

ATTENTION:

1. The waste packages should be sorted and put into solid dustbins according to the materials and be collected disposal by local special environment protection bureau. To avoid pollution, it's forbidden to throw away the wastes randomly.
2. To avoid leaking during the use of the products, the user should prepare some absorbable materials (scraps of wooden or dry duster cloth) to absorb the leaking oil in time. To avoid second pollution to the environment, the used absorbable materials should be handed in to special departments in terms of local authorities.

Thank you for choosing our RTT12 Rough Terrain Truck. For your safety and correct operation, please carefully read the manual before use.

NOTE: All of the information reported herein is based on data available at the time of printing. The factory reserves the right to modify its own products at any time without notice or liability in any sanctions. Please verify with the factory for possible updates and changes .

1. GENERAL SPECIFICATIONS

Type		RTT12
Capacity	kg	1200
Fork Length	mm	860
Fork width	mm	100
Width Overall Forks	mm	212-735
Maximum Fork Height	mm	223
Minimum Fork Height	mm	53
Overall L x W x H	mm	1375x1605 x1225
Big wheel size	mm	φ 550x132
Steering Wheel size	mm	φ 330x100
Net weight	kg	235

2. ASSEMBLY

If you have purchased a wooden box of Rough Terrain Truck, some assembly is required. Certainly, you need some tools, a hammer, a pliers, a spanner, a crane etc;

2.1 To fix the big wheel kits

See fig. A, press two bearing (02A00) into the frame of wheel, then fix the axle sleeve (04A00) and washer (01A00), insert the wheel kit into the fixing frame of wheel (06A00). At last, fix the bolt (05A00), washer (07A00), elastic washer (08A00) and the nut (09A00).

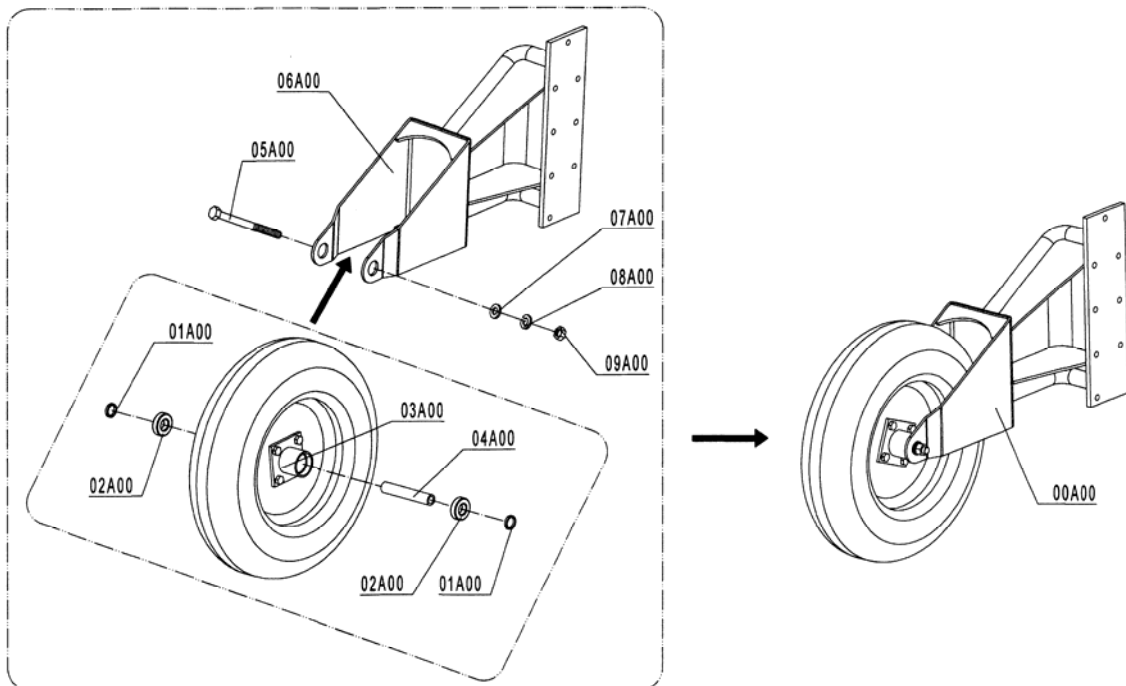


Fig A

Fig B

2.2 Fix the fixing frame of wheel (06A00) onto the truck body(05C00)

See fig. C, use the bolt (M12x45) (04C00)、 washer (ϕ 12) (03C00)、 elastic washer (ϕ 12) (02C00) and the nut (M12) (01C00) to tighten the fixing frame of wheel (06A00) and the truck body(05C00) together.

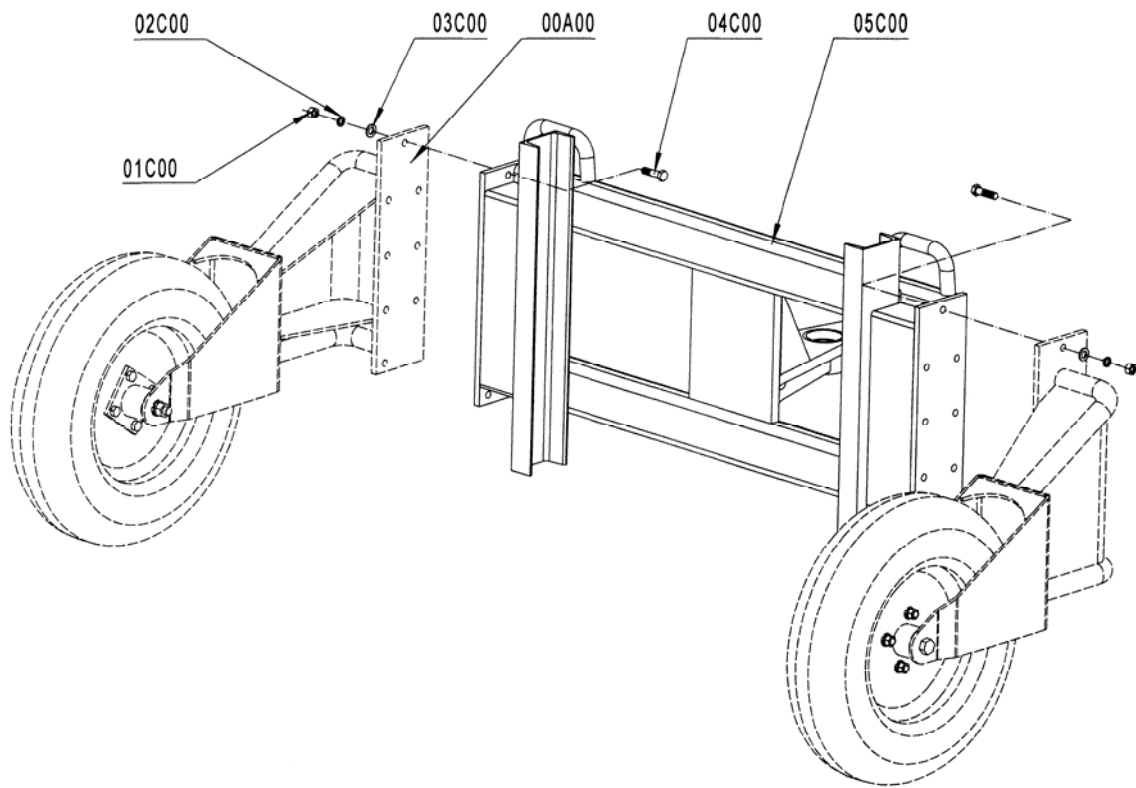


Fig. C

Then, it become:

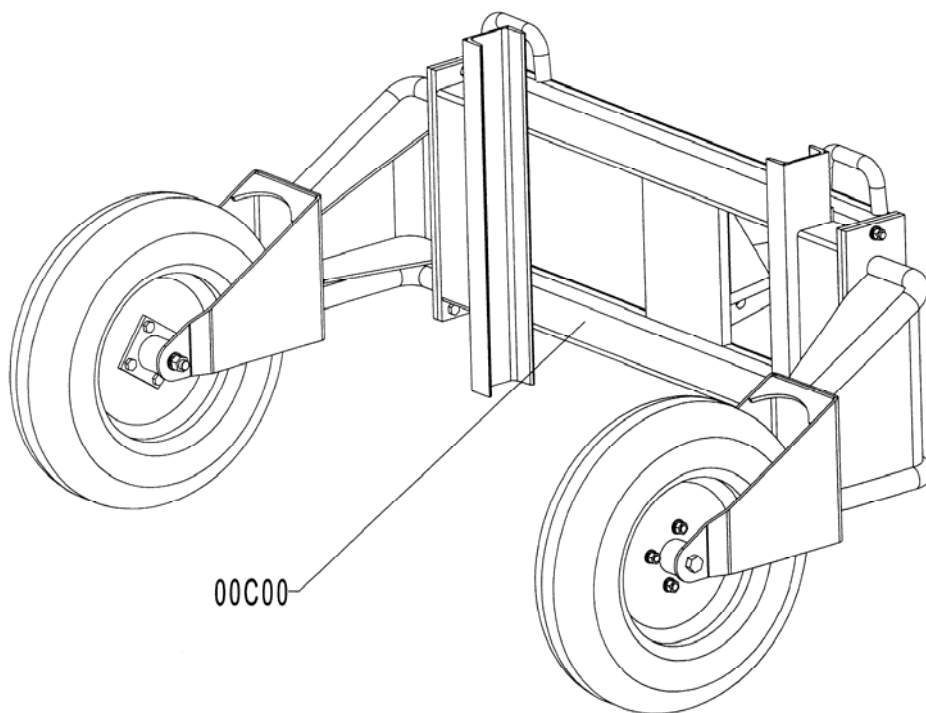


Fig. D

2.3 Fix the steering wheel kits

See fig. E: at first, insert the shaft of wheel (06E00) into the pole (05E00), hammer the elastic pin (ϕ 10x70) (04E00) in; then fix the steering wheel (03E00), washer (02E00), locking nut (01E00) one by one.

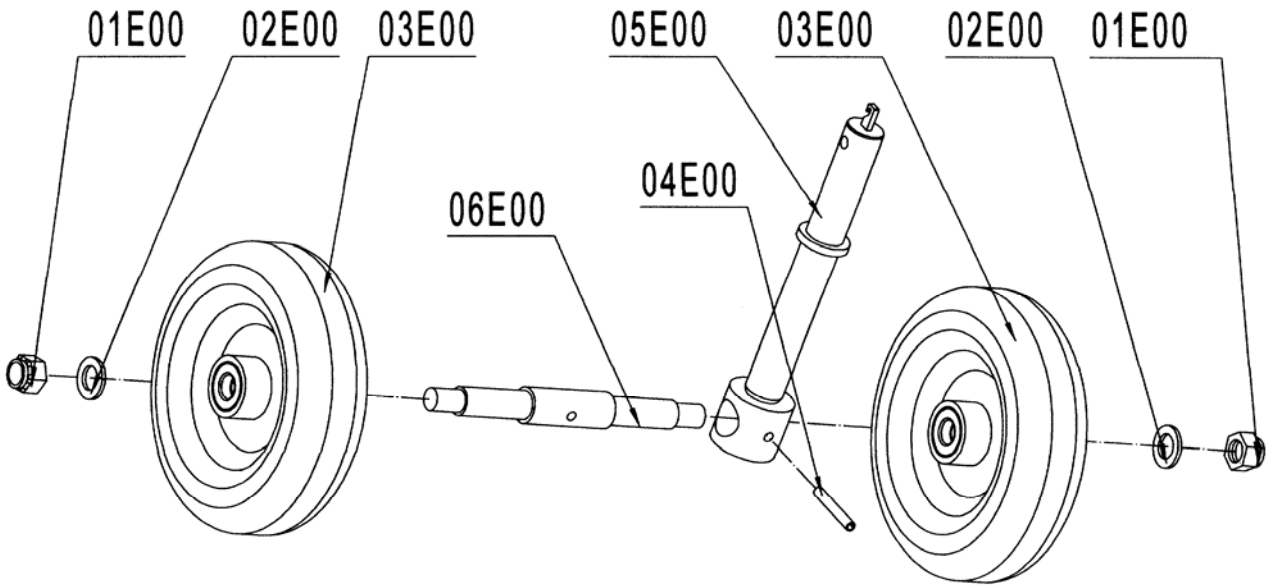


Fig. E

Then, it become:

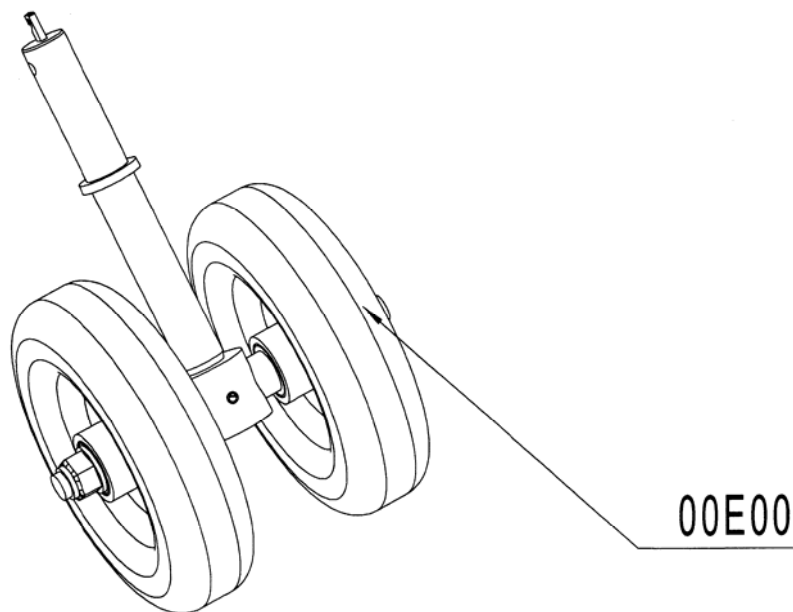


Fig. F

2.4 Fix the steering wheel kits(00E00) to the truck body kits(00C00)

See fig. G: hammer the bearing (05G00) into the seat of bearing which welded into the truck body (05C00) (NOTE THE DIRECTION OF THE BEARING), then fix the steering wheel kits (00E00) to the truck body kits (00C00) from the bottom up. Fix the ball bearing (01G00) and the cover (02G00) to pass through the pole (05E00) from the top down, then fix the seat of handle (03G00), hammer the shaft (06G00) through the hole of the linking seat of handle (03G00) and the pole (05E00), at last, fix the retaining ring (04G00) to the shaft (06G00).

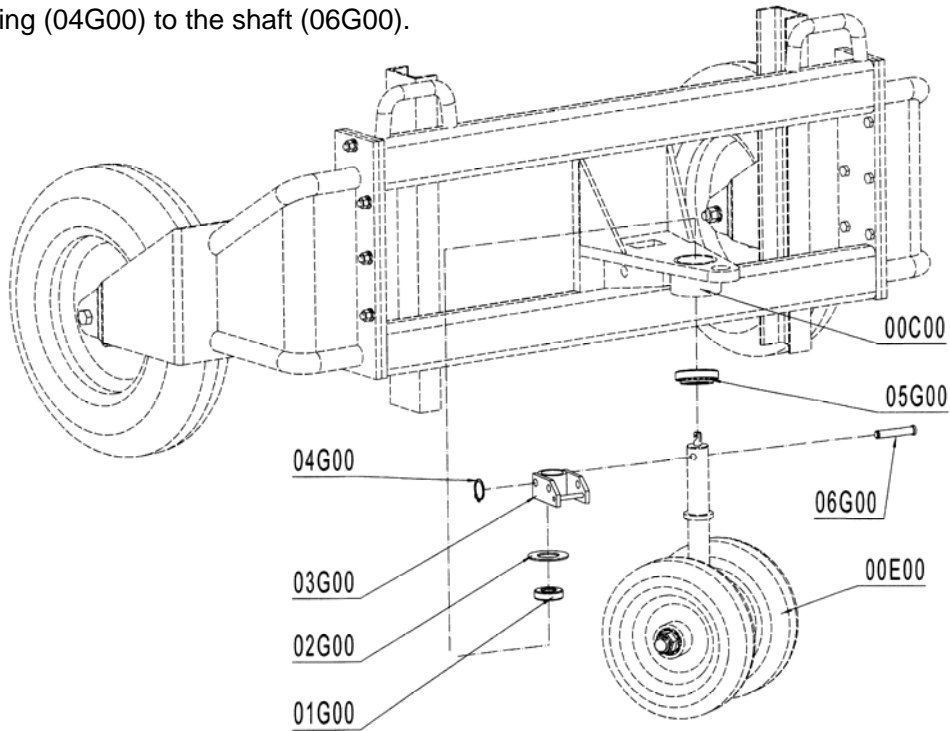


Fig. G

Then, it become:

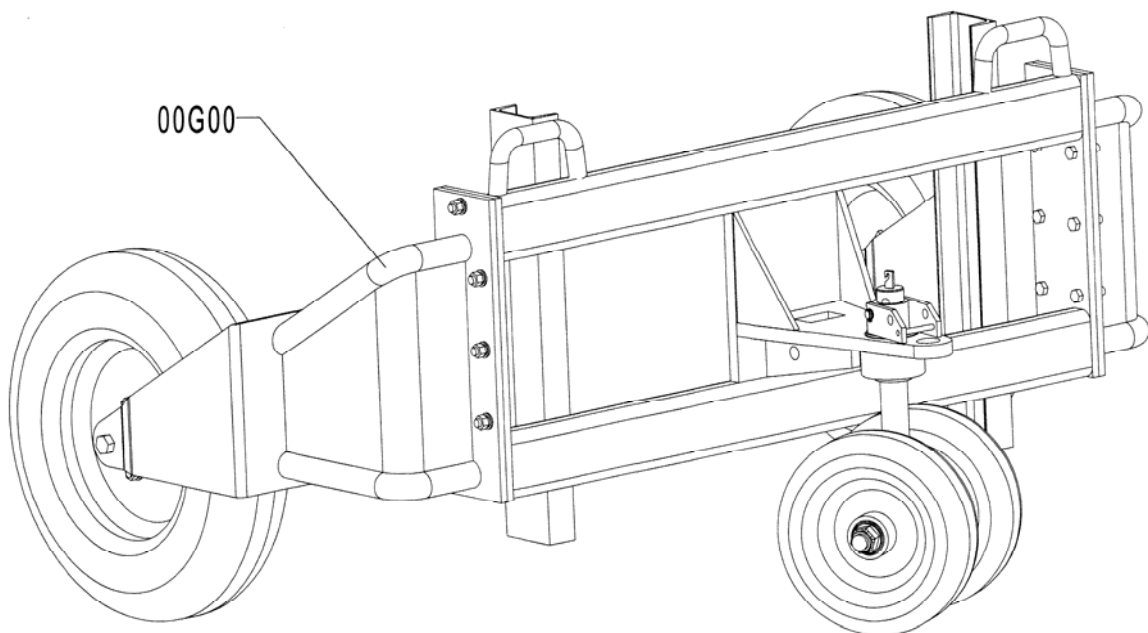


Fig. I

2.5 Fix the pump kits(02J00) to the truck body kits(00G00)

See the fig. J: take the pump kits (02J00) through the square hole of the truck body kits(00G00), hammer the pin (01J00) through the hole of the pump kits (02J00) and the truck body kits(00G00), then fix the retaining ring (03J00) to the pin (01J00).

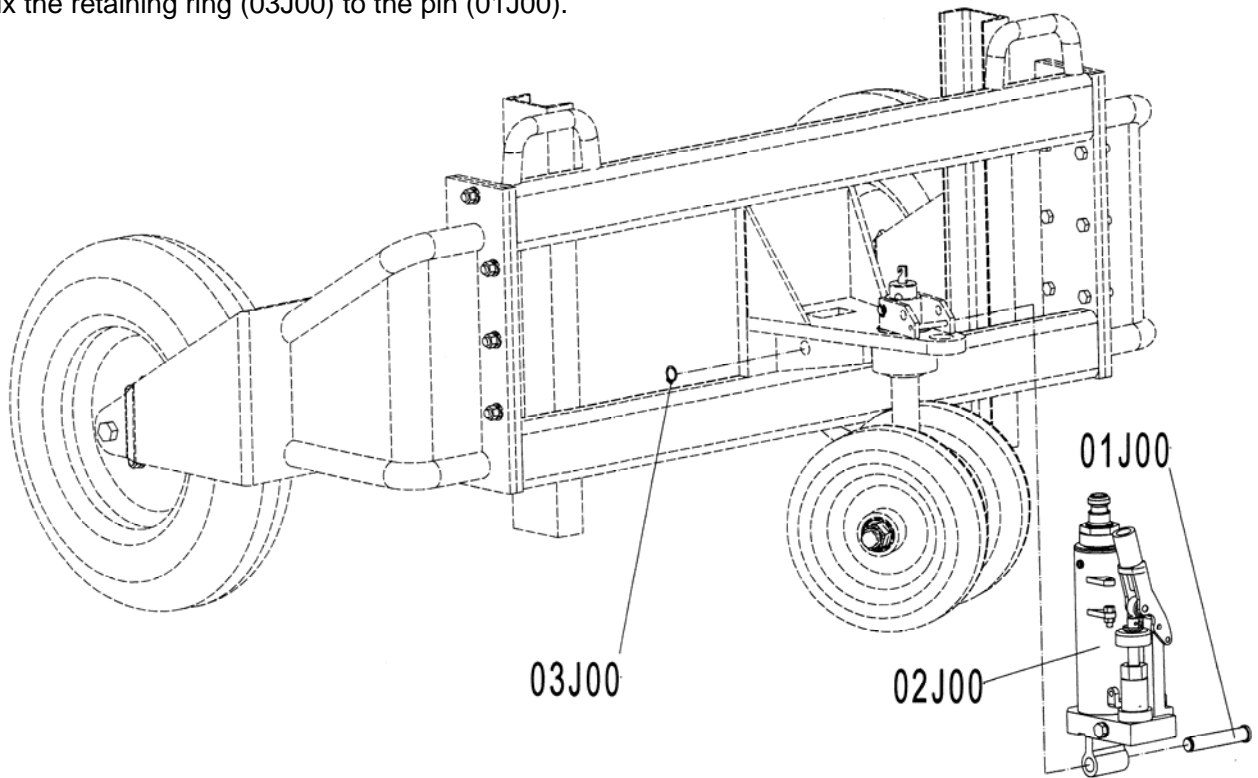


Fig. J

Then, it become:

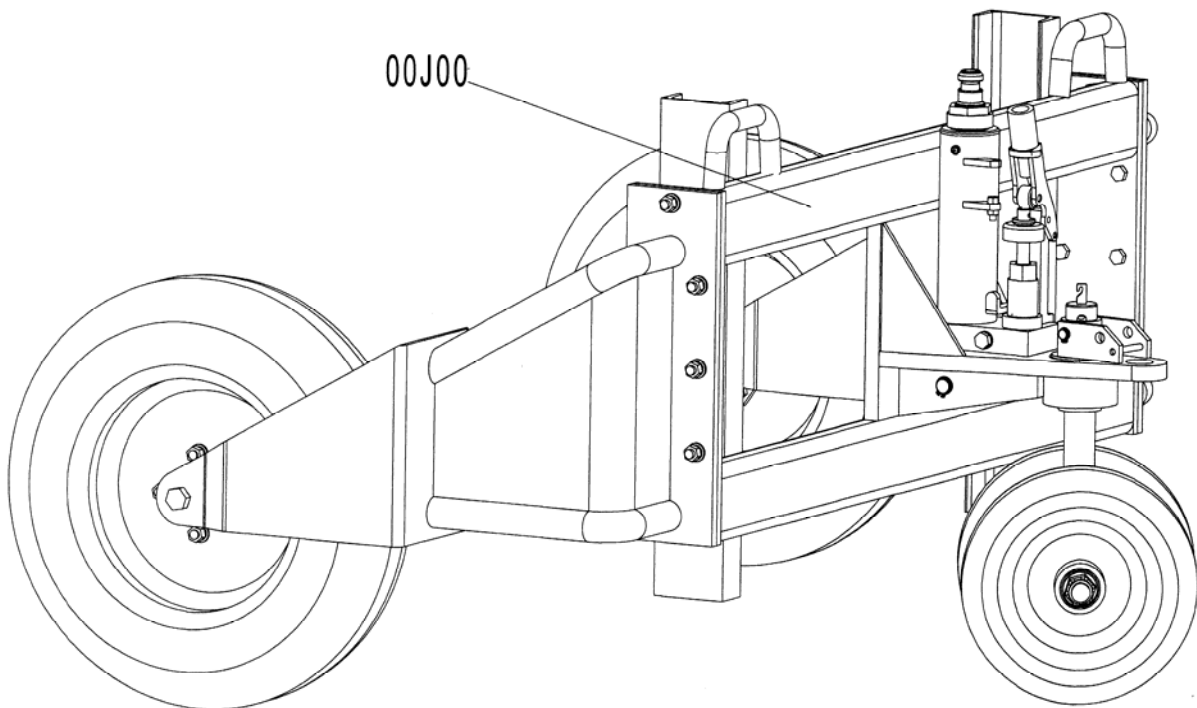


Fig. K

2.6 Fix the Fork Carriage kits

See the fig. L: hammer the long shaft (01L00) through the hole of one plate of the fork carriage (03L00), take one fork (04L00) between two plate of the fork carriage (03L00), then continue to hammer the long shaft (01L00) pass through the hole of the fork (04L00); fix the other fork (04L00) as same, at last, fix the retaining ring (02L00) to the long shaft (01L00).

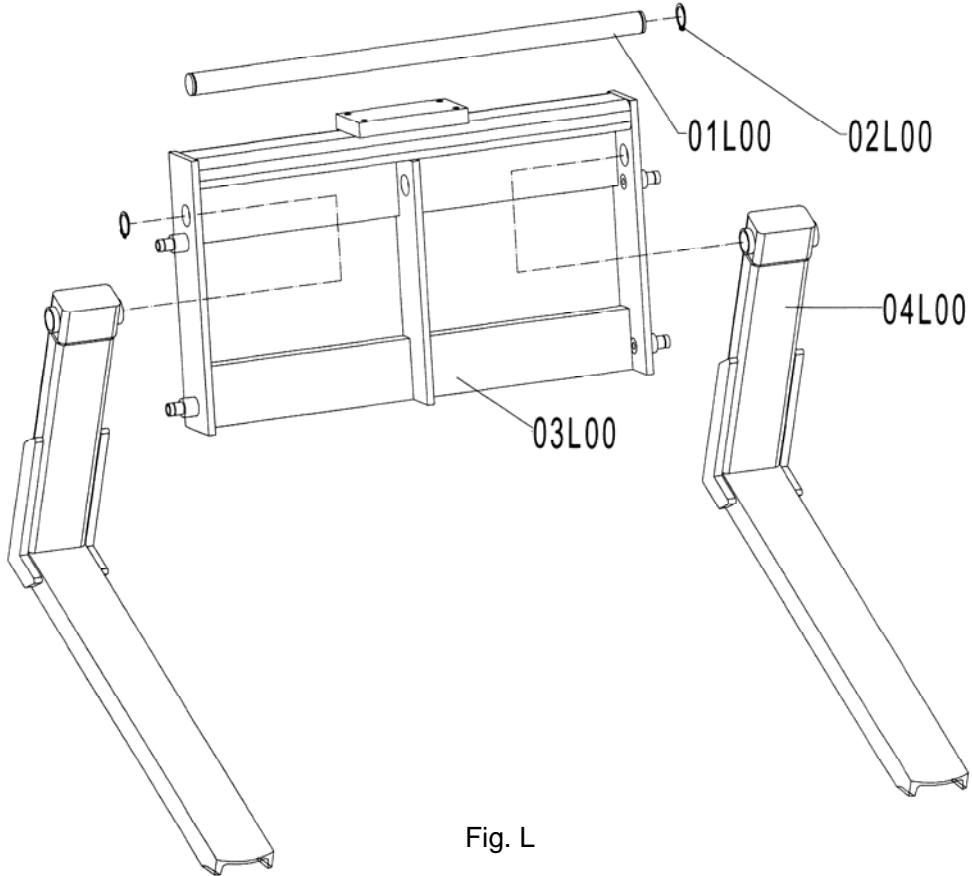


Fig. L

Then, it become:

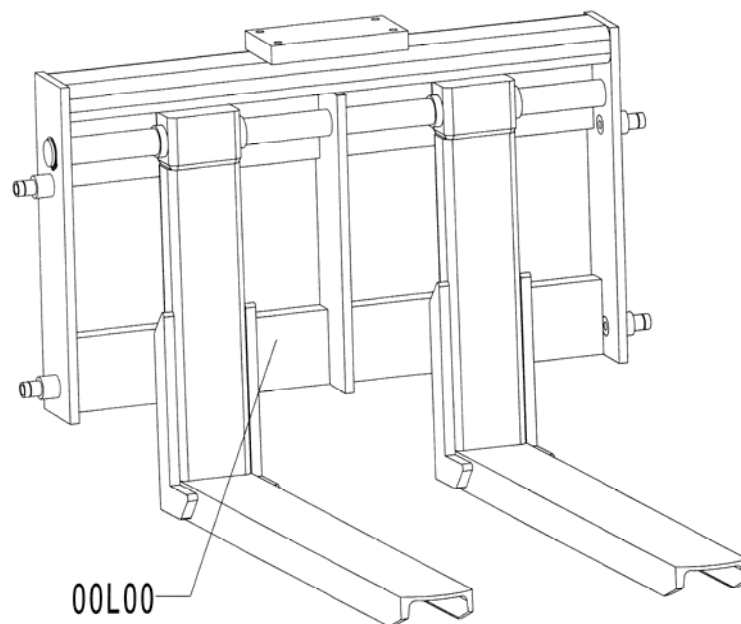


Fig. M

2.7 Fix the gooseneck and the rollers kits

- a) take the gooseneck (08N00) onto the fork carriage (00L00), then tighten four bolts (01N00), note do not forget the washer (02N00) and the elastic washer (03N00).
- b) press the rollers (05N00) into the shaft which welded into the fork carriage (03L00), then fix the retaining ring ($\phi 20$) (04N00).

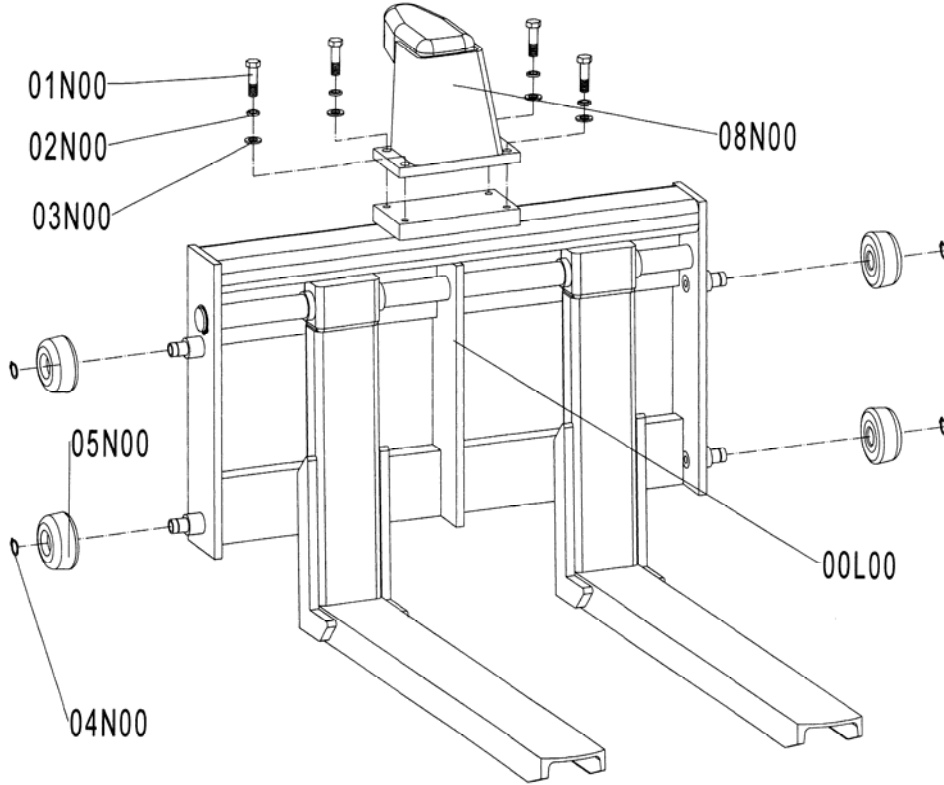


Fig. N

Then, it become:

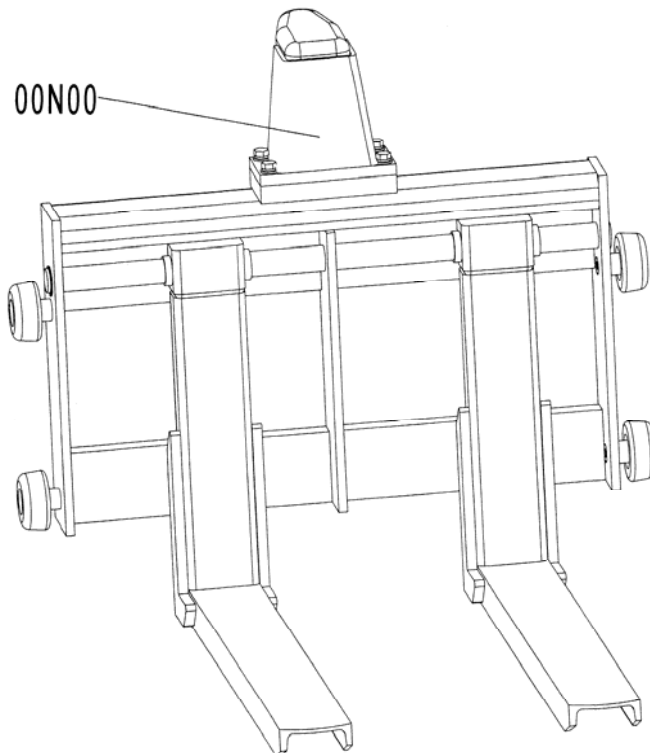


Fig. O

2.8 Fix the Fork Carriage kits to the truck body kits

See fig. P:

- a) take the steel ball ($\phi 18$)(04P00) onto the head of the piston rod which fixed in the pump kits.
- b) use a crane to hoist the Fork Carriage kits (00N00).
- c) stick four steel ball ($\phi 14$) (01P00) on the shaft which welded into the fork carriage (03L00) with mineral butter.
- d) insert the Fork Carriage kits (00N00) channel which welded on the truck body(05C00).
- e) cover the cover board (03P00) and tighten four screw (02P00).
- f) tighten the screw (05P00).

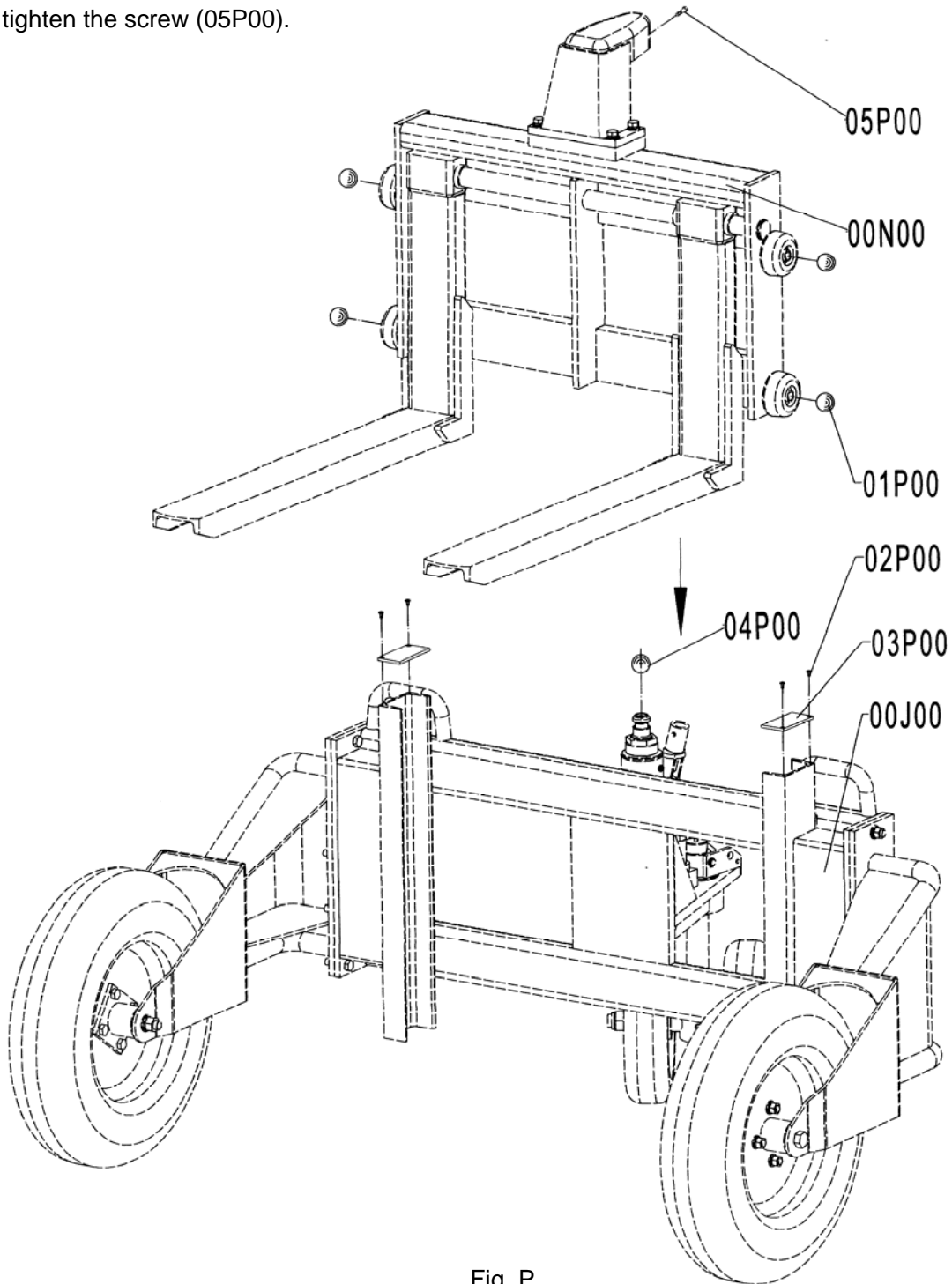


Fig. P

Then, it become:

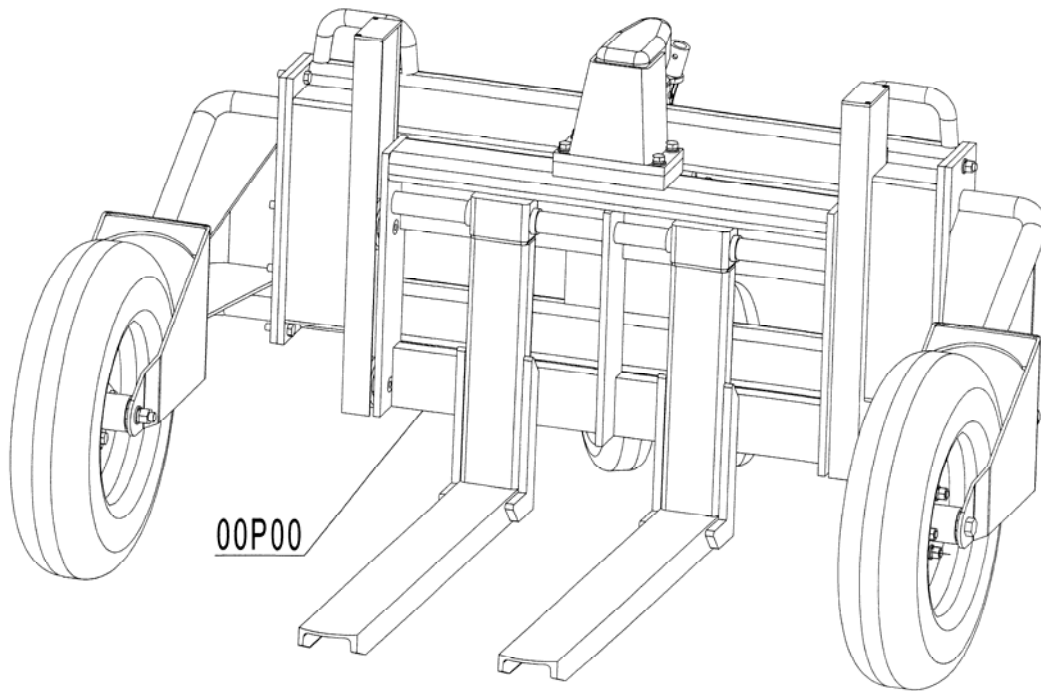


Fig. Q

2.9 Adjust the clearance of axle direction of the Fix the Fork Carriage kits

See the fig. R:

screw the nut (01R00) to the bolt (M10x60) (02R00), then fix the bolt (02R00) to the shaft which welded into the fork carriage (03L00) on a appropriate position. At last tighten the nut (01R00).

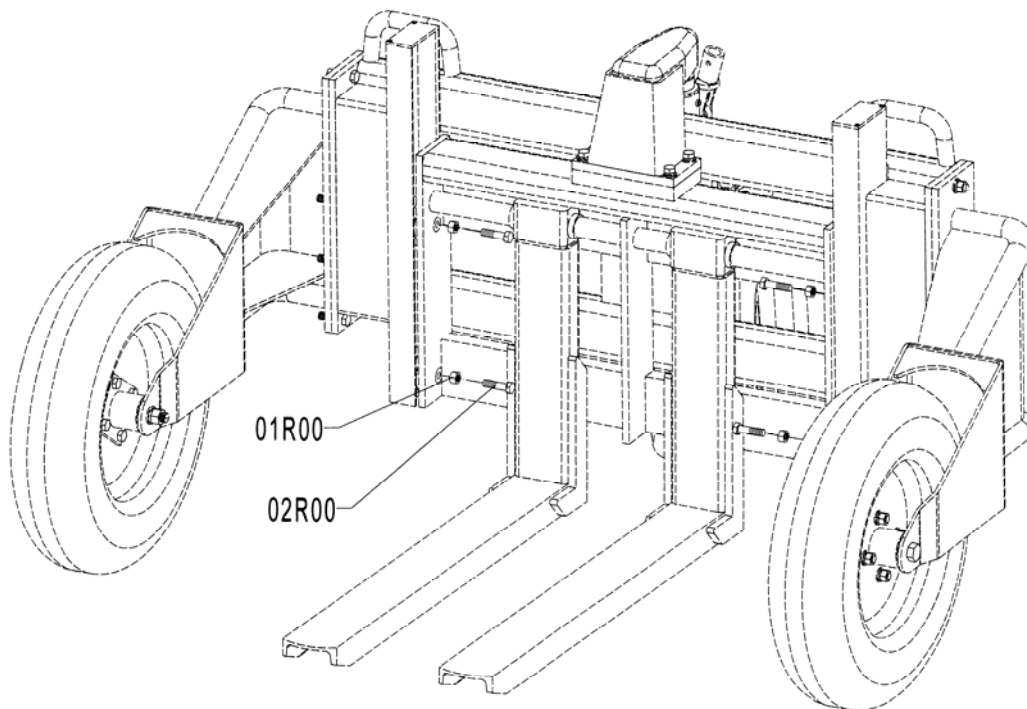


Fig. R

2.10 Fix the handle

See fig. S:

- a) put the handle (01S00) on the linking seat of handle (03G00), hammer the pin (02S00) through the hole of the linking seat of handle (03G00) and the handle (01S00), then fix the retaining ring ($\phi 14$) (03S00).
- b) let one side of the spring (04S00) hitch the nut which welded on the handle, the other side hitch the head of the pole (05E00).
- c) insert the cable (01S02) through the fixing plate which welded on the pump, bolt (02J44) and bolt (02J63), adjust the cable (01S02) to a appropriate position, then tighten the nut (02J61).

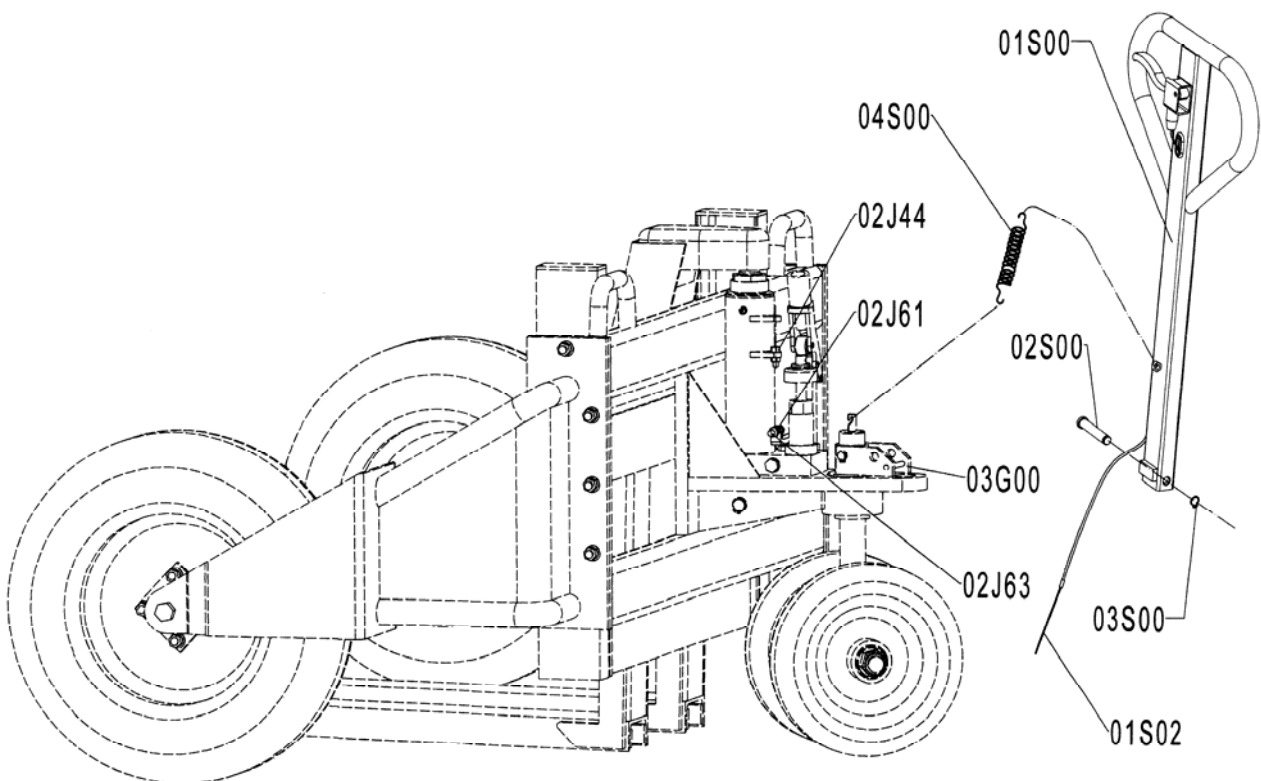


Fig. S

Now, you have finished fixing one Rough Terrain Truck.

3. GUIDE TO SAFETY OPERATION

- 3.1 Operator should read all warning signs and instructions here and on the Rough Terrain Truck before using this truck.
- 3.2 Do not operate a Rough Terrain Truck unless you are familiar with it and have been trained or authorized to do so.
- 3.3 Do not use on a slopping ground.

3.4 Do not load over maximum capacity.

3.5 Load goods between two forks, do not load goods with one fork.

3.6 Do not operate a Rough Terrain Truck unless you have checked its condition. Give special attention to the wheels or rollers, the draw-bar unit, the fork unit, the lever plate, etc. .

3.7 Do not take up any people on the Rough Terrain Truck.

3.8 The operator had better take on gloves for labor protecting.

3.9 At others special condition or place, the operator should be carefully to operate the pallet truck.

4. MAINTENANCE

The Rough Terrain Truck is largely maintenance-free.

4.1 OIL

Please check the oil level every six months. The oil can be hydraulic oil: ISO VG32, its viscosity should be 30cSt at 40⁰ C, total volume is about 0.5lt.

4.2 TO BANISH THE AIR

The air may come into the hydraulic oil because of transportation or pump in upset position. It can cause that the forks do not elevate while pumping. The air can been removed in the following way: let the control handle (01S01) on the **LOWER** position, then move the draw-bar (02J34) up and down for several times (See fig. T) .

4.3 DAILY CHECK AND MAINTENANCE

Daily check of the Rough Terrain Truck can limit wear as much as possible. Special attention should be paid to the wheels, the axles, as thread, rags, etc. It may block the wheels. The forks should be unloaded and lowered in the lowest position when the job is over.

4.4 LUBRICATION

All bearings and shafts are provided with long-life grease at the factory. You only need provide with long-life grease at monthly intervals or after each time the truck is cleaned thoroughly to the lubrication points.

5. Use instructions

5.1 Adjust the width between two forks

Pull or draw the fork (04L00) to right / left, you can adjust the width between two forks.

5.2 Lift the forks

Move the draw-bar (02J34) up and down, the forks will be up.

5.3 Lower the forks

Draw the control handle (01S01) up, the forks will be down.

5.4 Drive the Rough Terrain Truck

You can drive the Rough Terrain Truck by pulling or drawing the handle kits (01S00).

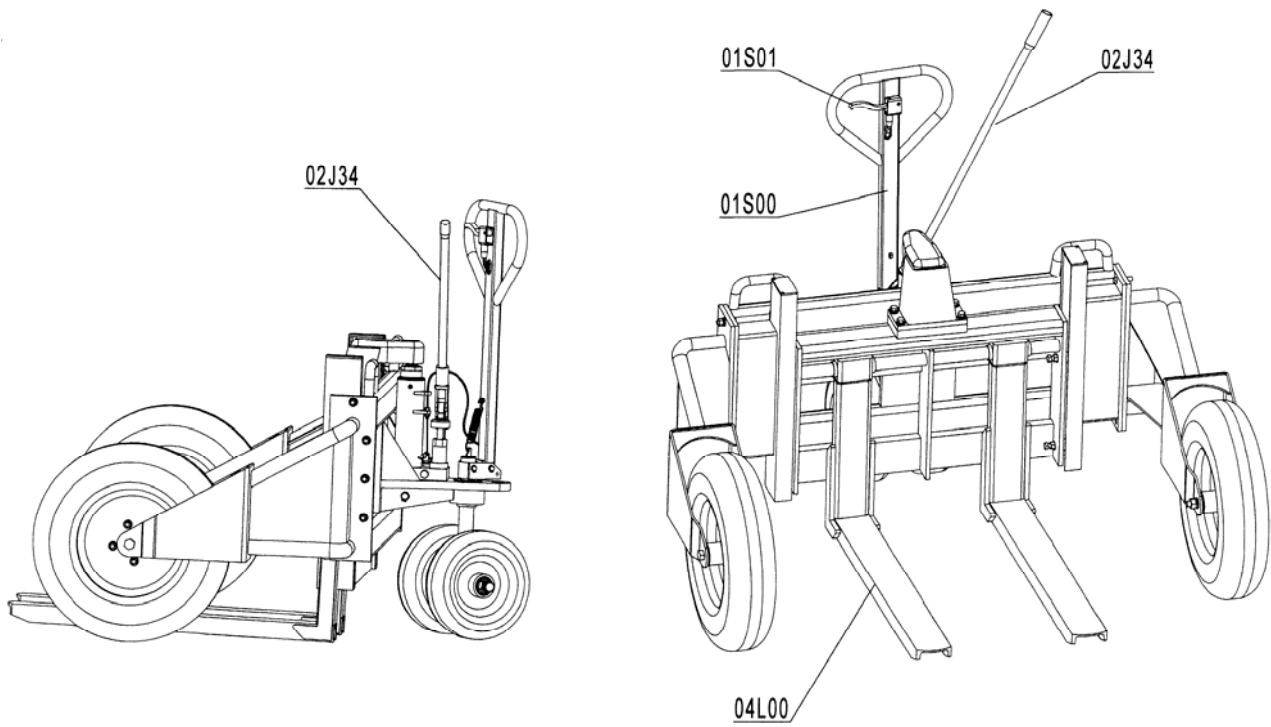


Fig. T

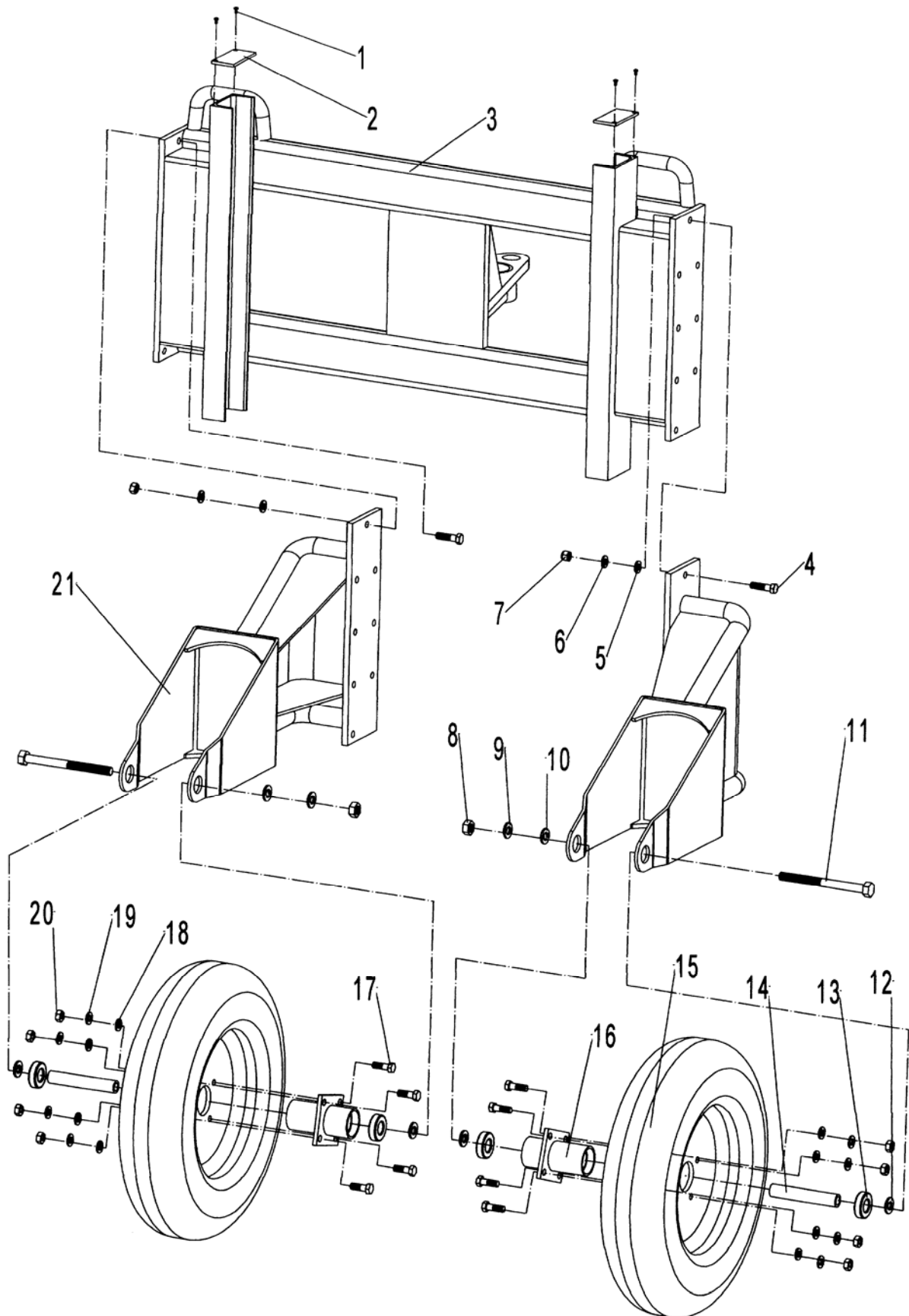
6. TROUBLES SHOOTING

No	Trouble	Clause	Fixing Methods
1	The forks can not be up the max. height.	-The hydraulic oil is not enough.	-Pour in the oil.
2	The forks can not be lifted up.	-Without hydraulic oil. -The oil has impurities. -The screw(02J66) is too closed, keep the pumping valve open. -Air come into the hydraulic oil.	-Fill in the oil. -Change the oil. -Adjust the screw(02J66). -Banish the air.(see item 4.2)
3	The forks can not be descended.	-The piston rod (02J01) or pump (02J45) is deformed resulting from partial loading slanting to one side or over-loading. -The fork was kept in the high position for long time with piston rod bared to arise in rusting and jamming of the rod. - The screw (02J66) is not in correct position. - The cable (01S02) is too loosed.	-Replace the piston rod (02J01) or pump (02J45). -Keeping the fork in the lowest position if not using, and pay more attention to lubricate the rod. -Adjust the screw (02J66). - Adjust the cable.
4	Leaks	-Sealing parts worn or damaged. -Some part cracked or worn into small.	-Replace with the new one. -Replace with the new one.
5	The fork descends without the release valve worked.	-The impurities in the oil cause the release valve to be unable to close tight. -Some parts of hydraulic system is cracked or bored. -Air come into the oil. -Sealing parts worn or damaged. - The screw (02J66) is not in the correct position.	-Replace with new oil. -Inspect and replace the waste parts. -Banish the air. (See item 4.2) -Replace with the new one. -Adjusting the screw (02J66).

NOTE: DO NOT ATTEMPT TO REPAIR THE PALLET TRUCK UNLESS YOU ARE TRAINED AND AUTHORIZED TO DO SO.

7. Parts List

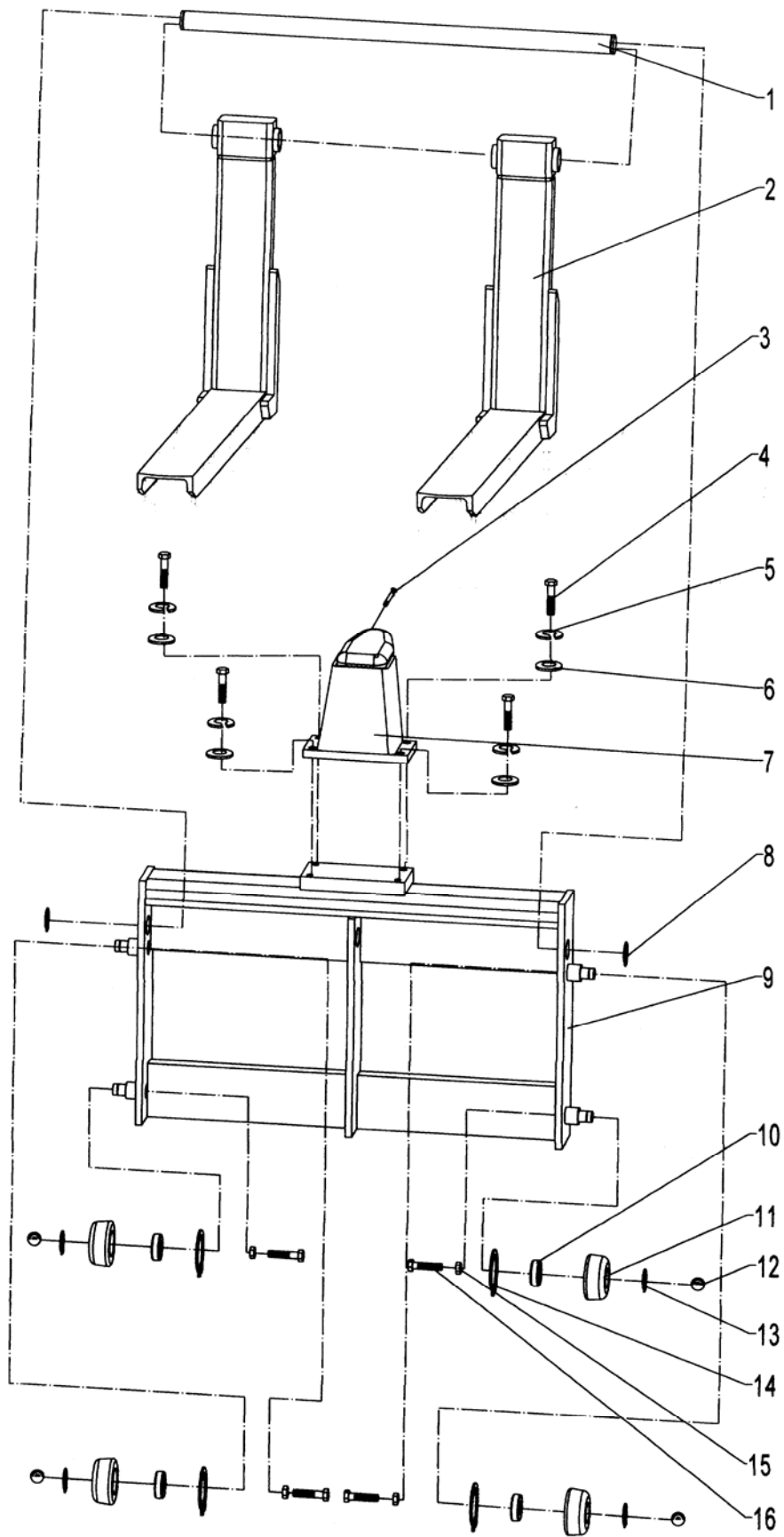
7.1 Frame body and big wheel



Frame body and big wheel

No.	Art. No.		Description	Qty.
1	02P00		Screw	4
2	03P00		Cover board	2
3	05C00		Truck body	1
4	04C00		Bolt	16
5	03C00		Washer	16
6	02C00		Elastic washer	16
7	01C00		Nut	16
8	09A00		Nut	2
9	08A00		Elastic washer	2
10	07A00		Washer	2
11	05A00		Bolt	2
12	01A00		Washer	4
13	02A00		Bearing	4
14	04A00		Axle sleeve	2
15	03A00	03A01	Big wheel	2
16		03A02	Holding axle	
17		03A03	Bolt	
18		03A04	Washer	
19		03A05	Elastic washer	
20		03A06	Nut	
21	06A00		fixing frame of wheel	2

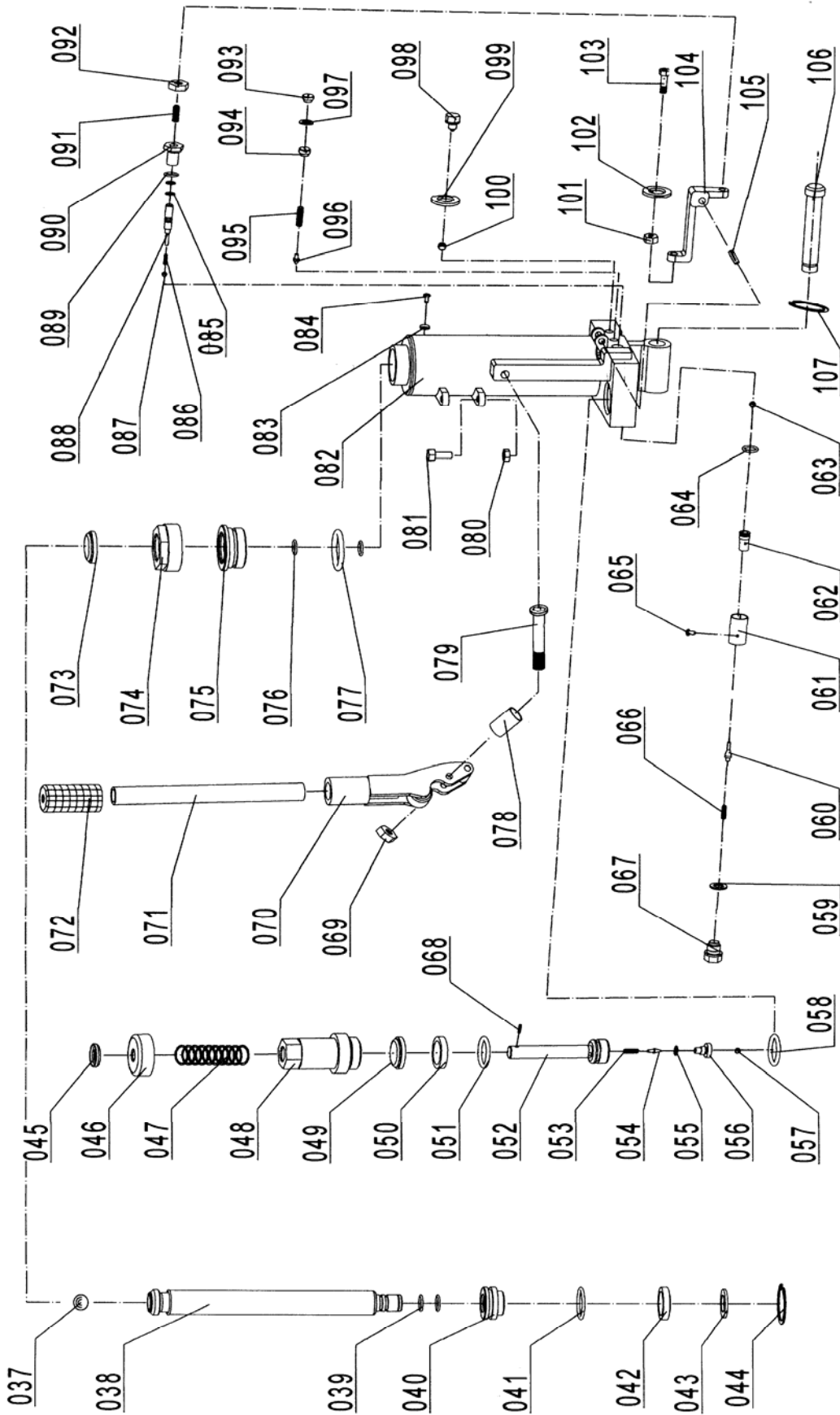
7.2 Fork Carriage



Fork Carriage

No.	Art. No.		Description	Qty.	
1	01L00		Long shaft	1	
2	04L00		Fork	2	
3	05P00		Screw	1	
4	01N00		Bolt	4	
5	02N00		Elastic washer	4	
6	03N00		Washer	4	
7	08N00		Gooseneck	1	
8	02L00		Retaining ring	2	
9	03L00		Fork carriage	1	
10	05N00	05N01	Roller	Bearing	4
11		05N02		Roller	
14		05N03		Retaining ring	
12	01P00		Steel ball	4	
13	04N00		Retaining ring	4	
15	01R00		Nut	4	
16	02R00		Bolt	4	

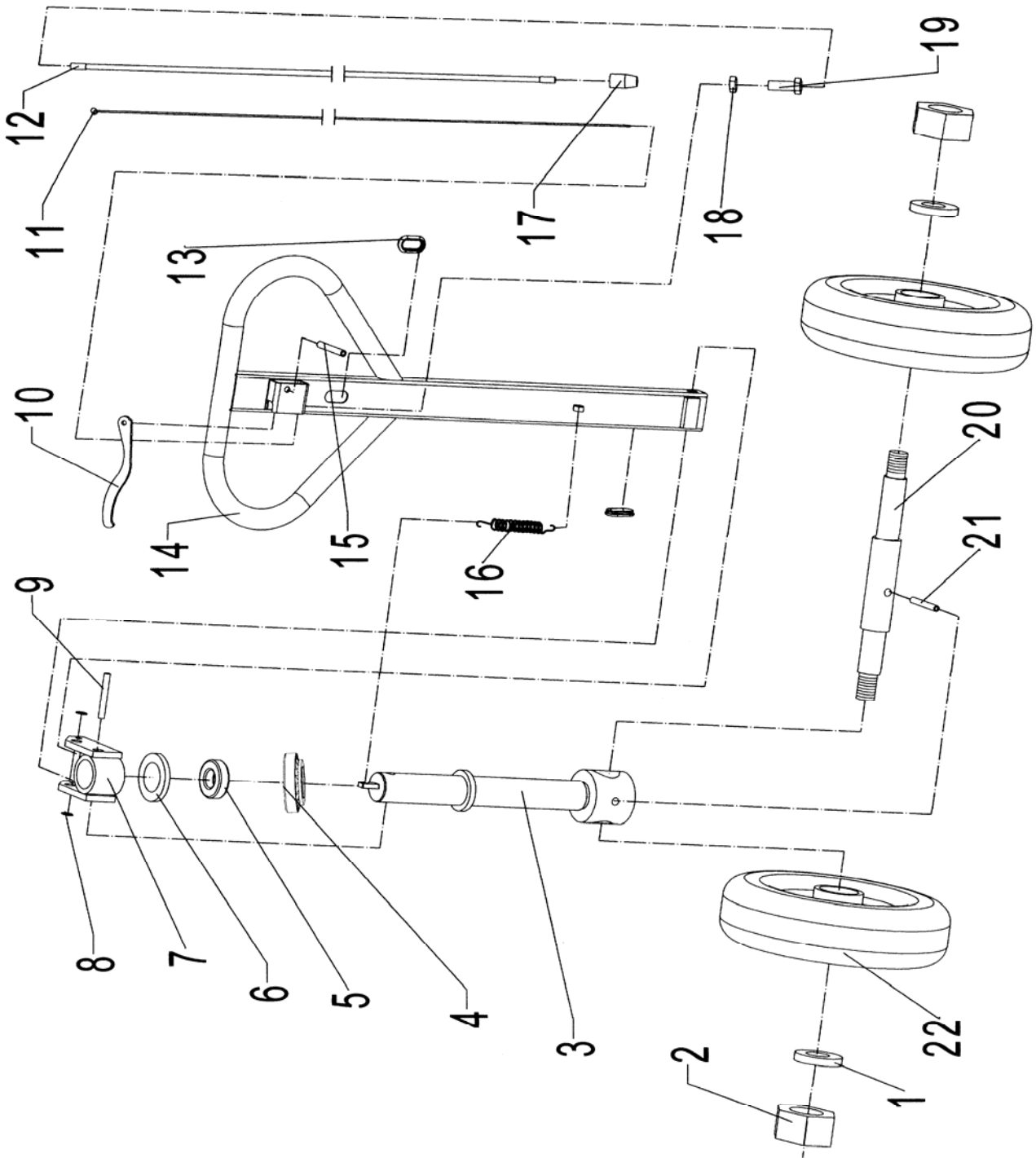
7.3 Pump unit



Pump Unit

No.	Art. No.	Description	Qty.	No.	Art. No.	Description	Qty.
1	04P00	Steel ball	1	2	02J01	Piston rod	1
3	02J02	O ring	2	4	02J03	piston	1
5	02J04	O ring	1	6	02J05	Y ring	1
7	02J06	Washer	1	8	02J07	Retaining ring	1
9	02J08	Upper cap	1	10	02J09	Cap of spring	1
11	02J10	Spring	1	12	02J11	Cylinder	1
13	02J12	Dust ring	1	14	02J13	Y ring	1
15	02J14	O ring	1	16	02J15	Pump Piston	1
17	02J16	Spring	1	18	02J17	Spindle of valve	1
19	02J18	O ring	1	20	02J19	Screw	1
21	02J20	Steel ball	1	22	02J21	O ring	1
23	02J22	Screw	1	24	02J23	Spindle of valve	1
25	02J24	Sleeve	1	26	02J25	Seat of pumping valve	1
27	02J26	Steel ball	1	28	02J27	O ring	1
29	02J28	Screw	1	30	02J29	Spring	1
31	02J30	Screw	1	32	02J31	Elastic pin	1
33	02J32	Nut	1	34	02J33	Seat for handle	1
35	02J34	Handle	1	36	02J35	Sleeve of handle	1
37	02J36	Dust ring	1	38	02J37	Screw cover	1
39	02J38	Sleeve for piston rod	1	40	02J39	O ring	2
41	02J40	O ring	1	42	02J41	Bushing	1
43	02J42	Screw	1	44	02J43	Nut	1
45	02J44	Bolt with hole	1	46	02J45	Pump body	1
47	02J46	Seal washer	1	48	02J47	Screw	1
49	02J48	Spring	1	50	02J49	Strike pin	1
51	02J50	O ring	2	52	02J51	O ring	1
53	02J52	Axle sleeve	1	54	02J53	Spindle of safety valve	1
55	02J54	Spring	1	56	02J55	Adjusting screw	1
57	02J56	Screw	1	58	02J57	Seal washer	1
59	02J58	Screw	1	60	02J59	Seal washer	1
61	02J60	Steel ball	1	62	02J61	Nut	1
63	02J62	Washer	1	64	02J63	Bolt with hole	1
65	02J64	Lever plat	1	66	02J65	Elastic pin	1
67	02J66	Screw	1	68	02J67	Nut	1
69	01J00	Pin	1	70	03J00	Retaining ring	1

7.4 Handle kits and steering wheel



Handle kits and steering wheel

No.	Art. No.	Description	Qty.
1	02E00	Washer	2
2	01E00	Locking nut	2
3	05E00	Pose	2
4	05G00	bearing	1
5	01G00	Bearing	1
6	02G00	Washer	1
7	03G00	seat of handle	1
8	04G00	Retaining ring	2
9	06G00	Elastic pin	2
10	01S01	Control handle	1
11	01S02	Cable	1
12	01S03	Sleeve of cable	1
13	01S04	Protect cover	1
14	01S05	Draw - bar	2
15	01S06	Elastic pin	1
16	04S00	Spring	1
17	01S07	Cover	1
18	01S08	Nut	1
19	01S09	Bolt	1
20	06E00	Shaft of wheel	1
21	04E00	Elastic pin	1
22	03E00	Steering wheel	1