45 is extended between both main pipes 32, and a steering holder pipe 49 which supports a steering holder 48 by way of a steering holder bracket 47 is extended between both upper pipes 31. Further, a steering shaft 50 which is connected to the above-mentioned handle rod 21 is rotatably supported by the steering bottom holder 45 and the steering holder 48.

Further, in the vehicle body frame 12, engine-mount front brackets 51 are fixed to rear end sides of both front pipes 33, engine-mount lower brackets 52 are fixed to portions of both main pipes 32 slightly behind positions where the front pipes 33 are connected to both main pipes 32 and, further, engine upper brackets 53 are fixed to portions of both upper pipes 31 at positions above the engine mount lower brackets 52. Further, on the vehicle body frame 12, the engine 13 (see Fig. 1) is mounted by way of the engine mount front brackets 51, the engine mount lower brackets 52 and the engine upper brackets 53.

Further, in the vehicle body frame 12, radiator stays 55 are fixed to both down pipes 40 in the vicinity of a position where both down pipes 40 are connected with the front pipes 33, while radiator stays 56 are fixed to both upper pipes 31 in the vicinity of positions where both down pipes 40 and the steering shaft 50 cross each other. Further, as shown in Fig. 4, into a grommet 57 made of an annular resilient material which is mounted on both lower radiator stays 55, both left and right fitting shaft portions 59 which are formed on a lower portion of the radiator 58 for cooling the cooling water for the engine 13 are inserted. Further, as shown in Fig. 3, left and right mounting portions 60 which are formed on an upper portion of the radiator 58 are fixed to both upper radiator stays 56 using bolts 62. In this manner, the radiator 58 is supported on both upper pipes 31 and both

down pipes 40 of the vehicle body frame 12, while the radiator 58 is supported on the vehicle body frame 12 in front of the engine 13 as shown in Fig. 1.

Further, as shown in Fig. 3, below the radiator 58 and on a left side which constitutes one side of the lateral direction, there is provided a reservoir tank 66 which is connected with the radiator 58 by way of a reservoir hose 65 and performs the supply and the discharge of cooling water between the reserve tank 66 and the radiator 58.

The reserve tank 66 is an integrally molded product made of a synthetic resin. As shown in Fig. 4 and Fig. 5, the reservoir tank 66 includes a container-like tank body portion 71 which reserves cooling water, an approximately tapered cylindrical filling portion 74 which extends upwardly from the tank body portion 71 and has a water supply port 73 (see Fig. 5) which is closed by a cap 72 on an upper end thereof, a hose plug 75 which is mounted on a lower surface of the tank body portion 71 and allows the connection of an end portion of the reserve hose 65 thereto, and an atmospheric pressure port 76 which is mounted on an upper surface of the tank body portion 71 in front of the filling portion 74 in an obliquely and upwardly projecting manner and is communicated with an atmospheric side so as to maintain the pressure in the inside of the reserve tank 66 at an atmospheric pressure.

The tank body portion 71 is formed in an approximately parallel rectangular shape as viewed in a side view, wherein a front surface and a rear surface of the tank body portion 71 are inclined along a shape of a rearwardly and downwardly extending intermediate portion 64 of a left shroud 61L of the front cover 27. Due to such a constitution, the tank body portion 71 is arranged not to be exposed from a side due to the left-side shroud 61L (see Fig. 1).

Further, the filling portion 74 extends upwardly while being slightly outwardly inclined from a laterally intermediate portion of the tank body portion 71 at a boundary position between an upper surface and a rear surface of the tank body portion 71. A threaded portion 77 (see Fig. 5) for allowing the thread engagement of a cap 72 therewith is formed on an outer peripheral surface of an

upper portion of the filling portion 74, a mounting bracket 78 which supports an intermediate portion of the reserve hose 65 is mounted on an intermediate front side of the filling port 74, and a support portion 80 which is supported on a stay 79 of the radiator 58 which is arranged on a vehicle body side is arranged below and in front of the filling portion 74 which is positioned in the vicinity of the mounting bracket 78 in a frontwardly projecting manner.

The stay 79 extends downwardly from a lower portion of the radiator 58, and a grommet 81 which is made of an annular resilient material is mounted in a mounting hole not shown in the drawing which is formed in the stay 79. By inserting the support portion 80 formed on the filling portion 74 into the through hole 81a of the grommet 81 from behind, a distal end portion 80a of the support portion 80 is resiliently supported in a projecting manner from the grommet 81. Further, the distal end portion 80a of the support portion 80 includes a tapered portion 82 which is tapered downwardly with an inclined surface, and a bulging portion 83 which projects upwardly from a columnar portion of the support portion 80 for preventing the removal thereof is formed. The distal end portion 80a of the support portion 80 is easily inserted into the inside of the through hole 81a of the grommet 81 due to the tapered portion 82 thus facilitating the mounting of the support portion 80 on the stay 79. Further, the bulging portion 83, after mounting the support portion 80, assumes a position at which the bulging portion 83 is overlapped to the grommet 81 in the radial direction thus making the removal of the support portion 80 from the grommet 81 difficult.

Further, on a lower portion of a rear surface of the tank body portion 71, a mounting lug portion 84 is formed in a rearwardly extending manner. A mounting hole not shown in the drawing which penetrates in the lateral direction is formed in the mounting lug portion 84. On the other hand, as shown in Fig. 5, outside the left front pipe 33, an approximately U-shaped bracket 86 which mounts a welded nut 85 on an inner surface thereof is arranged. The mounting lug portion 84 of the reserve tank 66 is fixed to the bracket 86 of the front pipe 33 by, in a state that the mounting lug portion 84 is brought into contact with an outer surface of the bracket 86, threadedly engaging a bolt 87 into the welded nut

85 through a mounting hole formed in the mounting lug portion 84 from the outside.

Accordingly, the reserve tank 66 can be mounted on the vehicle body side by inserting the distal end portion 80a of the support portion 80 into the inside of the through hole 81a of the grommet 81, by supporting the support portion 80 on the stay 79 of the radiator 58 by way of the grommet 81 and by fixing the mounting lug portion 84 to the bracket 86 mounted on the front pipe 33.

The hose plug 75 includes a base portion 89 which is formed into a dome shape by bulging a lower surface of the tank body portion 71 downwardly, and a tubular connection portion 90 which rearwardly extends from a lower portion of the base portion 89, wherein by inserting one end portion of the reserve hose 65 into the connection portion 90, it is possible to connect one end portion of the reserve hose 65 to the hose plug 75. By mounting the hose plug 75 on the lower portion of the tank body portion 71, it is unnecessary to provide piping inside the tank body portion 71 thus simplifying the structure of the reserve tank 66.

The mounting bracket 78 which is formed on a front surface side of the intermediate portion of the filling portion 74 is formed in an arcuate shape to close the opening side of the recessed portion 91 which is formed by indenting an outer peripheral portion of the filling portion 74 toward the inside. Further, a mounting hole 92 which penetrates the mounting bracket 78 in the lateral direction together with an inner surface of the recessed portion 91 is formed in the mounting bracket 78, wherein the reserve hose 65 is supported by inserting the reserve hose 65 into the mounting hole 92. With the provision of the mounting bracket 78 on the recessed portion 91 of the filling portion 74, a projecting amount of the mounting bracket 78 in front of the filling portion 74 can be suppressed thus allowing the filling portion 74 to be arranged in the vicinity of the rear surface of the radiator 58. Here, the recessed portion 91 and the mounting bracket 78 are also molded at the time of performing the integral molding of the reserve tank 66.

Further, as shown in Fig. 4 and Fig. 5, a mounting bracket 93 having an approximately L-shaped cross section is mounted on an intermediate portion of a rear surface of the tank body portion 71 in a state that the mounting bracket 93 is aligned with the hose plug 75 in the lateral direction and projects from a rear surface thereof. The reserve hose 65 is sandwiched between the mounting bracket 93 and the rear surface of the tank body portion 71.

Accordingly, the reserve hose 65 which has one end portion thereof connected to the hose plug 75 is curved behind the mounting lug portion 84, is supported on the mounting bracket 93 and the mounting bracket 78 and, thereafter, extends upwardly along the rear surface of the radiator 58. Further, as shown in Fig. 6, the reserve hose 65 has another end thereof connected to an upper portion of the radiator 58 in the vicinity of the radiator cap 94. Accordingly, the reserve hose 65 is also pulled around in the frontwardly and upwardly along the inclined rear surface of the tank body portion 71 and, as shown in Fig. 1, is arranged following a shape of the intermediate portion 64 of the left shroud 61L such that the reserve hose 65 is not exposed sideward with the use of the left shroud 61L.

Further, the atmospheric pressure port 76 includes a base portion 95 which is formed into a dome shape by upwardly bulging an upper surface of the tank body portion 71 and a tubular connection portion 96 which extends obliquely in the frontward and upward direction from a front portion of the base portion 95. By fitting one end portion of the hose 97 which is opened to the atmosphere to the connecting portion 96, one end portion of the hose 97 is connected to the atmospheric pressure port 76. Although the atmospheric pressure port 76 is, as shown in Fig. 6, arranged at a position where the atmospheric pressure port 76 is overlapped to the radiator 58 in the longitudinal direction and the lateral direction, by extending the connection portion 96 obliquely in the frontward and upward direction, the interference between the hose 97 and the lower surface of the radiator 58 can be obviated thus facilitating the pull-around operation of the hose 97.

As has been explained heretofore, according to the reserve tank structure of this embodiment, the mounting bracket 78 which supports the intermediate portion

of the reserve hose 65 is mounted on the filling portion 74 which extends upwardly from the tank body portion 71 and, at the same time, forms the water supply port 73 on the upper end thereof. Accordingly, it is unnecessary to consider the layout of the filling portion 74 and the mounting bracket 78 which obviates the interference between the filling portion 74 and the mounting bracket 78 and hence, it is possible to enhance the degree of freedom in the layout of the filling portion 74 of the reserve tank 66 and the mounting bracket 78. Further, it is possible to reduce the number of the mounting brackets which are mounted on the tank body portion 71 to one mounting bracket 93 and hence, it is possible to also enhance the degree of freedom in layout of the peripheral members of the reserve tank 66.

Further, the recessed portion 91 is formed in the outer peripheral portion of the filling portion 74 and the mounting bracket 78 is mounted in the recessed portion 91 and hence, it is possible to suppress a projection amount of the mounting bracket 78 from the outer peripheral portion of the filling portion 74 to the outside. Accordingly, it is possible to arrange the mounting bracket 78 close to the radiator 58 which is arranged around the mounting bracket 78 and hence, it is possible to further enhance the degree of freedom in layout and, at the same time, it is possible to shorten a length of the reserve hose 65.

Still further, the support portion 80 which is arranged in the vicinity of the mounting bracket 78 mounted on the filling portion 74 supports the reserve tank 66 on the vehicle-body-side radiator 58 and hence, it is possible to effectively suppress the swinging of the filling portion 74 and, at the same time, it is possible to effectively suppress the movement of the reserve hose 65.

In addition, the distal end portion 80a of the support portion 80 which is supported on the stay 79 of the vehicle-body-side radiator 58 includes a tapered portion 82 which is tapered toward a tip end thereof and hence, it is possible to easily mount the support portion 80 on the stay 79. Further, the distal end portion of the support portion 80 includes the removal-preventing bulging portion 83 and hence, it becomes difficult to remove the support portion 80 from the stay 79.

Further, on the upper surface of the tank body portion 74, the atmospheric pressure port 76 which is communicated with an atmospheric side and maintains the pressure in the inside of the reserve tank 66 at an atmospheric pressure is mounted in a projecting manner in a state that the atmospheric pressure port 76 is directed in the obliquely upward direction and hence, even when the reserve tank 66 is arranged below the radiator 58, it is possible to arrange the reserve tank 66 close to the radiator 58 and, at the same time, it is possible to facilitate the pull-around operation of the hose 97 when the hose 97 is connected to the atmospheric pressure port 76.

Here, the present invention is not limited to the above-mentioned embodiment, and various modifications and improvements are conceivable when necessary.

For example, a shape of the mounting bracket of the present invention which is mounted on the filling portion is not limited to the shape of this embodiment. That is, provided that the mounting bracket can surely support the reserve hose, the mounting bracket may be formed into an arbitrary shape or the mounting bracket may be formed separately from the filling portion.

Further, the reserve tank is not limited to the constitution of this embodiment in which the reserve tank is arranged on the left side and below the radiator, and the reserve tank may be arranged at an arbitrary position. However it is preferable to arrange the reserve tank close to the radiator to shorten a length of the reserve hose.

Although various preferred embodiments of the present invention have been described herein in detail, it will be appreciated by those skilled in the art, that variations may be made thereto without departing from the spirit of the invention or the scope of the appended claims.

THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:

1. A reserve tank structure which is constituted by connecting a reserve tank to a radiator by way of a reserve hose, characterized in that the reserve tank includes a tank body portion which reserves cooling water, a cylindrical filling portion which extends upwardly from the tank body portion and includes a water supply port on an upper end thereof, a hose plug to which an end portion of the reserve hose is connected, and a mounting bracket which supports the reserve hose, and the mounting bracket is mounted on an intermediate portion of the cylindrical the filling portion.

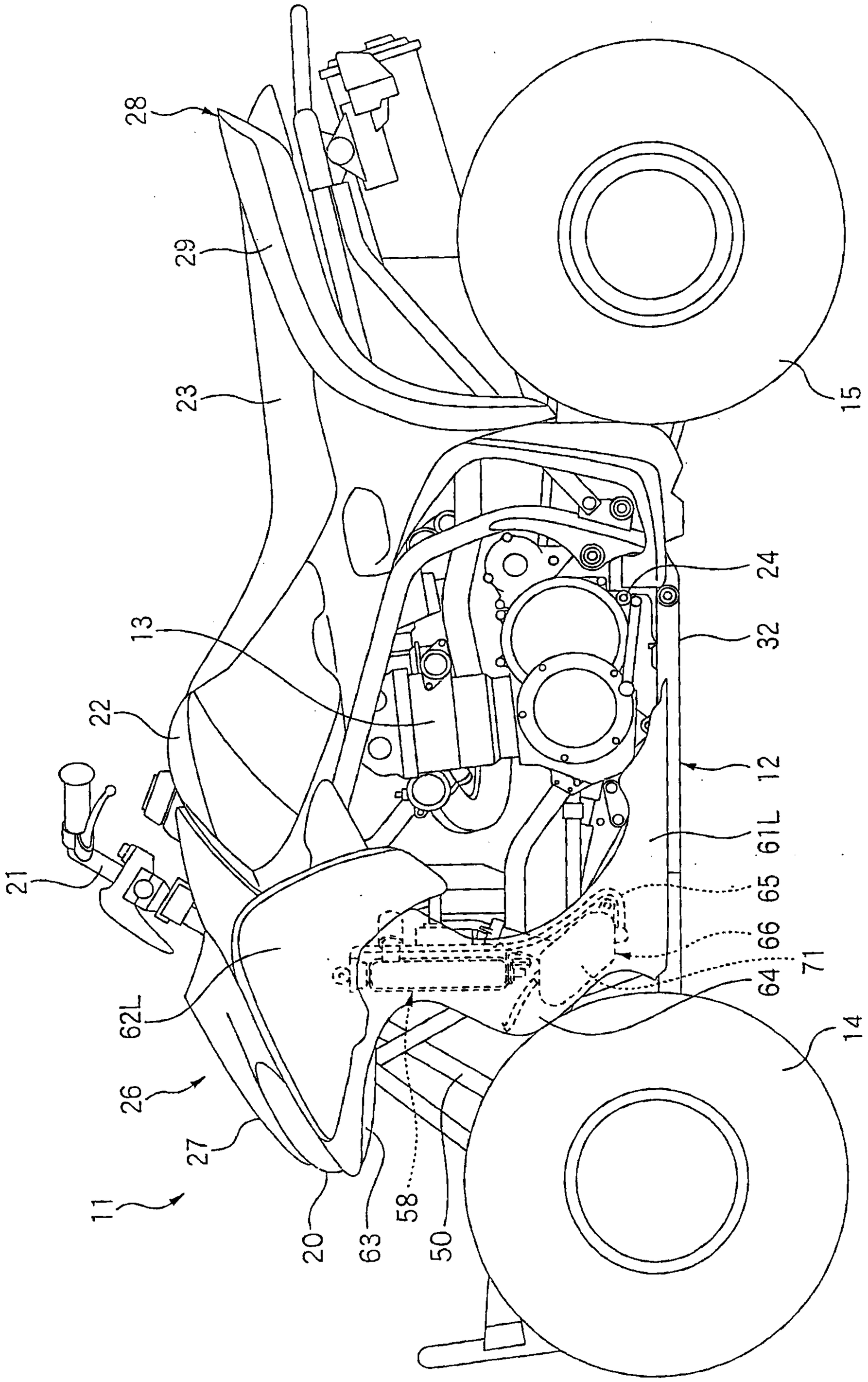
2. A reserve tank structure according to claim 1, characterized in that a support portion for supporting the reserve tank on a vehicle body side is arranged in the vicinity of the mounting bracket which is mounted on the filling portion.

3. A reserve tank structure according to claim 2, characterized in that the support portion is supported on a vehicle-body-side stay and a distal end portion of the support portion includes a tapered portion which is tapered toward a tip end thereof and a removal-preventing bulging portion.

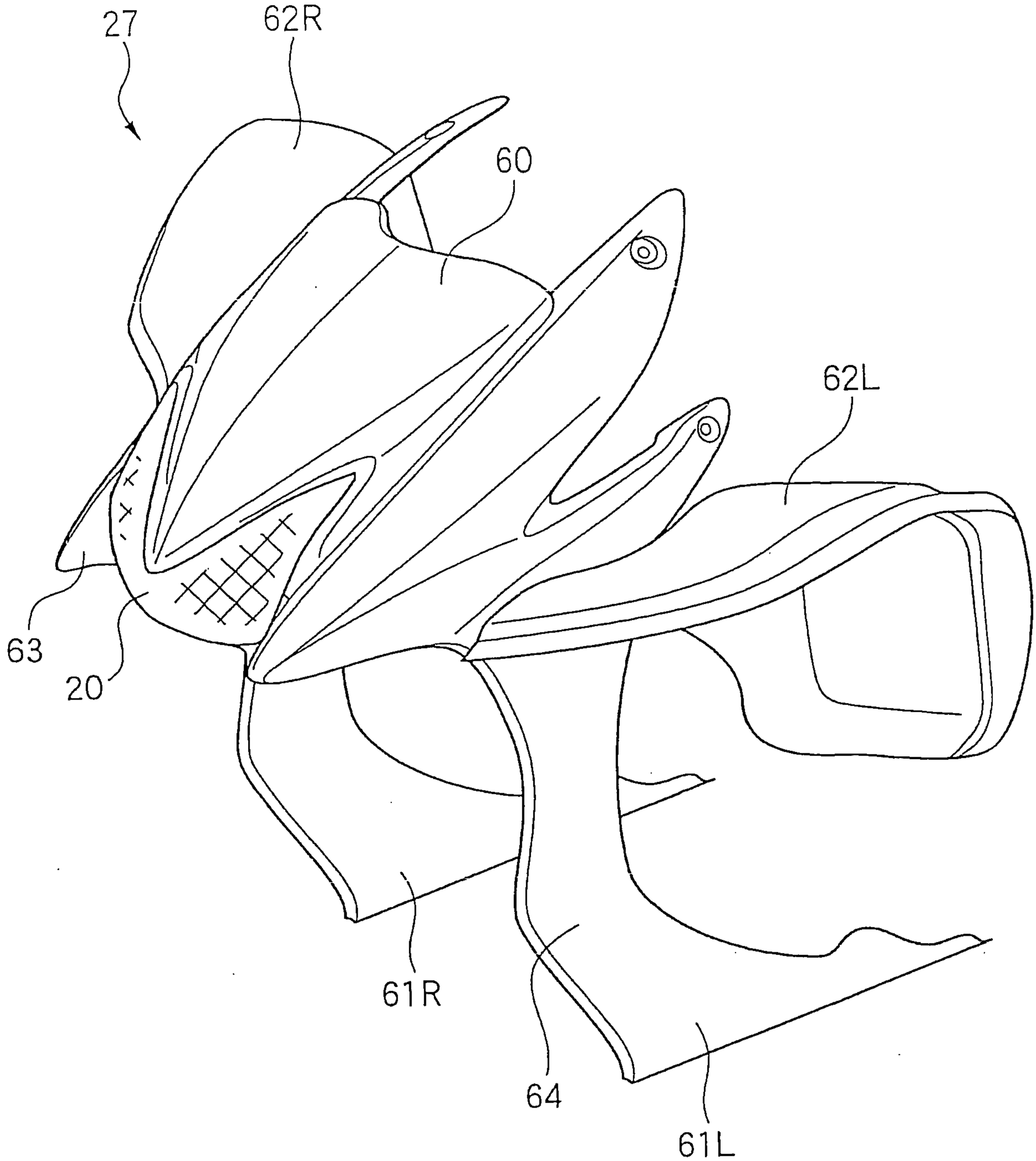
4. A reserve tank structure according to any one of claims 1 or 3, characterized in that the reserve tank is arranged below the radiator and an atmospheric pressure port which is communicated with an atmosphere side and maintains a pressure in the inside of the reserve tank at an atmospheric pressure is mounted on an upper surface of the tank body portion in an obliquely and upwardly projecting manner.

[Name of Document] Drawings

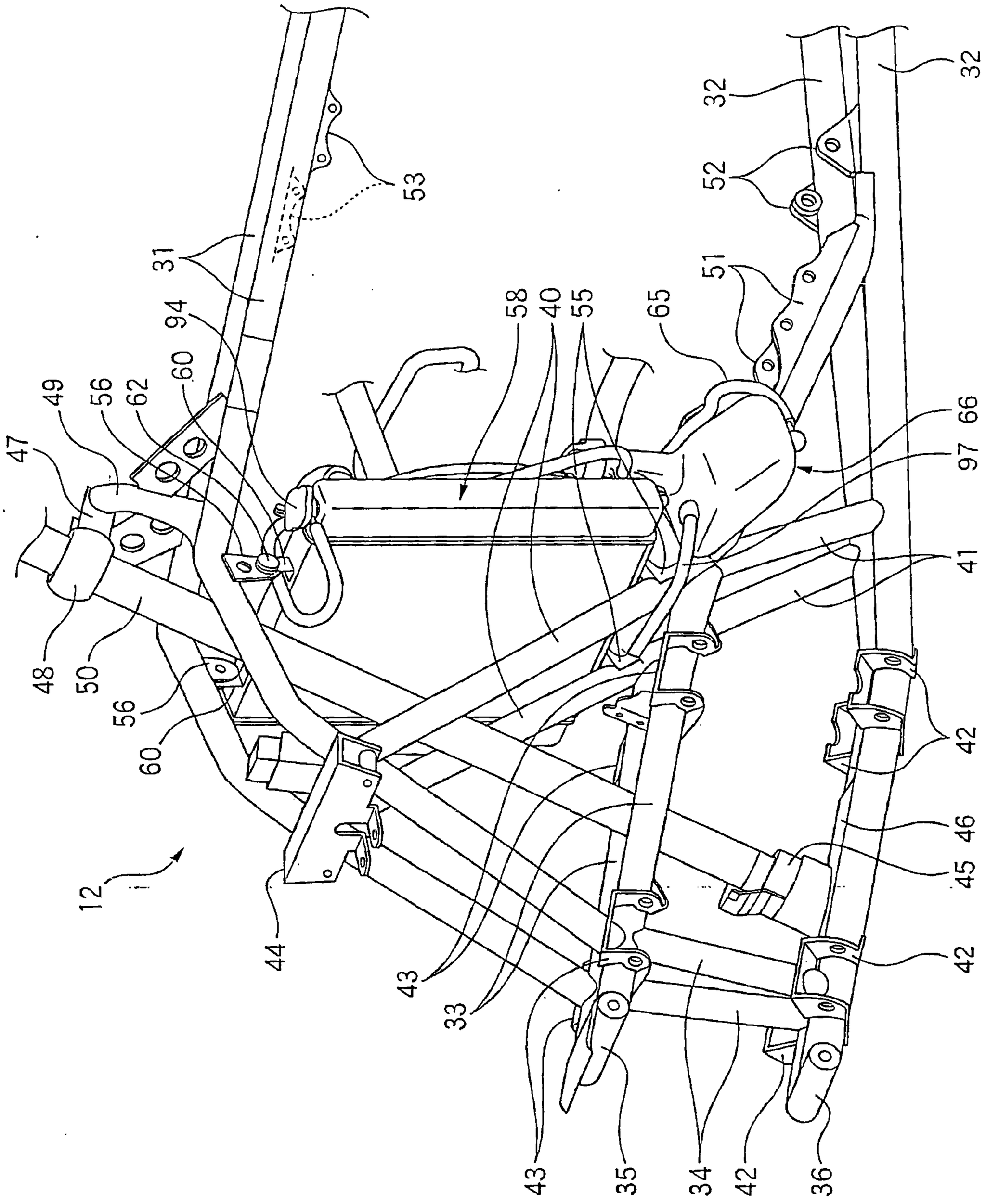
[Fig.1]



[Fig.2]



[Fig.3]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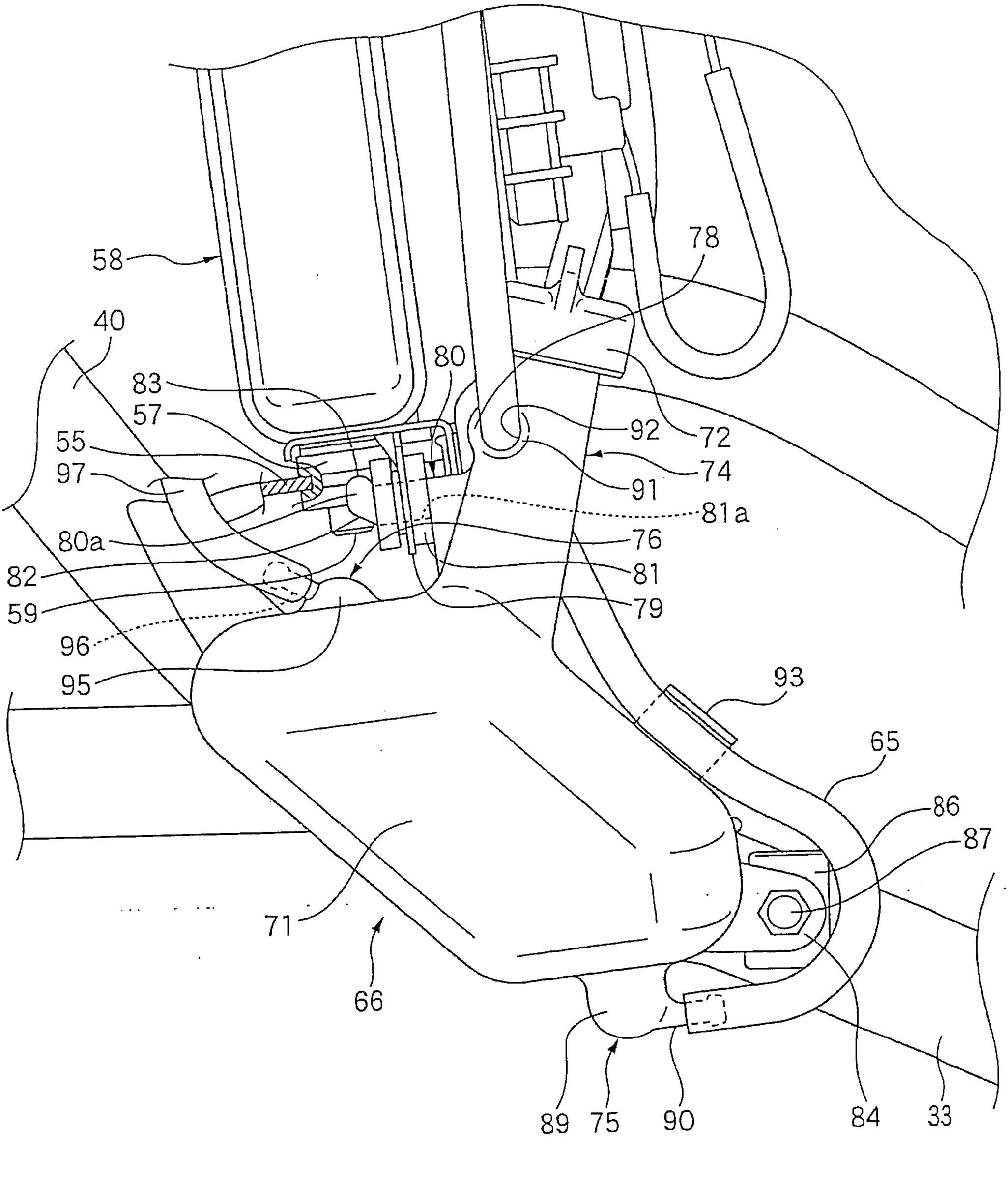
[Fig.4]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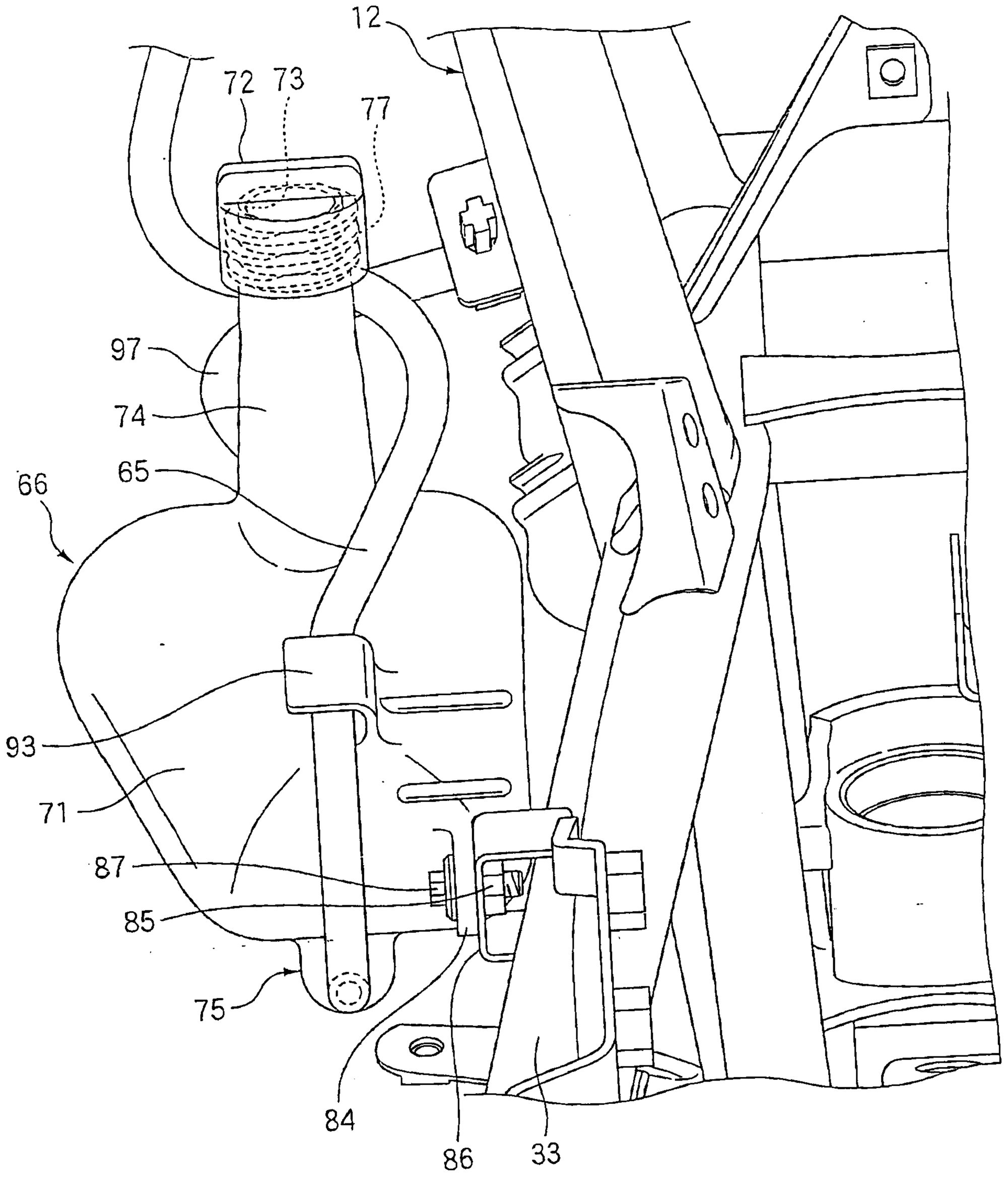
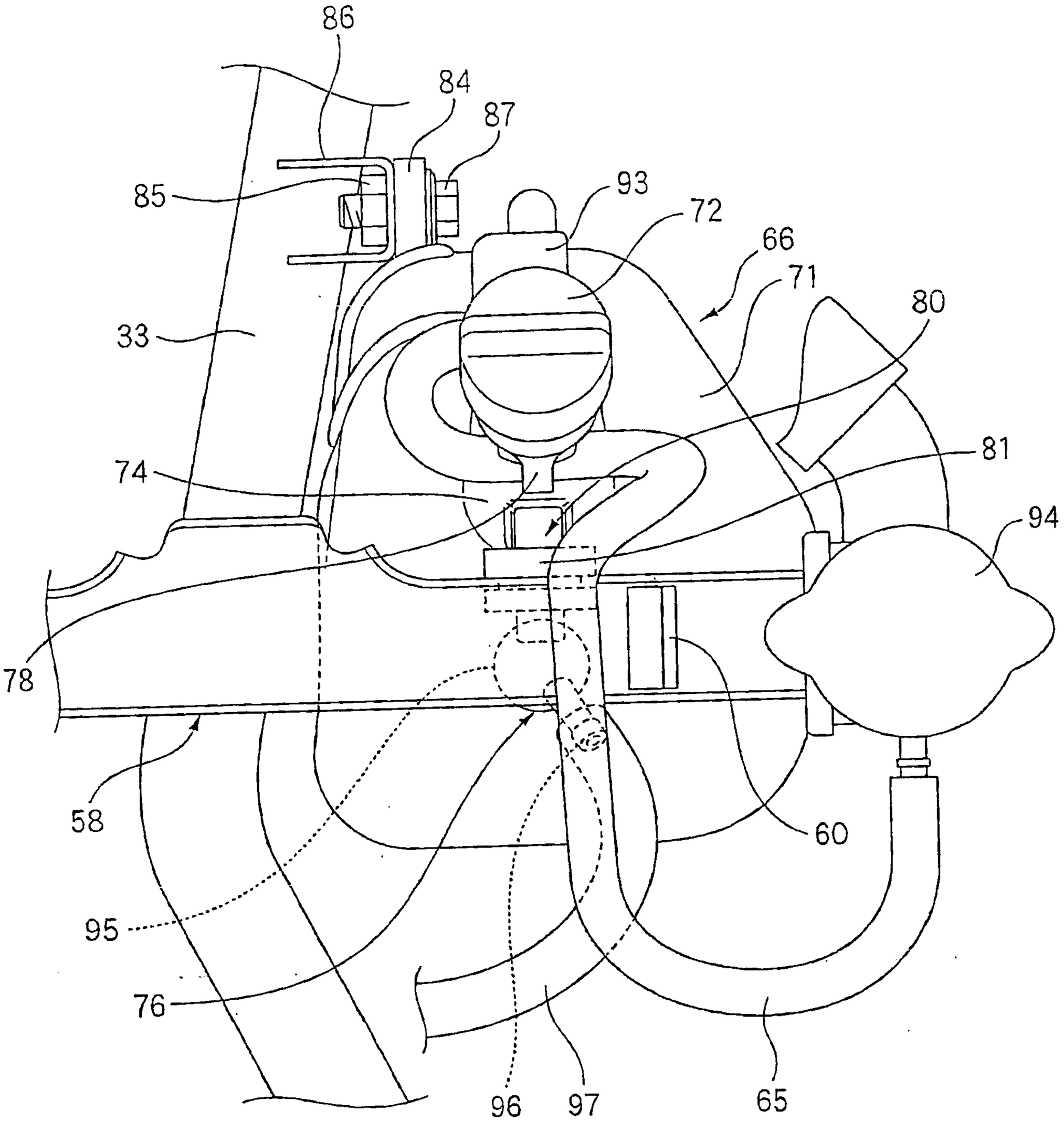
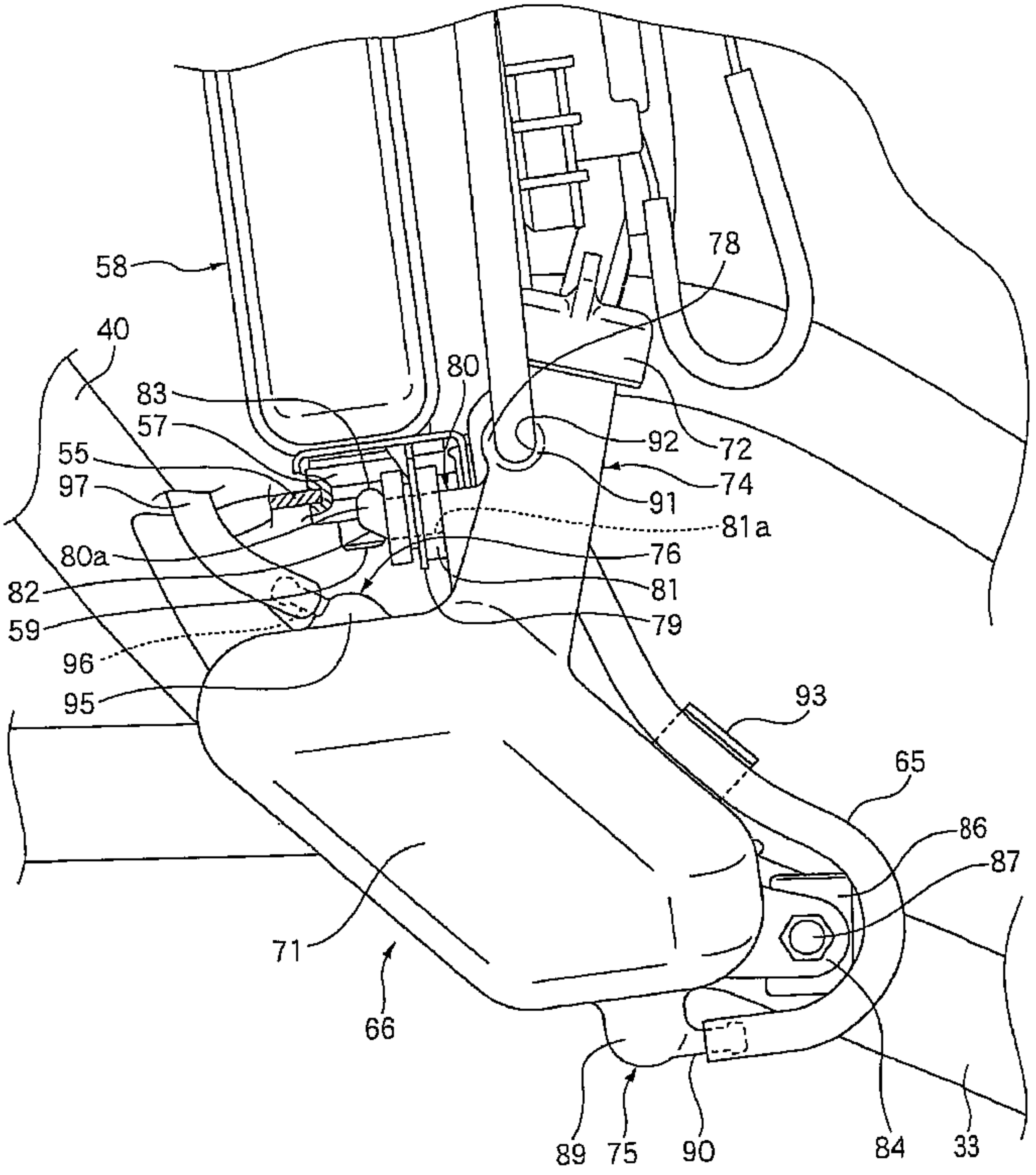
[Fig.5]



[Fig.6]

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