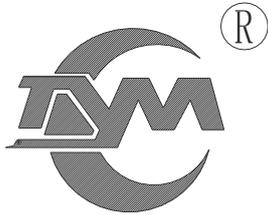


Yangzhou Tongyi Machinery Co., Ltd



Screw jacks for special vehicles
(Semi-trailer landing gear)

Instruction Manual

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The instructions of landing gear

1. Hand crank operating procedures

1.1 Operation method

1.1.1 Keep the feet on the landing. First, Use the high-speed (push in), change gears for low speed when the leg is on the landing.

1.1.2 First use the low speed to lifting the leg, changing for high speed when the leg touch the ground.

1.1.3 Change shift operation.pulling out is slow-speed shift, pushing in is high-speed shift when shake crank A gently

1.2 Notes

1.2.1 Don't use high speed when the landing gear touch the ground for lifting the trailer, please use the low speed.

1.2.2 Please recommend the gears mesh across the whole tooth when the hand crank hung up the hook (the gears are on high-speed or slow-speed shift), the gears don't on the gap.

2. Installation

2.1 The installation of the landing gear is fixed on trailer, shown below

Figure 1.

2.2 Check the proper configuration before installation, please install 4, 5, and 6 as shown below figure 1.

2.2.1 Keep the two landing gear vertical to the ground of the trailer frame.

2.2.2 Keep 1&3 to be a coaxial

2.2.3 Keeping the installation of the 4, 5, 6 to be solid and reliable, to let the out tube of the landing gear little distorts under stress, to prevent excessive force, shell deformation, and affect use.

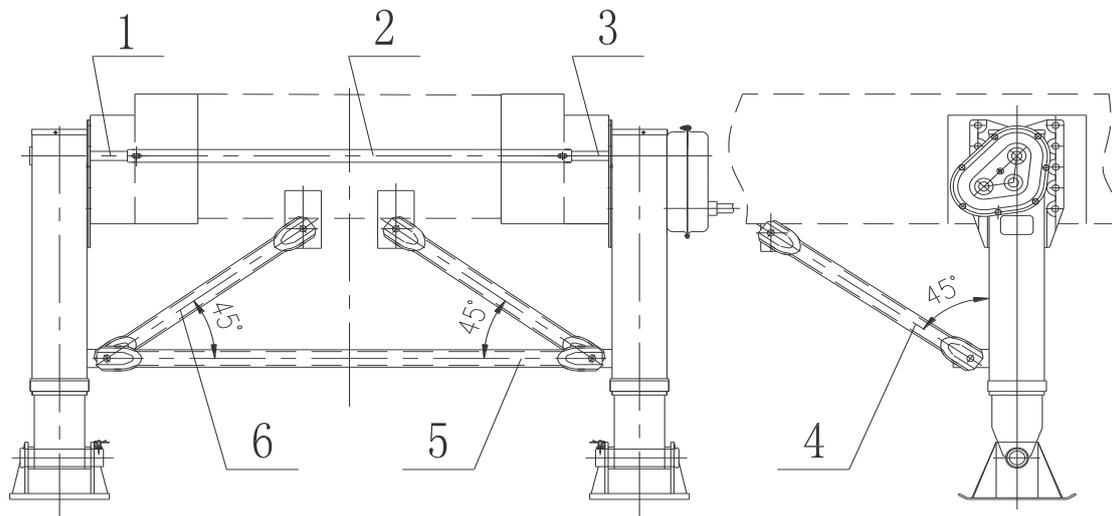


Figure 1

2.2.4 The torque of the bolt tightening is 182 / 245N.m.

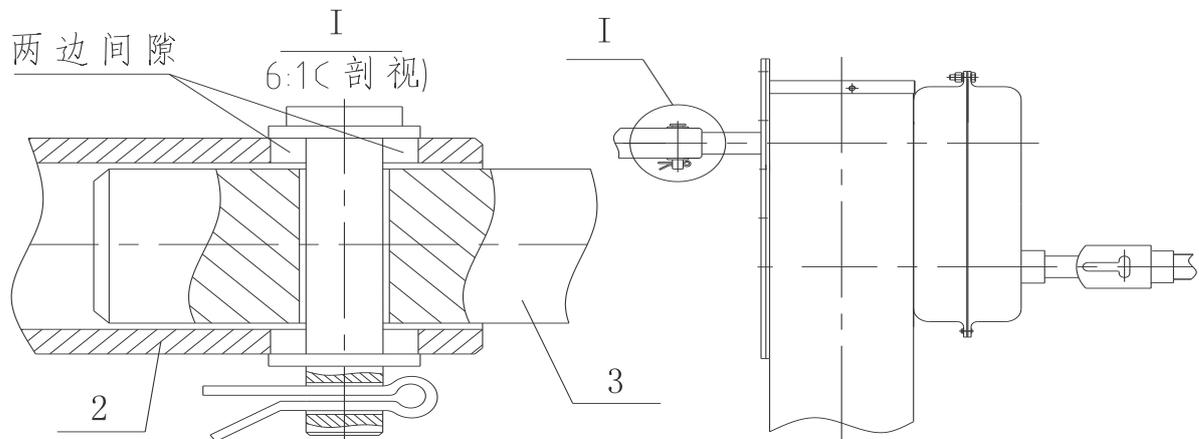


Figure 2.

2.3 Don't too tension 1& 3, which 2 should be appropriate axial string momentum.

2.4 Adjust the hoisting height of two landing leg: the tolerance of A1 and A2 is less than 5 mm. In Figure 3

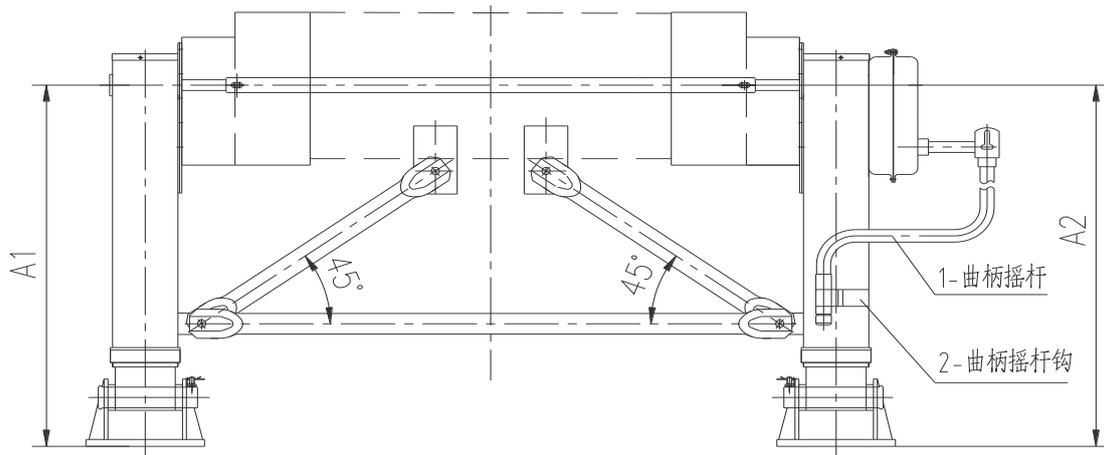


Figure 3

2.5 Turn the hand crank, rising and falling is flexible, high and low gear should lift flexible, two landing leg synchronous flex, easy shift gear. or should be re-adjusted.

2.6 Put 1 into 2 after installation is completed

3. Using

3.1 Do not overload, do not rule-breaking operations

3.2 Do not use the landing gear on a slope or soft soil surface. Trailer must be parked on a flat concrete pavement or tight flat ground.

3.3 Not use over-travel.

3.4 Tractor trailer driven slide should avoid supporting device dragged on the ground and damage when the trailer couple-uncouple

3.5 Uncouple, lifting the trailer for an appropriate travel:

First, use high speed until the feet touch the ground, then change the low speed lifting. Turn 4-8 circles after the landing leg landing.

3.5.1 does not Operating at the situation 3.1, 3.2.

3.5.2, when change the shift, hand the crank push in or pull out, and confirm the gears engage across the whole tooth, then shake the hand crank

3.5.3 Hand grip and uniform rotation when Lifting

3.5.4 Don't change the shifting when the gear loading or an unsafe condition.

3.6 keeping more then 300mm of the distance of landing leg and ground before the trailer leaving

3.7 Put 1 into 2 after operation is completed and after confirm the gears are on engaged gear.

4. lubricates of the landing gear

4.1 The landing gears factory has been added enough lithium grease, but still need add the lithium grease at regular intervals, to do your best to extend landing leg's life

4.2 Lubrication of the inner tube

4.2.1 The landing leg, lead screw, nuts with an oil storage set, do not need maintain.

4.2.2 The lead screw, nut and bearing without an oil storage set need to add lithium grease two times per year, or add as required

4.3 lubrication of out tube leg

4.3.1 The two left and right out tubes add lithium grease two times per year, or add as required

4.4 lubrication of the gear box

4.4.1 The gears in the gear box need to add lithium grease two times per year, or add as required

4.5 Each filling points are equipped with an oil cup.

5. Maintenance of the landing gear.

5.1 Take the left and right landing legs off the trailer, clear paint and Uneven collision traces , don't beat with a hammer.

5.2 disassemble and inspection of the gearbox

5.2.1 Take the nuts, bolts and spring pins off the gearbox when the gear on low speed shift, then pull out the shell of the gearbox and the inside gears together

5.2.2 Don't pull the badly sealing gasket.

5.2.3 Pull out the dual gear axle in the gearbox a little, take the dual gear out, then take out the dual gear axle

5.2.4 Take out the sleeve in the gearbox, then take out bevel gear

5.2.5 Take the flat key off the axle

5.2.6 Cleaning and checking the parts.

5.3 Disassemble and inspection inside and outside tube.

5.3.1 Take out the outside she, then pull the small bevel gear axle onto the small bevel gear, and take off the flat key. Or using technical tools take out the elastic pin, and take off the the small bevel gear & gasket

5.3.2 Take out the big bevel gear, then take out the cylindrical pin & gasket

5.3.3 Take the outside & inside tube apart, then take out gaskets & bearings

5.3.4 Cleaning and checking the status of parts.

5.4 Assembly and adjustment of the landing gear

5.4.1 Make the lead screw the maximum length, add the lithium grease near the nut, rotate the lead screw whole travel 2-3 times, to adequately lubricated the lead screw and the nut.

5.4.2 Load bearing&gasket on the lead screw, add the grease, and add appropriate grease on the upper of the lead screw, then load the outside tube.

5.4.3 Assembly of the small & big bevel gears. Add 0.5kg cars GM Lithium-base grease into the cavity of the bevel gears , then cove the outside shell

5.5 Assembly and adjustment of the gearbox.

5.5.1 load the spring & steel ball into the hole of the dual gear axle, the dual gear, then pull the dual gear axle into place, finally add cars GM Lithium-base grease

5.5.2 Load the spur gears, sleeve etc into the inside shell of gearbox, add grease, load the inside shell back and load the spring dowel pin, then screws tight the nuts & bolts

6. The common faults' causes and handling methods

Phenomenon	Reasons	Exclusion methods
1.Shake hard when Just install	1.)Intermediate linkage shaft at both ends of the left and right landing legs protruding shaft pulled too tight, no axial clearance, the impact of gears. 2.) Output shaft of the landing legs Concentricity error is large 3.) The ground tilt is the large for trailer parking 4.) Gear shaft bending deformation during transport strike	1.Reconnected to ensure that the axial clearance 2.Reinstall the adjustment 3.Placed on level ground. 4.Replace the gear shaft

2.handle heavy shaking or does not move during use		1).gear is damaged or gear shaft bending. .	Replacing the gear or gear shaft
		2). inside and outside landing legs partial interference: Use accidentally hit deformation.	Replace the deformed landing leg
		3). shell deformation, bending screw nut damage when tractor and trailer docking severe impact,	Replace the parts in the landing legs
		4). the landing legs all deformation for did not shrink when vehicle start,	Replace the landing legs
3.Main leg can not lift	Females leg can lift	Cylindrical pin which connecting landing leg of the large bevel gear, or master key & spring pin which connecting small bevel gear	Replace damaged parts
	Females leg can not lift	1) The reason for the main legs : (with gear box)①key or pin damage which connect two dual gears ② (without gearbox) spring pins is damage which connect cylindrical gear and bevel pinion	Replace damaged parts
		2) the the cause of the main legs and females leg : ① according to the above reason (1) Check the main leg ② key and pins which connect big & small bevel gears, in the females leg, or The damage of the leg	Replace damaged parts or damaged landing leg
		3) the the cause of the main legs and females leg : ① according to the above reason (1) Check the main leg ② connecting linkage pin shaft damage or no connection.	Replace damaged parts or Reconnect

4. Main leg can lift, but females can't lift	1)connecting linkage pin shaft damage or no connection.	connecting linkage pin shaft damage or no connection.
	2)key and pins which connect big & small bevel gears, in the females leg, or cylindrical pin is broken which connected large bevel gear	Replace damaged parts
5.No-load the leg stretching normal Heavy load the leg can not lift	key or pin damage which connect two dual gears	Replace damaged parts
6.Shifting difficulties Or can not shift	1) the ball, spring off in the dual gear shaft, or shaft seat stuck after damage .	
	2) dual gear shaft bending	

7. After-sale services description

7.1 The following instructions of after-sales service based on confidence in our products, the user is responsible.

7.2 Our company has initially established a comprehensive network of services across the country, to provide users with fast, high quality service.

7.3 Products manufactured with the product specification, Please strictly follow the manual installation, use, maintenance, repair. And ensure that all parts are provided by our company. Otherwise, the consequences are not arising therefrom not warranty Within the scope

7.4 Product warranty for one year, which calculated from date of receipt of goods. Users should provide proof of use which it don't exceed the period of service. Or it is subject to my company's quality record or trailer vehicle factory records. During the warranty period, If the product quality caused by damage to the product, not normally use, etc, the company responsible for the maintenance and improvement necessary to replace, to ensure that products can be used normally.

7.5 Our company Will be in accordance with customer requirements and will be paid service when beyond the warranty period the product can not be used, and fee income component costs, other expenses related

7.6 We will dealt with comments and notify the user. within 24 hours after receiving the quality complaints

7.7 Customers are not free services entitled to the following:

7.7.1 The quality problems of the products due to improper use or improper installation

7.7.2 The product quality problems due to incorrect propaganda supporting units of production (including exaggerated product performance, extended service period, etc.).

7.7.3 Not properly follow our company instructions for installation, use and repair, and maintenance.

7.7.4 The product quality problems by the trailer and other accessories.

7.7.5 Don't reshaping, reconfiguring our products. All the consequences of the transformation of the user unauthorized alterations caused by our products, our company will not bear

7.7.6 Products are over the Warranty.

7.8 Our company will create a user visit system, so that we can regularly listen to your comments on our products, which allows you to buy and use with confidence.

7.9 Yangzhou Tongyi Machinery Co., Ltd. After - sales service Department:

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