# QJY245DS~DA

# Two Post Lift Installation & Adjustment Manual

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The manufacturer reserves the right to make design changes or add improvements to its product line without notice.

#### 1. Warning

This manual is an essential integral part of this equipment. Please read it carefully.

Properly keep this manual for use during the maintenance.

This lift is only used for its clearly designated purpose. never use it for other purpose.

The manufacturer is not responsible for any damage or injury caused by improper use for other purpose.

#### 2. Summary

The lift double-cylinder hydraulic lifter is a new type of hydraulic drive vehicle elevator equipment by our company recently.

It is designed briefly and reasonably. It select hydraulic power unit, having merits of low noise, smooth rise-and fall. The machine has elevator carriage, safety device guard against falling, qualification equipment for ultimate load, lock equipment of revolution angle of lift arm, and the forced same step of the steel wires of elevator carriage.

Lower elevator carriage makes it have strong flexibility and convenient operation .It is the necessary elevator equipment in the vehicle industry.

#### 3. Use

The machine can be use in elevating saloon car, beach wagon, and station wagon, which have lower than 4500kg deadweight. It fixes them at operational height needed in order to repair, service and clean.

#### 4. Mainly technology parameter

Model	Lift quality	Lift height	Rise time	Fall time	Power of motor	Power supply	Drive Thru Clearance	Machine weight
QJY245DS	4.5t	1863mm	<50s	>45s	2.2kw	380/220v	2658mm	740kg
QJY245DA	4.5t	1863mm	<50s	>45s	2.2kw	380/220v	2585mm	750kg

NOTE: If use 220V power supply, the user should buy a manostat.

Please choose the correct power supply, or will cause damage to your lift or injury to you. Customers should response for the damage caused by the unstable voltage.

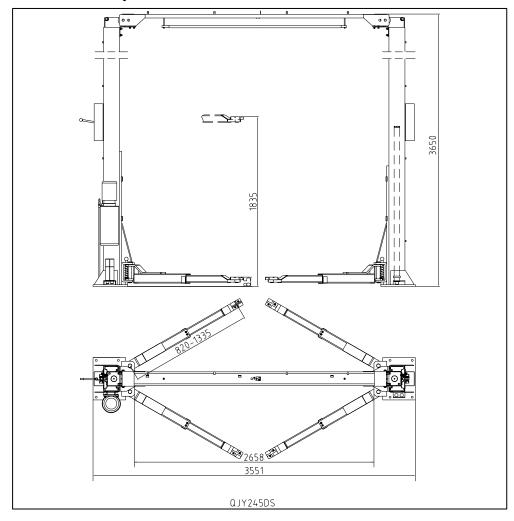
#### 5. Basic structure of the production

The machine mainly has double-column, double oil cylinders, hydraulic power unit, elevating carriage in-step equipment, safety mechanism, and rotation-angle lock equipment of lift arm which can be operated simply.(as shown in Fig.1)

When you push the switch on the electric motor of hydraulic power unit, the machine will rise. If you loosen, it will stop. If you want to go down, you must pull the safety unlocked wire to apart the safety bracing plate from the safety seat firstly, and open the handle bar on the hydraulic power unit.

Gyration lift arm is telescopic and rotatable. Height of pallet can be adjusted in order to meet the different need of different kinds of vehicle.

Lock devices are installed on the four lift arms in order to lock automatically at arm angle work need. When carriage is at the bottom, lift arm can rotate freely.



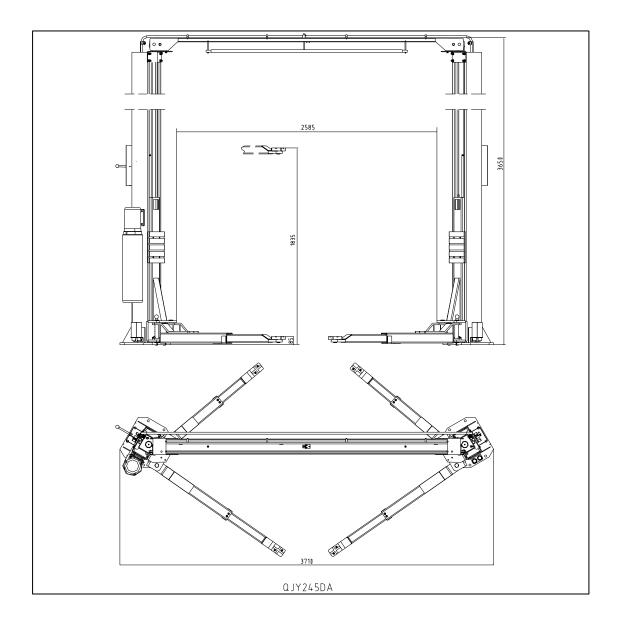
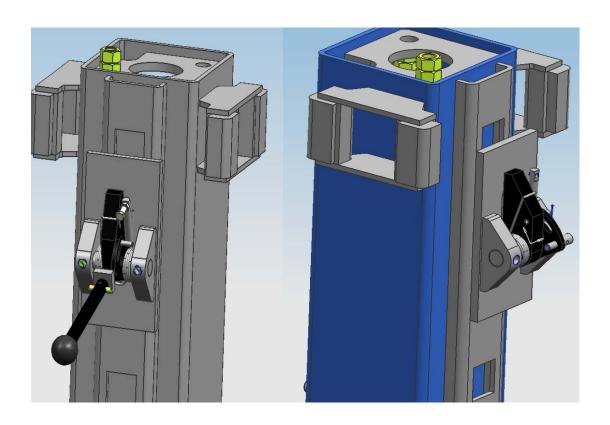


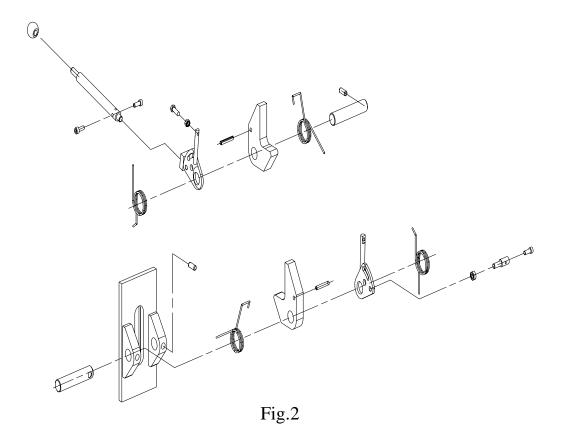
Fig.1

#### 6. Safety device

The machine has safety device guard against crack falling no-pressure protection defending oil pipe overload. (as shown in Fig.2)

Safety bracing plates are designed on the left and right lift carriages. when lift pallet rise, safety bracing plate dragged by spring jumps in the safety block of pole. When stop the rise, safety-bracing plate dragged by spring is on the safety block and defends carriage falling. If the carriage would fall, crawling the hydraulic switch make the carriage rise a little firstly. Then draw the unlocked line on the left and right carriage in order to draw safety bracing apart from safety seat. Last, open the pressure relief valve on the hydraulic pump to make the carriage fall.





#### 7. Installation and adjustment

#### 7.1 Important notice

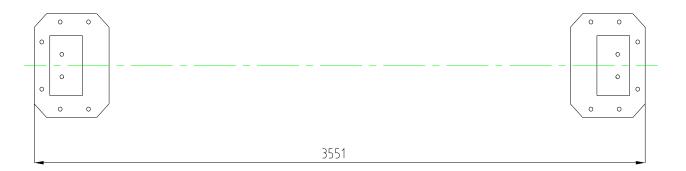
The wrong installation will cause the lift damage or personal injury. The manufacturer will not undertake any responsibilities for any damage caused due to incorrect installation and usage of this equipment, whether directly or indirectly.

The correct installation location shall be horizontal floor to ensure the horizontal lifting. The slightly slope floor can be corrected by proper shimming. The thickness of shims shouldn't exceed 5mm.

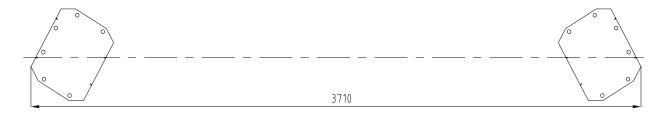
Don't install the lift on any asphalt or any surface other concrete floor conforming to the minimum requirement showed in this manual. Don't install the lift on the concrete with seams or crack and defect. Please check together with the architect.

Concrete drilling test: The installation personnel can test the concrete thickness at each site by drilling test. If several lifts are installed at one place, it is preferred to make drilling test in each site.

#### 7.2 Base plate layout



QJY245DS



QJY245DS

Fig.3

#### 7.3 install the powerside column

First connect and assemble the powerside column, and then raise the powerside column upper right to the location. Align the base plate of column with the chalk line layout. Guided by the hole on the base lpate of the column, drilling the holes into the concrete slab and use five concrete anchor bolts to fix it into the ground. During the drilling process, ensure no movement from the chalk line.(As shown in Fig.4)

To get the correct and safety installation, please follow the following installation steps.

- 1. Wear the safety goggles.
- 2. Use hard alloy drill-bit.
- 3. Don't use the drill-bit with wearing exceeding the tolerance.
- 4. The drill and concrete surface should be kept perpendicular.
- 5. Let the drill work itself. Don't apply the extra force, and don't ream the hole or allow the drill to wobble.
- 6. The drilling depth of the hole is based on the length of anchor bolt. The distance from the bolt head to the concrete floor should be more than twice of the bolt diameter.
- 7. remove the dust from the hole.
- 8. gently tap the bolt into the hole till the washer rests against the baseplate of column.
- 9. Tighten the bolt.

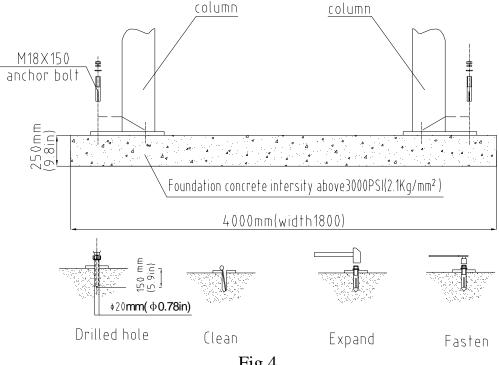
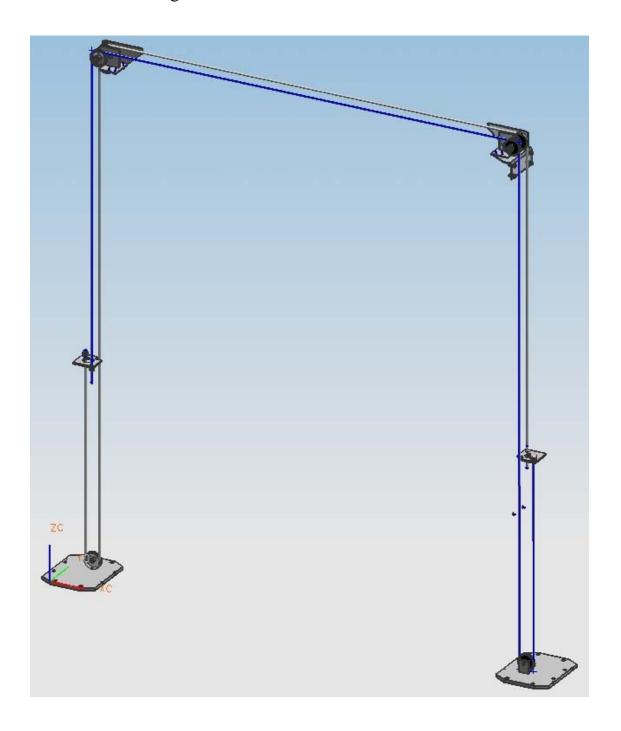


Fig.4

#### 7.4 install and adjust the balancing steel cable

Rise the two carriages to the safety locking position (make sure that the safety locks on each column are fully engaged before attempting to install cables), and two carriages are in equal position from the floor (same height). Install the two steel cables as shown in Fig.5.

Adjust the tension of cables through the adjustment nuts on each end of steel cable. The steel cables should be in equal tension. Each steel cable should be ensured in the pulley when adjusting tightly, otherwise the steel cable will be damage



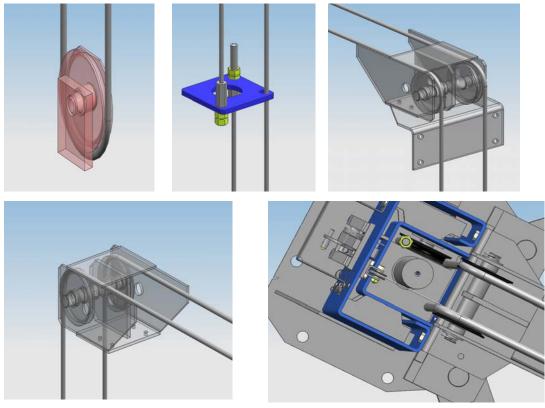
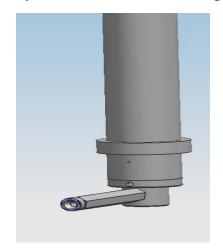


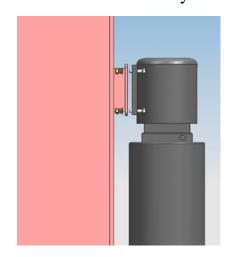
Fig.5

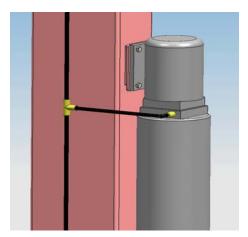
#### 7.5 Install the power unit and hydraulic line

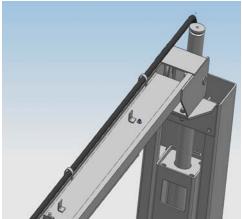
Use two M10 bolts and washers to fix the power unit as shown in Fig.6,iastall the hydraulic line, and tighten all the fittings to prevent oil leakage.

Fill the reservoir with hydraulic oil (oil capacity of 10L).operate carefully to avoid dust and other pollutants mixed with the hydraulic oil.









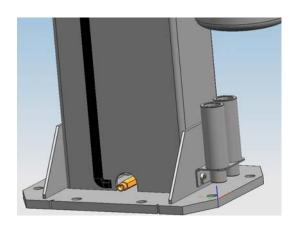
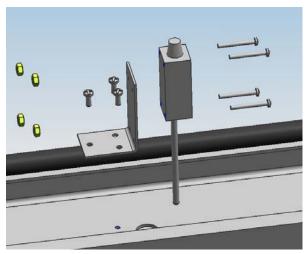


Fig.6

# **7.6** Install the beam and Limit switch (Fig.7)



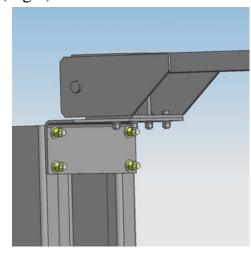


Fig.7

# 7.7 Install the insurance and insurance wire rope

The insurance of the main column (Fig.8)

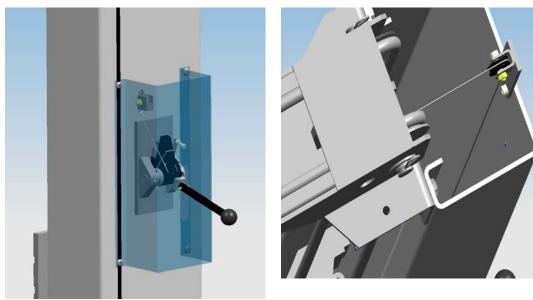


Fig.8

The insurance of the Vice column (Fig.9)

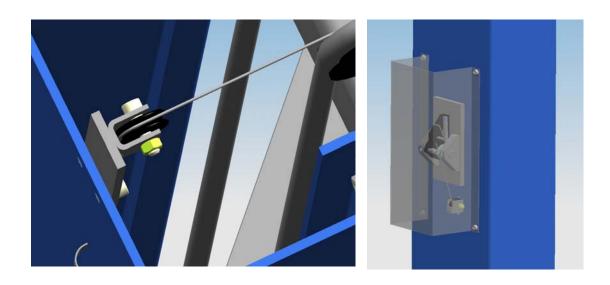


Fig.9

#### 8. Lift adjustment

#### 8.1 preparation before the adjustment

lubricate contact surface of the carriage and corners of column with general-purpose lithium grease. All sliding surface should be coated evenly from top to bottom.

Fill hydraulic oil N32or N46 to the oil reservoir of the power unit.

#### 8.2 Adjustment procedure

Check to see if the power supply is installed properly.

Check to see if all the bolts are fastened.

Press the UP button to start the motor, and the carriage rise. Release the UP button, and the carriage stops. To lower the carriage, first draw the unlocked line on the left and right carriage. If it can't release the safeties, press the UP button again, then draw the unlocked line, then press the DOWN button, the carriage will lower. Release the DOWN button the carriage will stop lowering. When the vehicle is raised at required height, press the DOWN button, making sure the safety locked. Ensure the safe repairing under the vehicle.

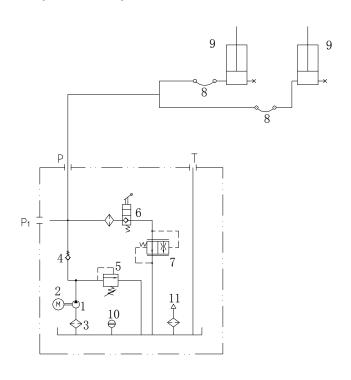
The hydraulic system may contain air due to new installation. To bleed the air, repeat the lifting and lowering for several times.

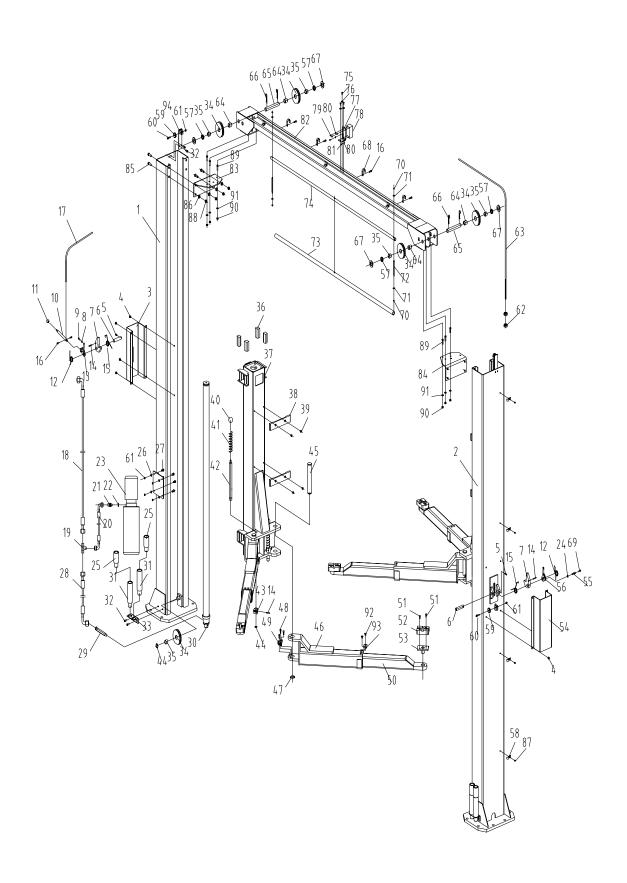
The adjustment is completed.

# 9. Failure and repair

> T anare and repair		
Failures	Reasons	Recovery methods
Electric appliance fail,	Electric source phase	Check resource, fuse
can't start	lack or electric	box, contactor in
	appliance failure	connection box of
		electric machine
Carriage crawl during	Air existing in the	Pour oil into tank, oil
rising	hydraulic system or oil	cylinder run total
	lack in oil tank	excursion some times
		or discharge the air in
		the oil tank
Carriage can't fall or	Operation mistake	Scrawl the switch to
fall unwell-balanced	without pull the safety	elevate the carriage a
	apart	little and open pressure
		relief valve for falling
		after pall off the safety
		hook to make it run
		well

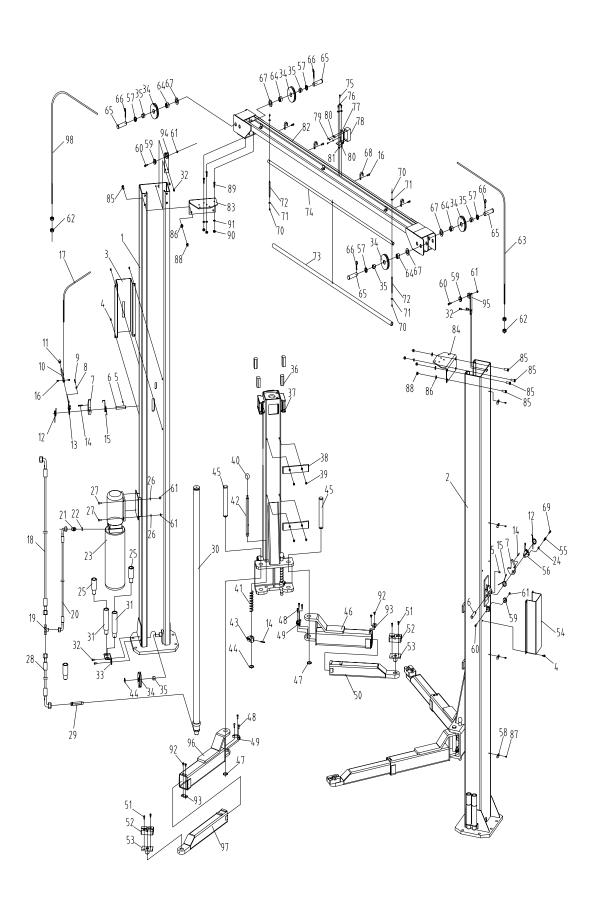
# 10.Diagram of the hydraulic system





1	QJY245DS.1	1	33	QJY245DS-16	2	64	QJY245DS.9-01	4
2	QJY245DS.2	1	34	QJY245DS-17	6	65	QJY245DS.9-02	2
3	QJY245DS-13	1	35	SF-2	6	66	QJY245DS.9-06	4
4	GB 818 (M8X10)	8	36	QJY230C.2-03	16	67	GB95-85 (26)	4
5	GB 71(M10 X12)	2	37	QJY245DS.3	2	68	QJY245DS.9-03	4
6	QJY245DS-06	2	38	QJY230C.2-01	4	69	GB/T 70.1 (M6X16)	1
7	QJY245DS-09	2	39	GB819-85 (M8X15)	8	70	GB/T889.1-2000	4
8	GB 6170 M6	 1	40	GB84141.11-84 (M12X30)	4	71	GB/T96.2-2002	4
9	GB 5782 (M6X30)	1	41	QJY245DS.3-07	4	72	QJY230D.3-04	2
10	QJY245DS-10	1	42	QJY245DS.3-05	4	73	QJY230D.3-07	1
11	GB84141.11-84 (M10X25)	1	43	QJY245DS.3-08	4	74	QJY230D.3-06	1
12	QJY245DS-08	2	44	GB 894.1	6	75	GB818-85 (M5x12)	3
13	QJY245DS.10	1	45	QJY245DS-04	4	76	GB98-85 (5)	3
14	GB 879 (6X40)	6	46	QJY245DS.5.2	4	77	QJY230D.3-03	1
15	QJY245DS-07	2	47	GB 894	4	78	ME - 9101	1
16	GB/T 70.1 (M6X10)	6	48	GB/T 70.1-2000 (M8X25)	12	79	GB818-85 (M4x12)	2
17	QJY245DS-02	1	49	QJY245DS.5-01	4	80	GB95-85 (4)	4
18	QJY245DS.8-04	1	50	QJY245DS.5.1	4	81	GB818-85 (M4X25)	2
19	QJY245DS.8-06	1	51	GB/T 70.1-2000 (M8X15)	8	82	QJY245DS.9.1	1
20	QJY245DS.8-03	1	52	QJY230C.4-03	4	83	QJY245DS.9-04	1
21	QJY245DS.8-05	1	53	QJY245DS.5.3	4	84	QJY245DS.9-05	1
22	JB982-77 (14)	1	54	QJY245DS-14	1	85	GB5781-86 (M12X35	8 (
23	Power assembly	1	55	QJY245DS-12	1	86	GB95-85 (12)	8
24	GB6170 (M8)	1	56	QJY245DS.13	1	87	GB818	8
25	QJY245DS-18	4	57	QJY230D.3-05	4	88	GB889.1 (M12)	8
26	GB97 (8)	4	58	QJY230D-02	8	89	GB5781-86 (M10X30	) 6
27	GB5782 (M8X22)	4	59	QJY245DS-03	4	90	GB889.1 (M10)	6
28	QJY245DS.8-02	1	60	GB 70.1 (M8X30)	4	91	GB95-85 (10)	6
29	QJY245DS.8-01	2	61	GB 889 M8	8	92	GB/T 2673 (M10×12	8
30	QJY245DS.7	2	62	GB6170 M16	8	93	QJY245DS.5-02	4
31	QJY245DS-05	4	63	QJY245DS-01	2	94	QJY245DS.11	2
32	GB 70.1 (M8X12)	8						

**QJY245DS Parts List** 



1	QJY245DS.1	1	40	GB84141.11-84 (M12X30)	4	79	GB818-85 (M4×12)	2
2	QJY245DS.2	1	41	QJY245DS.3-07	4	80	GB95-85 (4)	4
3	QJY245DS-13	1	42	QJY245DS.3-05	4	81	GB818-85 (M4X25)	4
4	GB 818 (M8X10)	8	43	QJY245DS.3-08	4	82	QJY245DA.9.1	1
5	GB 71(M10×12)	2	44	GB 894.1	6	83	QJY245DS.9-04	1
6	QJY245DS-06	2	45	QJY245DS-04	4	84	QJY245DS.9-05	1
7	QJY245DS-09	2	46	QJY245DA.6.2	2	85	GB5781-86 (M12X35)	8 (
8	GB 6170 M6	1	47	GB 894	4	86	GB95-85 (12)	8
9	GB 5782 (M6X30)	1	48	GB/T 70.1-2000 (M8X25)	12	87	GB818 6X8	8
10	QJY245DS-10	1	49	QJY245DS.5-01	4	88	GB889.1 (M12)	8
11	GB84141.11-84 (M10X25)	1	50	QJY245DA.6.1	2	89	GB5781-86 (M10X30)	) 6
12	QJY245DS-08	2	51	GB/T 70.1-2000 (M8X15)	8	90	GB889.1 (M10)	6
13	QJY245DS.10	1	52	QJY230C.4-03	4	91	GB95-85 (10)	6
14	GB 879 (6X40)	6	53	QJY245DS.5.3	4	92	GB/T 2673 (M10X12)	8
15	QJY245DS-07	2	54	QJY245DS-14	1	93	QJY245DS.5-02	4
16	GB 70.1 (M6X10)	6	55	QJY245DS-12	1	94	QJY245DA.11	1
17	QJY245DS-02	1	56	QJY245DS.14	1	95	QJY245DA.12	1
18	QJY245DS.8-04	1	57	QJY230D.3-05	4	96	QJY245DA.5.2	2
19	QJY245DS.8-06	1	58	QJY230D-02	8	97	QJY245DA.5.1	2
20	QJY245DS.8-03	1	59	QJY245DS-03	4	98	QJY245DA-01	1
21	QJY245DS.8-05	1	60	GB 70.1 (M8X30)	4			
22	JB982-77 (14)	1	61	GB 889 M8	8			
23	Power assembly	1	62	GB6170 M16	8			
24	GB6170 (M8)	1	63	QJY245DS-01	1			
25	QJY245DS-18	4	64	QJY245DS.9-01	4			
26	GB97 (8)	4	65	QJY245DA.9-01	2			
27	GB5782 (M8X22)	4	66	QJY245DS.9-06	4			
28	QJY245DS.8-02	1	67	GB95-85 (26)	4			
29	QJY245DS.8-01	2	68	QJY245DS.9-03	4			
30	QJY245DS.7	2	69	GB/T 70.1 (M6X16)	4			
31	QJY245DS-05	4	70	GB/T889.1-2000	4			
32	GB 70.1 (M8X12)	8	71	GB/T96.2-2000	4			
33	QJY245DS-16	2	72	QJY230D.3-04	2			
34	QJY245DS-17	6	73	QJY230D.3-07	1			
35	SF-2	6	74	QJY230D.3-06	1			
36	QJY230C.2-03	16	75	GB818-85 (M5x12)	3			
37	QJY245DS.3	2	76	GB98-85 (5)	3			
38	QJY230C.2-01	4	77	QJY230D.3-03	1			
39	GB819-85 (M8X15)	8	78	ME-9101	1			

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