

a state that the liquid crystal display unit **51d** is mounted to the door **3**, impact and vibration directly traveling to the liquid crystal display unit **51d** can be weakened by the buffers **54d**.

[0114] The material of the buffers **54d** is the same material as the buffer **54**. The buffers **54d** are made of natural rubber or synthetic rubber such as chloroprene rubber, for example. The buffers **54d** are inserted in the projections **51D** with elasticity. That is, the small diameter portion **54F** of the buffer **54d** is supported with elasticity by the holding portion **511**.

[0115] The width L2 of the groove formed in the buffer **54d** is slightly smaller than the thickness T of the projection **51D**, and the outer diameter of the bottom face of the groove is slightly smaller than the width W of the cutout of the projection **51D**. That is, the width L2 of the minor-diameter portion **54F** of the buffer **54d** is slightly smaller than the thickness of the projection **51D**, and the outer diameter of the small diameter portion **54F** is smaller than the width W of the holding portion **511**. The buffer **54d** is mounted to the projection **511** in such a way that it is inserted into the holding portion **511** from the tip of the projection **511**. As described above, the buffers **54d** are previously held in the projections **51D** of the liquid crystal display unit **51d**, and thereby the liquid crystal display unit **51d** is easily mounted to the door **3**.

[0116] The length L3 of the shank of the stepped screw **59** is slightly smaller than the total length L1 of the buffer **54d**. For this reason, when the buffers **54d** are held in the holding portions **511** and then fixed to the inner frame **31d** described later with the stepped screws **59**, the buffers **54d** are slightly compressed to be fixed to the inner frame **31d** with the stepped screws **59**.

[0117] The inner frame **31d** is shaped like a box having a flange, and has a first recess **31F** in which the transparent member **53** (see FIG. 1) is inserted. The inner frame **31d** has a second recess **31G**, continuously formed on the outer wall of the recess **31F**, in which the liquid crystal display unit **51d** is inserted.

[0118] The second recess **31G** has an opening **31H** which is formed in its center part and through which the back of the liquid crystal display unit **51** is visible. Further, the second recess **31G** has a plurality of screw holes **311** formed in its bottom face each having a female screw matching with the male screw of the stepped screw **59**.

[0119] The inner frame **31d** has holes **312**, which are formed in its flange, for being mounted to the outer frame **32d** (described later) which becomes a component of the door **3** (see FIG. 1). Further, the inner frame **31d** has screw holes **313**, which are formed in its flange, for fixing the transparent member **53** to the inner frame **31d** with fixing plates **61** (see FIG. 13). The inner frame **31d** is shaped from lightweight aluminum alloy, for example, in one piece.

[0120] With reference to FIG. 13, the attachment structure of the liquid crystal display **5d** will be described according to the sequence of assembling it. FIG. 13 is a partial cross-sectional view of the liquid crystal display **5d**.

[0121] First, the buffers **54d** are held in the projections **51D** of the liquid crystal display unit **51d**, and then the liquid

crystal display unit **51d** is fixed to the recess **31G** of the inner frame **31d** with stepped screws **59**.

[0122] Next, the inner frame **31d** with which the liquid crystal display unit **51d** is fixed is secured to the outer frame **32d**, which becomes a component of the door **3** (see FIG. 1), with screws **62**. Next, the transparent member **53** is set in the first recess **31F**, and then the fixing plates **61** are fixed to the flange with screws **63**. Thus, the transparent member **53** is supported by the inner frame **31d**.

[0123] The transparent member **53** is disposed apart from the front of the liquid crystal display unit **51d** in this way, and thereby it is prevented that any article directly comes in contact with the liquid crystal display unit **51d**. The transparent member **53** allows the light from the liquid crystal display unit **51d** to pass through it, thereby not obstructing the display of the liquid crystal display unit **51d**.

[0124] The transparent member **53** is a glass plate or a touch panel. In the case of a glass plate, materials for it can be got at low price. In the case of a touch panel, switch functions can be added.

[0125] As the fixing plates **61**, four plates may be used each of which is fixed to the inner frame **31d** with a screw **63** using any one of the four screw holes **313**. Alternatively, as the fixing plates **61**, two long plates may be used each of which is fixed to the inner frame **31d** with two screws **63** using any pair of the four screw holes **313**. Moreover, as the fixing plates **61**, one rectangular plate may also be used which has a rectangular opening at its center part and is fixed to the inner frame **31d** with four screws **63** using the four screw holes **313**.

[0126] According to the size of the transparent member **53**, each of the long fixing plates **61** may be fixed to the inner frame **31d** with three screws, or the one piece of the rectangular fixing plate **61** may be fixed to the inner frame **31d** with six screws. The fixing plates **61** are preferably made of hard synthetic resin, for example, so as not to press and damage the transparent member **53**.

[0127] Next, the cover **52d** having an opening at its center part is fixed to the outer frame **32d** with screws **62**. That is, the cover **52d** has an opening from which the front of the liquid crystal display unit **51d** is exposed, and is able to cover the peripheral portion of the liquid crystal display unit **51d** at its front. Since the outer frame **32d** is directly fixed to the cover **52d** as described above, any bezel or the like is not required, and the number of parts can be reduced accordingly.

[0128] Waterproof rubber **57** is embedded in the entire peripheral portion of the surface of the cover **52d** opposite to the transparent member **53**. The waterproof rubber **57** can exert its buffer function for the transparent member **53** in addition to its essential waterproof function.

[0129] As shown in FIG. 13, in a state that the inner frame **31d** is fixed to the outer frame **32d**, the inner frame **31d** and the outer frame **32d** constitute the frame of the door **3** as one piece. The door **3** has many bending points, and thus the shape of the door **3** itself is prevented from being twisted or strained by its own weight or externally applied force from the viewpoint of structural mechanics.

[0130] Since the liquid crystal display unit **51d** is supported with elasticity through the buffers **54d** by the door **3**,