

Quality check
Quality inspection
Date

DC12V Electric hydraulic jack

5 in 1 (jack/air pump/major light/warning light/electric wrench)

INSTRUCTION MANUAL

12V



Safety Warning:

- Please read this manual carefully before using.
- The material of the cover is Plastic ,which is easy to break, please handle it carefully when using. Then if carrying it, please with the handle, NOT lifting the pressure rod.
- Do not overhaul the machine to avoid destroying the machine and lose the right of Guarantee.
- Do not work for long time, when not using, please cut off the power.
- Avoid the machine dropping into the water and using in the bad condition.
- Check the power to match well with DC 12V/ 15A Car Cigarette Lighter before using.
- Take notice of the smooth floor and loading capacity when using,also pay attention to finding the exact loading position of the car before the operation of lifting.
- Do not overload when using the machine, make sure to keep upright with the lifting car at the same

timer, never operate it aslant.

- Do not pull the power cable casually when using, avoid the cable broken or short circuit.
- Make sure the car park in one side and close the engine before using.
- In the process of using the machine, ensure the operator stay with it all time, in case the operator have to leave for a short while, please shut off the machine first.
- The machine adopts the power of precise hydraulic oil, please keep the adequate ventilation, avoid doing it in the environment of high temperature and rather low temperature, while the suitable temperature should be from -15°C to 50°C.

1), FEATURES:

Advantages: The machine is with the fashionable and beautiful design, and adopts the advanced electric machinery technology. It is low noise, quick speeding, stable lifting performance and so on.

Safety: Considering the safety, the machine designs self-locking power structure and overloading protection device specially, That is to say: when the power has been disconnected, the lifted jack will not fall, only re-connecting the power, the jack will go on working, or using the safety knob to fall the car, which will protect the operator's personal safety effectively, **Practicability:** In order to strengthen the practicability, the machine is added the functions of Tire Inflator Pump, Illumination and Warning.

So the machine combines two functions: Car Jack and Tire Inflator Pump

Application: The machine is widely used for Family Car, Go-anywhere Vehicle, Multi-Purpose Vehicle.

2), Packing List

1. Portable Multifunctional Electric Jack One Piece
2. Instruction Manual One Piece
3. Mini tool bag: The inflating needle, one of American-type Inflatable head, one of British-type

taflatable head,one of fuse for cigarete lighter, one of six-angle spanner
3),Introduction



Diagram One:

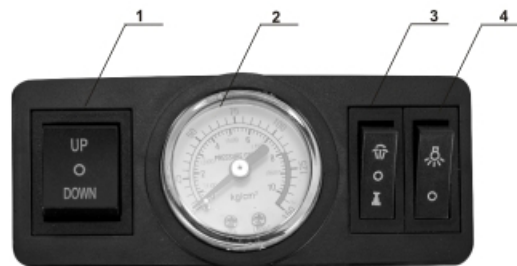
No.	NAME	DESCRIPTION
1	Switches	Check Diagram Three
2	Storage Box	Collect the air hose
3	Pressure Rod	For lifting
4	Top Light	Illumination for Chassis




5	Front Light	For illumination
6	Protective Pad	Lin the protective pad
7	Adjusting Screw	Adjust the distance of the pressure rod and automobile chassis



Diagram Two:

No.	NAME	DESCRIPTION
8	Baseboard	Support lifting weight
9	Safety Valve	Unlock the pressure rod in emergency
10	Handle	If moving the jack, hold here
11	Power Cable	Power cable with car cigar lighter head
12	Cable Socket	Connect the power cable
13	Left Storage Box	Air needle. Fuse. Hexagon socket wrench
14	Warning lights	Red and blue light flashing warning function



No.	NAME	DESCRIPTION
1	Direction Switch	Up/Close/Down
2	pressure Gauge	Show the pressure
3	Function Gauge	Inflate/Close/Lift
4	LightSwitch	<div>  On/off </div>
	UP	Up
	DOWN	Down
		Inflate
		Lift
	O	Close

4). Application Method

☐ Jack Function:

- (1) Stop the car, tension the car brake.
- (2) Check the switch whether it is to the close position, it should be to "O" state, if no, please = do it so first, then connect the power plug into the car cigarette lighter. **(Note: if the battery is not enough, please charge it first (start the car engine) or replace the battery)**
- (3) Put the jack in the side of car tyre, and **ensure the centre of Pressure Rod** to align the loading part of automobile chassis, then rotate the adjusting screw to make it close to the automobile chassis as far as possible.
- (4) Adjust the function switch to "Lift", the direction switch to "Up", then the jack will start to work, till the distance between the car tyre and the floor is about 5cm, reset the power switch, while the power is disconnected, the machine would lock automatically and wouldn't fall.
- (5) After changing the tyre, adjust the direction switch

to "Down". the jack would start to fall in constant speed.

- (6) Finish all, please collect the cables and tools in the box.

☐ Inflation Function:

- (1) Prepare for the equipment well, pull out the air hose and choose the suitable inflatable head to connect, then turn on the power.
- (2) Adjust the function switch to "Inflation", then it would start to inflate, please check the change of the pressure gauge.
- (3) If finishing, please close the power first, then pull out the inflatable head to collect in the tool box. Later also pull out the plug from the cigarette lighter, then collect the cables into the tool box.

Note: when inflating each time, Not more than 10 minutes.

5), Specification

a: fication

Input Voltage	DC 12V
Rated Power	150 W
Rated Current	13 A
Fuse	15 A
Length of Power Cable	3.5 m
Max.Loading Car Weight	3T/5T
Lifting Height Range	Common Item: 135-360mm Update Item: 150-450mm
Working Temperature	-25~50°C

b. For Inflator Pump:

Input Voltage	DC 12V
Inflating Speed	35L /min
Working Current	10A

Pressure	10BAR/150PSI
Length of Air Hose	600mm
Cylinder Diameter	25mm

6),Fault Diagnosis

1. Jack couldn't work

- a).Check whether turning on the auto power.
- b).Inspect whether the function switch is adjusted to the relevant function position,
- c). The pilot lamp for the cigarette lighter plug is lighted or not, if not, please re-connect the plug; if re-connecting it, still no lighting, please check whether the inside fuse of the cigarette lighter plug is destroyed.
- d).Whether the plug for the power cable of jack is loosen with the jack or aling off.

The socket is no electric or loosen, or check the cable, please connect the power correctly; If the power switch is in the position of "O", pls adjust the switch to "I" (See DiagramThree); Check the

2. Not Inflating

- a). Check whether starting the inflator pump
- b). Whether the gas nozzle of air hose is rightly connected with tyre gas nozzle.
- c). Inspect the air hose whether leaking air because of being destroyed in emergency

3. The pressure rod couldn't be risen

- a). Confirm whether starting the motor.
- b). Whether the function switch is adjusted to the JACK function position, and also check the direction switch for "Up"/"Down"
- c). Check whether the lowest temperature is within the range of suitable temperature for this product, if not, please preheating the jack first, making the hydraulic oil thaw, then using it.
- d). Not using for long time maybe Cause the oil is not smooth, please first press "Down" switch for starting one minute, then press "Up" switch.

4. The pressure rod couldn't be fallen

- a). Confirm whether starting the motor.
- b). Whether the function switch is adjusted to the JACK function position, and also check the direction switch for "Up"/ "Down".
- c). Not using for long time maybe cause the oil is not smooth, please first press "Up" switch for Starting live seconds , then press "Down" switch.

Remove the head of safety valve(See Diagram Two, point 3), loose the safety valve with six-angle spanner(rotate about half circle by anticlockwise), till the pressure rod falls to the prior position, then tightening it.

Electric wrench

Instructions

Accessories included in blow molding box

1. One electric dry Jack
 2. One battery clamp
 3. Fuse (15A) 3 sets
 4. Double head sleeve 1 pair (17 / 19mm, 21 / 23mm)
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Technical reference

Model: TY02EW

Control mode: wire control

Working voltage: cigarette lighter

Power supply DC12V or vehicle power supply

Rated power: 85W

Working current: < 12A

Maximum torque: 350N. M

Sleeve: 17 / 19mm, 21 / 23mm

Transmission shaft square head size: 12.5mm

Weight: 3.7lb

1. Sleeve
2. Square shaft
3. 12v power plug
4. Elastic switch



Usage:

Step 1: When changing tires in an emergency, turn on the warning light, park the car near the horizontal (no more than 6 degrees), pull the brake, and use the tire pad or other antiskid materials to pad the tire firmly to ensure that the car has been braked safely

Step 2: When the replaced wheel leaves the ground, connect the electric wrench to the 12V power supply through the following two ways

- (1) Use the cigarette lighter to connect. Insert one end of the cigarette lighter plug into the car cigarette lighter and the other end into the electric wrench socket. (Note: the rated current of fuse of cigar lighter shall not be less than 12a) (Figure 1)
- (2) (Recommended) Direct connection of vehicle battery: when the fuse current of cigar lighter is less than 12a, insert one end of the plug line of cigar lighter into the cigar lighter socket with one end of battery clamp, and connect the Black clamp on the battery "+" (positive) and battery "-" (negative) on the red clamp. Then insert the other end into the socket of the electric wrench (at this time, the guiding device of the vehicle should be in working state) (as shown in Fig. 2)

Step 3: Select a suitable socket, insert the square hole into the square shaft head at the top of the electric wrench, and then loosen or tighten the bolt 2 sleeves are suitable for unloading screws of 4 sizes, and 1 sleeve is suitable for unloading screws of 2 sizes. Pay attention to the size when selecting the sleeve. If it is not possible to remove the screws, please use a different size.

Step 4: According to the required working direction, select the loose and tight switch.

At the left mark "II" of the power switch, reverse the direction and remove the screw.

At the mark "I" on the right, it is in the direction of clockwise rotation, tighten the screws.

At middle mark '0', it means stop.

Use the thumb to press and hold the corresponding direction switch all the time, pay attention not to stop, keep the thumb pressed and cannot be loosened, make sure that the screw has been removed or tightened, and then loosen it. (Fig. 3 and 4 shown)



Figure 1



Figure 2



Figure 3



Figure 4



Matters needing attention:

1. Read this manual carefully before operation, and make sure you have fully understood the contents of the tool before using the product.
2. Overload use shall be absolutely prohibited, and it is prohibited to work at the highest speed under no-load condition.
3. In order to ensure sufficient power, it is better to start the vehicle.
4. Do not let the electric wrench and wire get damp or soaked, and do not operate in rainy days to increase the risk of electric shock for users.
5. Do not operate in flammable and explosive places to avoid fire and explosion.
6. When the battery clamp is used to take power from the car battery (when the power supply is DC 12V), the positive and negative poles must not be reversed.

7. When loosening or tightening the nut with the electric wrench, do not push the accumulated nut too hard. If the nut cannot be loosened and the wrench cannot rotate, please stop the operation immediately, replace the electric wrench with higher power and greater torque, and continue to work. Do not use the electric wrench to rotate the nut manually.



8. It is absolutely forbidden for children to operate the electric wrench. Do not allow children to access the electric wrench workplace.

9. According to the required working direction, select the loose and tight switch.

At the left mark "II" of the power switch, reverse the direction and remove the screw.

At the mark "I" on the right, it is in the direction of clockwise rotation, tighten the screws.

At middle mark '0', it means stop.

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10. No one is allowed to put any part of his body under the vehicle.

11. It is recommended to block the wheels and do not allow anyone to stay in the jacked vehicle.

Replacement of the fuse:

1. Unscrew the metal part at the front of the cigarette lighter plug anticlockwise;
2. Take out the fused fuse and replace the fuse with the same specification as the original fuse;
3. Screw the metal part in clockwise direction.

Note: The fuse to be replaced must be consistent with the original fuse specification, and the current level of the fuse cannot be increased or reduced arbitrarily, and other conductive materials cannot be replaced.

Maintenance:

1. Do not dismantle or repair this set of tools without permission, if there is any fault, please send it to the dealer or manufacturer for maintenance.
2. Do not use caustic soda, Tang material and solvent to clean the electric wrench. If there is any reason, please send it to the dealer for repair.
3. Do not change the product structure without permission, otherwise it will easily cause safety accidents.
4. Keep clean and dry after each use.

Troubleshooting:

Problem	Reason	Method
the electric wrench can not be started normally or can not loosen or tighten the nut	A. check the fuse of cigarette lighter	A. replace the fuse wire with a new one to see if it is broken
	B. check the interface of cigarette lighter	B. connect the current output port correctly
	C. check whether the battery voltage is too low	C. replace the battery
	D. check whether the positive and negative battery clamps are connected to the power supply correctly	D. reconnect the power supply correctly
	E. check if the electric board selected the correct direction of rotation	E. reselect the correct direction of rotation
1. According to the required working direction, select the loose and tight switch. At the left mark "II" of the power switch, reverse the direction and remove the screw. At the mark "I" on the right, it is in the direction of clockwise rotation, tighten the screws. At middle mark '0', it means stop. Use the thumb to press and hold the corresponding direction switch all the time, pay attention not to stop, keep the thumb pressed and cannot be loosened, make sure that the screw has been removed or tightened, and then loosen it. (Fig. 3 and 4 shown).		



