concerns in the long term due to the weight of the dummy door that can result in mishandling. This approach is therefore impractical as a long-term solution.

A need therefore exists to provide a method that seeks to minimize at least one of the above problems.

SUMMARY

In accordance with a first aspect of the present invention, there is provided a method for detecting alignment of a door surround structure for an airplane, the method comprising the steps of:

mounting a light source on one side of the door surround structure;

mounting a target on an opposite side of the door surround structure, the target comprising a marking and configured to receive a light beam from the light source; and

determining a distance between the marking and the light beam on the target;

wherein an alignment is detected based on the distance between the marking and the light beam on the target.

The light source may comprise a laser.

The mounting of the light source on one side of the door surround structure may comprise mounting the light source to one or more hinges disposed on said one side of the door surround structure.

The light source may be rotatably mounted to the one or more hinges.

The method may further comprise:

positioning the light source at a first distance horizontally from a first reference edge on the one side ; and

positioning the marking at a second distance horizontally from a second reference edge on the opposite side, wherein the first distance is substantially equal to the second distance.

The positioning of the light source may comprise first mounting a source base plate on which the light source is mounted to the one or more hinges and then adjusting the light source relative to the source base plate.

The positioning of the marking may comprise first mounting a target base plate on which an adjustable target plate is mounted to the opposite side of the door surround structure and then adjusting the target plate relative to the target base plate.

The method may further comprise adjusting a direction of the light beam along a plane perpendicular to an axis of the hinges for positioning the light beam on the target.

The adjusting of the direction of the light beam may comprise adjusting a spacer element coupled between the light source and a stopper surface of the one side of the door surround structure.

In accordance with a second aspect of the present invention, there is provided a kit of parts for detecting alignment of a door surround structure for an airplane, the kit of parts comprising:

a light source adapted to be mounted to one side of the door surround structure; and

a target adapted to be mounted to an opposite side of the door surround structure, the target comprising a marking and configured to receive a light beam from the light source;

wherein an alignment is detected based on a distance between the marking and the light beam on the target.

The light source may comprise a laser.

The light source may be adapted for mounting to one or more hinges disposed on said one side of the door surround structure.

The light source may be adapted for rotatable mounting to the one or more hinges.

The kit of parts may further comprise a source base plate on which the light source may be adjustably mounted for positioning the light source.

The target may comprise a target base plate on which an adjustable target plate comprising the marking may be mounted for positioning the marking.

The kit of parts may further comprise a spacer element adapted for coupling between the light source and a stopper surface of the one side of the door surround structure, wherein the spacer element may be adjustable for adjusting the direction of the light beam.

In accordance with a third aspect of the present invention, there is provided a device for mounting a light source to a door surround structure for an airplane, the device comprising:

a source base plate on which the light source is mountable and adapted to be mounted to one or more hinges of the door surround structure; and

a spacer element coupled to the source base plate and configured to abut a stopper surface of the door surround structure for adjusting a direction of a light beam emitted from the light source.

The light source may comprise a laser.

The source base plate may be adapted for rotatable mounting to the one or more hinges.

The light source may be adjustable relative to the source base plate for positioning the light source.