

TITLE: POWERED STAND DEVICE FOR MOTORCYCLE

FIELD OF THE INVENTION

5 The present invention relates to a powered stand
device for motorcycle. That riders just needs to press the
button to make the twin middle prop which is under the
motorcycle move onward then drop down to prop the body of
motorcycle and complete the parking activity, moreover, it
10 could be rotated rearward and lifted up then riders can
start to ride. It's a kind of motor device that it could
complete propping the body of motorcycle and rising or
descending activity automatically. Don't need to move the
motorcycles laboriously, the advantages included simplify
15 structure and convenient.

BACKGROUND OF THE INVENTION

Motorcycle is a convenient and economical vehicle, but
20 its weight and stable level sometimes is a huge load for
the riders whose body is smaller and weaker. To use the
traditional middle prop could reduce the total weight of
motorcycle through leverage, it could be moved to backseat
namely support the whole one. The method actually is not
25 perfect. In the process, the rider needs to press down the
prop by one foot to be the strong point of lever, and hold
the handles then pull the motorcycle rearward laboriously
to lift it up and make the middle prop to be the strong point.
It is strenuous when female and people who have smaller
30 figure and strength, especially heavy motorcycle. It will
be more difficult to operate.

In addition, it's difficult to search a parking space

due to the traffic jam in most of city and too many motorcycles in the modern city so that riders need to park their motorcycles under narrow space. At this time, riders (or their motorcycles) often hit other motorcycles easily
5 when they are parking and it may not have enough space that riders stand beside their own motorcycles when lifting it up.

SUMMARY OF THE INVENTION

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The invention is special for solving the inconvenience that riders park the traditional motorcycles. Riders don't need to get it off, just press the button to make the twin middle prop which is under the motorcycle move 80 degree
15 onward to the middle part of motorcycle then prop it up by motor method and parking is completed. Not only riders don't need to get off their motorcycles to complete the parking activity but also don't feel inconvenient when they park under narrow space. Female and people who has smaller figure
20 and strength will complete the parking easily. Riders don't need to worry the weight of heavy motorcycle when they ride it. As long as using this invention, everyone can park any kind of motorcycle even if female or people who has smaller figure and strength.

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The rider just needs to press the button to make the middle prop that support the motorcycle to rotate rearward then drop the body down. The middle prop will go back the original place under the back area of the motorcycle. Then
30 the rider can start to ride.

It is not only completely solved the inconvenience of parking traditional motorcycle but also make the process

of parking be automatic. Regard to riders, the operation is very simple and convenient to complete the process easily and operate it by press the button only.

5 BRIEF DESCRIPTION OF THE DRAWINGS

Fig.1 is the front view of the invention.

Fig.2 is the lateral view of this invention.

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REFERENCE NUMBERS IN DRAWINGS

- 1 electric button typed switch
- 2 driving motor
- 15 3 transmission-spur gear
- 4 transmission-bevel gear
- 5 eccentric transmission gear
- 6 eccentric transmission linkage
- 7 sliding shaft with piston route
- 20 8 fixed base for sliding shaft
- 9 middle-curved prop with transmission linkage
- 10 middle-prop fixed shaft
- 11 twin-middle prop

25 DETAILED DESCRIPTION OF THE INVENTION

Referring to Fig.1 and Fig.2, the Powered Stand Device for Motorcycle is installed under the motorcycle. If riders would like to use this device to park, they just need to
30 press the electric button typed switch (1) that installed on the motorcycle to make the driving motor (2) start, transmit the motive power to transmission-spur gear (3), then transmit to transmission-bevel gear (4) that linked

with transmission-spur gear. The motive power from transmission-bevel gear (4) transmit to eccentric transmission gear (5) and promote eccentric transmission linkage (6) to make the sliding shaft with piston route (7) which linked with eccentric transmission linkage (6) start to move front and rear. There is a fixed base for sliding shaft (8) which functions as fixed the sliding shaft with piston route (7), finally, the sliding shaft with piston route (7) promote middle-curved prop with transmission linkage (9), which is linked with the sliding shaft with piston route (7) to make the twin-middle prop (11), that is fixed by middle-prop fixed shaft (10) rotating 80 degree onward from the original back place until the body of motorcycle lifted up and be vertical with it by leverage, then complete the parking after propped up the later half part of motorcycle.

If riders would like to ride the motorcycle which parked, they just need to press the electric button typed switch (1) that installed on the motorcycle to make the driving motor (2) start, transmit the motive power to transmission-spur gear (3), then transmit to transmission-bevel gear (4) that connect with transmission-spur gear (3). The motive power from transmission-bevel gear (4) transmit to eccentric transmission gear (5) and promote eccentric transmission linkage (6) to make the sliding shaft with piston route (7) which connect with eccentric transmission linkage (6) start to move front and rear. There is a fixed base for sliding shaft (8) which functions as fixed the sliding shaft with piston route (7), finally, the sliding shaft with piston route (7) promote middle-curved prop transmission linkage (9), which is linked with the sliding shaft with piston

route (7) to make the twin-middle prop (11), that is fixed
by middle-prop fixed shaft (10) rotating 80 degree backward
from the vertical status until it went back the original
back place. Thus riders could start to ride their
5 motorcycles.

From above-mentioned method, this invention makes the
process of parking and start to ride be functional as
automatic. Riders can complete the process easily by press
10 the button only.

CLAIMS

I claim:

- 5 1. A powered stand device for motorcycle comprising:
- (a) A driving motor can be started the motive power to transmission-spur gear;
 - (b) A transmission-spur gear can be transmitted the motive power to transmission-bevel gear;
 - 10 (c) A transmission-bevel gear can be promoted the eccentric transmission gear;
 - (d) An eccentric transmission gear can be promoted the eccentric transmission linkage;
 - (e) An eccentric transmission linkage can be made the
15 sliding shaft with piston route move front and rear;
 - (f) A fixed base for sliding shaft is functional as fixed the sliding shaft with piston route;
 - (g) A sliding shaft with piston route can be promoted middle-curved prop with transmission linkage;
 - 20 (h) A middle-curved prop with transmission linkage can be promoted a twin-middle prop that is fixed by middle-prop fixed shaft rotated from back to front or from front to back;
 - (i) A middle-prop fixed shaft is fixed by the
25 twin-middle prop;
 - (j) A twin-middle prop can be rotated onward to support the body of motorcycle or backward to return the original place on back area and it's end of part is a saw-toothed.
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2. The device of claim 1 wherein the saw-toothed twin middle prop could be another kind of shape.