

## CATALOGUE

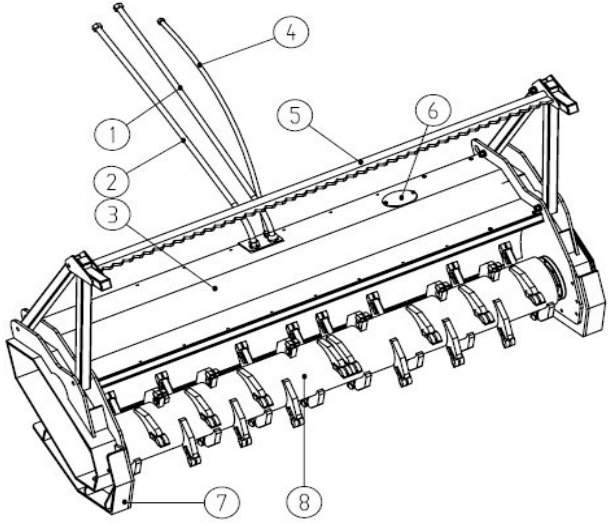
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## Safety Instruction

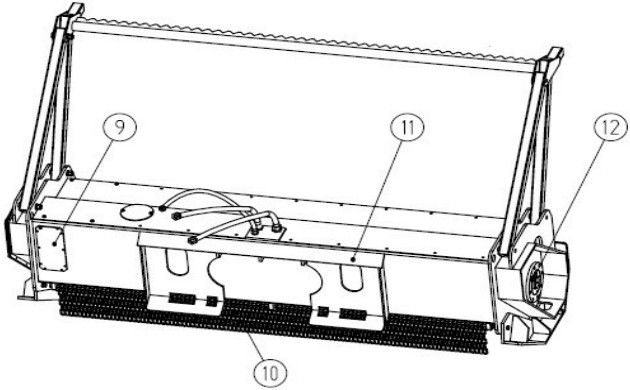
- (1) Before the installation, please be sure to read the manual
- (2) Before using this equipment it should to know its production or working capacity, its dimensions and operation steps.
- (3) Pay attention to the flying objects caused by the operation of this equipment, at the same time operator should be installed with the glasses, helmet and mask.
- (4) under high pressure, hydraulic oil's leak will cause harm or even death to the staff, operators should as far as possible away from leaking oil pipeline .
- (5) Don't modify equipment, it can reduce machine's performance, Security and reliability.
- (6) Equipment working environment requirements; Flat ground, open vision。
- (7) Make sure this is no pollution in steps and armrest of the equipment.
- (8) when operating, be sure that this is nobody around the equipment;
- (9) Operator do not leave the machine when it working 。
- (10) Isolating working area when working, avoid people and animals close to the machine and be hurt by cutting pieces.
- (11) when mulcher working for big trees, be careful of logs dumping backwards to the cab where operator working in.
- (12) Do not run this machine on steep hills, lest cause tilting.
- (13) Do not drunk when operating this machine .
- (14) Before operator leave the skid steer loader, make sure to put mulcher attachment fell to the ground, then close the skid steer engine and pull out its key.

- (15) Check all fasteners, make sure they has no loose phenomenon. Change the damage parts in time, and make sure all warning signs clear and clean, change them if damage happens.
- (16) Before every time usage, it should check whether the bolt fastening everywhere.

**Products Instruction**



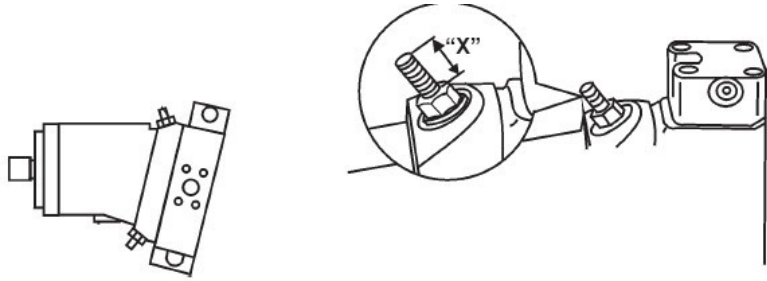
- (1)—Oil inlet (2)—oil return pipe (3)—upper cover plate (4)—oil outlet
- (5)—forward press bar (6) motor displacement adjustment plate (7) wear plate (8) cutting drum



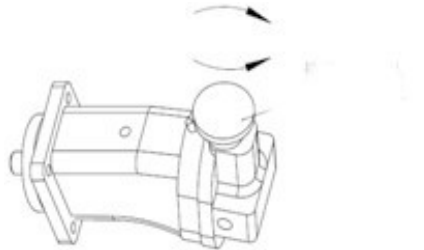
- (9) checking port (10) protection chain (11) hitch frame (12) grease fitting

**. Operation Instruction**

- (1) Hydraulic motor displacement setting  
 This Mulcher attachment uses inclined shaft axial piston motor, the displacement of motor is manually adjustable. Displacement limit adjustment range is 15.8-54.8ml/r, and the limiting speed of the motor can be reached 5000r/min, but too high speed will reduce attachment working life, so this mulcher requires motor maximum output speed not to exceed 3000 r/min , mulcher motor's displacement adjustment range is adjusted to 30-54.8 ml/r in factory, and is secured by a locking bolt. (see following pictures)



The best flow range of host machine to provide to mulcher is 80—150L/MIN, if less than 80L/MIN; mulcher work efficiency will be reduced, if more than 150 L/MIN, mulcher vibration will be intensified, then mulcher work life will be reduced. If host machine flow is more than 150 L/MIN, it should be considered to use the other larger displacement of hydraulic motor。 The ideal rotational speed of cutting drum (see product structure instructions) is 1700-2000 r/min, in this speed range, the actual output displacement of motor is adjusted by turning the handwheel (see following picture),



The handwheel rotates clockwise for one circle to decrease 1.1ml/r;

The handwheel rotates counterclockwise for a circle to increase 1.1 ml/r;

For variety host machine flow, variety speed of cutting drum, refer to following table for the number of turning for handwheel adjustment ;

Mulcher (0513) Motor displacement setting						
Host machine flow (L/MIN)	Cutting drum speed 1800rpm		Cutting drum speed 1900rpm		Cutting drum speed 2000rpm	
	Motor Displacement (ml/r)	Handwheel turns counter-clockwise	Motor Displacement (ml/r)	Handwheel turns counter-clockwise	Motor Displacement (ml/r)	Handwheel turns counter-clockwise
80	30	0				
85	31	1	30	0		
90	33	3	31.5	1.4	30	0
95	35	4.5	33	3	31.5	1.4
100	37	6	35	4.5	33	3
105	39	8	37	6	35	4.5
110	41	10	38.5	8	37	6
115	43	12	40	9	38	7
120	44	13	42	11	40	9
125	46	14.5	44	12.7	42	11
130	48	16	46	14.5	43	12
135	50	18	47	15.5	45	13.6
140	52	20	49	17	46.7	15
145	54	22	51	19	48.3	16.7
150			53	21	50	18

(2) Specific steps:

① Description of Equipment Capability:

This mulcher model is used to clear high weeds, dense shrubs and trees with a diameter no more than 200mm. The host machine pressure not more than 35MPa.

② If mulcher uses on skid steer loader, please use high-flow tubing connection。

Please note: Cutting drum rotational direction is unidirectional, If mulcher tubes connect correctly, but cutting drum does not work, the engine of host machine needs to be idled until the cutting drum is operated, otherwise it need to replace tubing connectors location . ( Turn off the host engine when replacing tubing connectors )

- ③ After opening the hydraulic motor, gradually increase flow to improve required speed to work, and ensure cutting drum speed is moderately during flow adjustment process.
- ④ Operate host machine to control mulcher both sides wearing plates touch with ground, then operator control mulcher toward destination and working, so this can achieve the best working results.
- ⑤ During operation, do not lift mulcher too high, so that the protection chain to lose the protective effect on the operator, because cutting pieces are easy to hurt the operator.
- ⑥ Do not forward host machine too fast, because fast speed not only makes the hydraulic system pressure of host machine too high, but also will make high fever.
- ⑦ If mulcher encounter obstacles in the work to be greater cutting force, but cutting drum does not rotate, the operator should remove the mulcher from cutting things, and then restore the cutting drum speed, adopt small cutting method for cutting the obstacles, and slow down host machine speed .
- ⑧ For cutting thicker trunks, when cutting drum cuts off 3/4 of trunks, use front compressive bar on the mulcher to touch with trunks, and then forward host machine to control front compressive bar to force the trunks

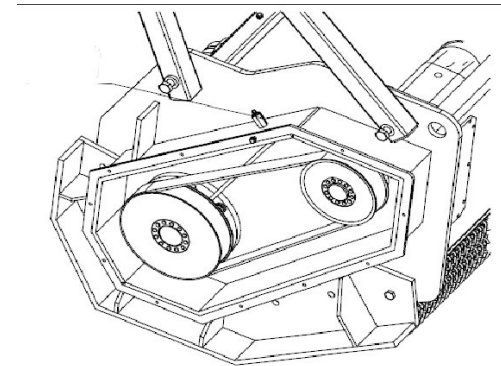
break, it can protect operator will not be hit by broken trunk.

#### . Maintenance Instructions

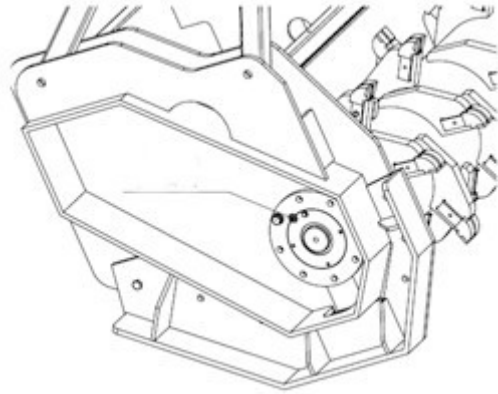
Regular maintenance on attachment is the key to remain its long working life and safety work. The maintenance items described below are more important.

- (1) Check all fasteners for looseness and fasten them.
- (2) Check mulcher hydraulic system, to see whether there is leakage or not, if there is leakage, replace leaked tube joints or tubes timely.
- (3) Check for components damage on mulcher, and cracks on solder joints, repair if necessary.
- (4) To refill oil bearing regularly, generally not more than 40 hours for one time refill. The positions of refill lubricating oil are at both ends of the cutting drum and motor mount. See following pictures:

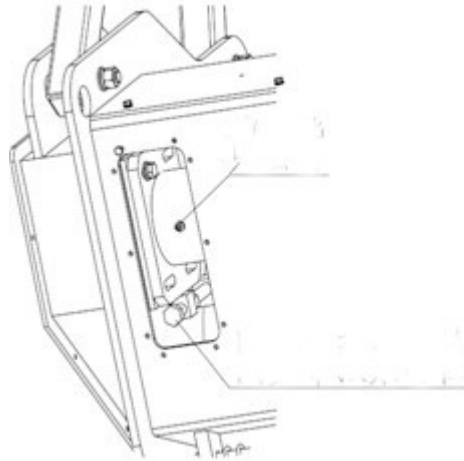
A. Transmission end:



B .The other side of Transmission end:



### C. Motor installation



- (5) Regularly check belt tension, general inspection once every 100 hours.
- (6) After one time working, clean up debris and dirt on cutting drum and other parts.
- (7) In the maintenance work, be sure to turn off host machine engine, and hang up the "maintenance" warning sign on host machine obvious place to prevent others close to.

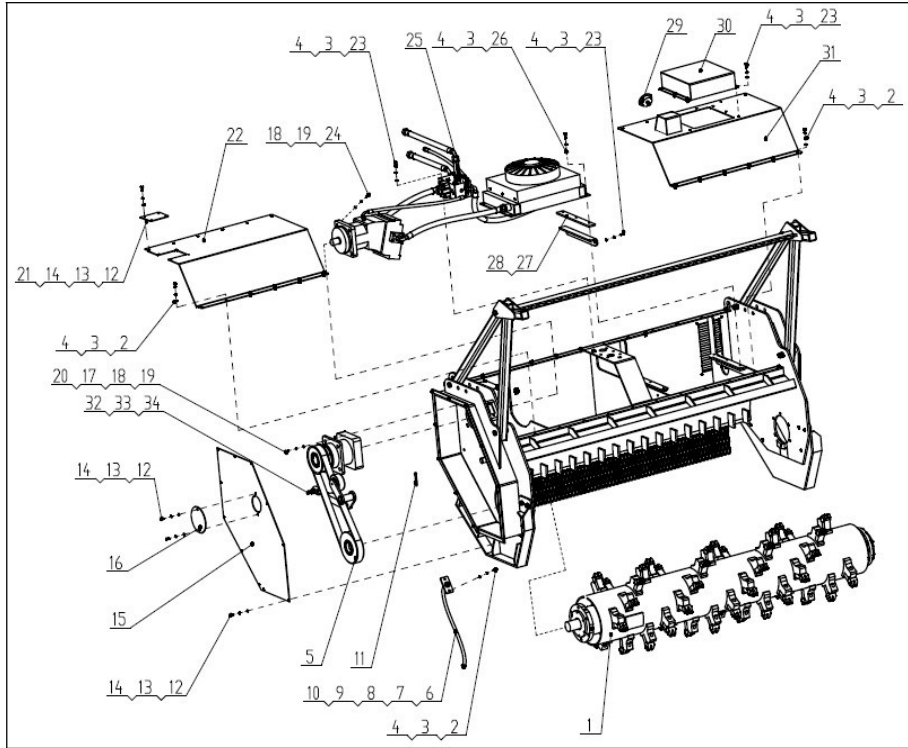
(8) When replacing parts, replace only with the parts approved by the manufacturer.

### . Storage Instructions

- (1) Thoroughly clean all soil, dirt and grease on mulcher surface.
- (2) Should be stored in a dry and safe place, exposed will shorten the service life of equipment.
- (3) When mulcher is placed, it should be a fixed positioning bracket, it will be convenience to next time connection with host machine and mulcher.

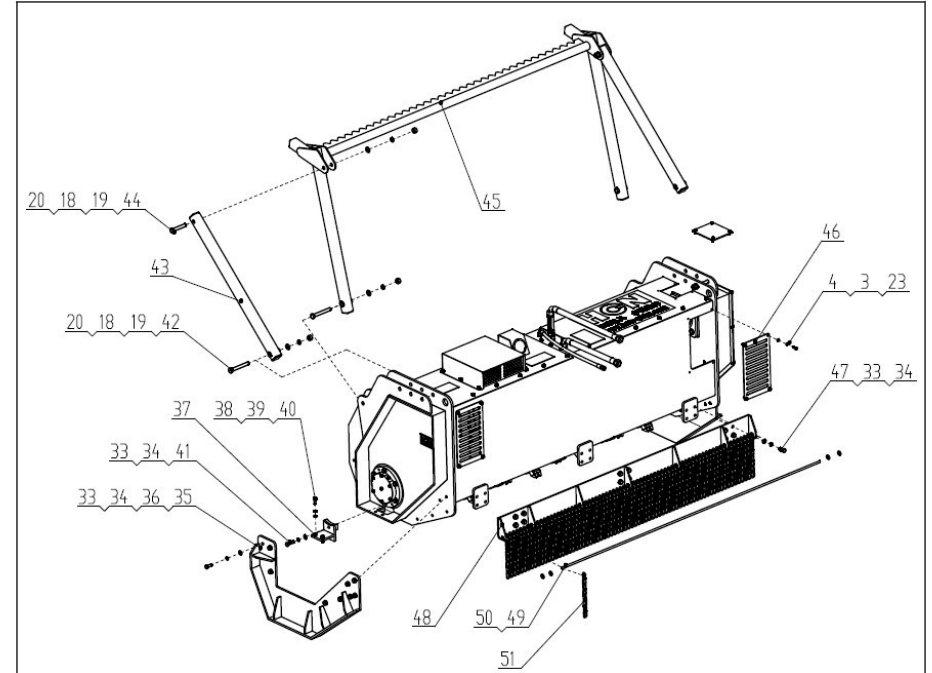
## Parts Subsidiary

### 1、 The mulcher assembly



No.	Part NO.	Name	Quantity	Remark
1	0513-01	Cutting roller assembly	1	
2	0513-02	Screw bolt M8X16	34	
3	0513-03	Spring washer D8	46	
4	0513-04	Flat washer D8	46	
5	0513-05	Mechanical transmission assembly	1	
6	0513-06	Air tube $\phi$ 12-600	1	
7	0513-07	Pagoda-Shape Connectors G3/8	2	

8	0513-08	Clamps $\phi$ 16	2	
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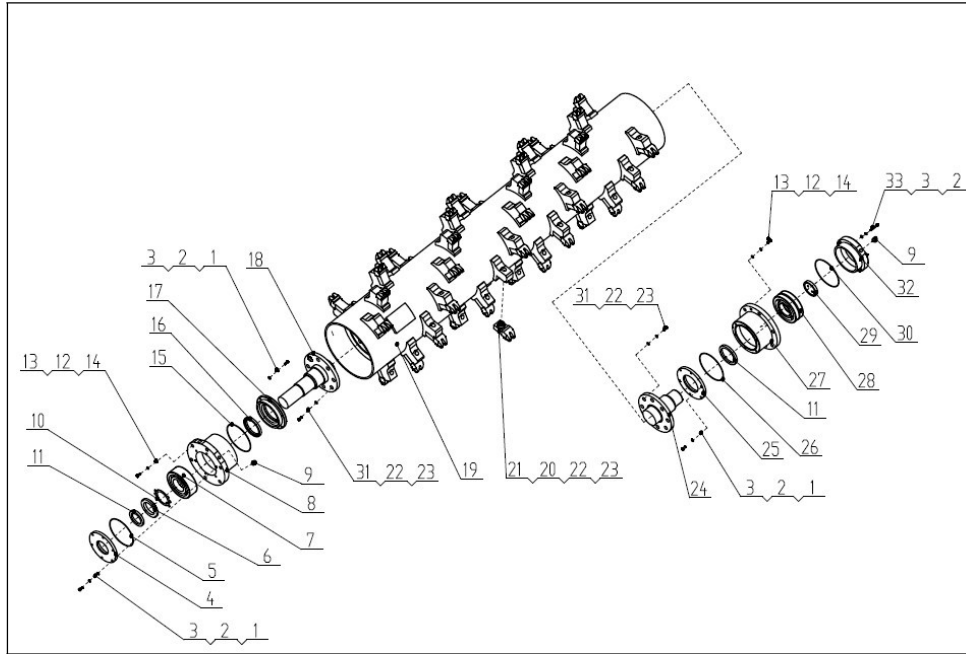


No.	Part NO.	Name	Quantity	Remark
9	0513-09	Purge plug G1/4	4	
10	0513-10	Oil filling port	1	
11	0513-11	Split pin D8x60	1	
12	0513-12	Hexagon bolt M6x16	17	
13	0513-13	Spring washer D6	17	
14	0513-14	Flat washer D6	17	
15	0513-15	Side seal plate	1	

16	0513-16	Cover plate	1	
17	0513-17	Hexagon bolt M16x60	4	
18	0513-18	Spring washer D16	8	
19	0513-19	Flat pad D16	8	
20	0513-20	Nut M16	4	
21	0513-21	Upper refueling board	1	
22	0513-22	Upper cover plate	1	
23	0513-23	Hexagon headed bolt M8x20	18	
24	0513-24	Hexagon bolt M16x50	4	
25	0513-25	Hydraulic system	1	
26	0513-26	Hexagon bolt M8x25	6	
27	0513-27	Radiator support plate	2	
28	0513-28	Rubber sheet	2	
29	0513-29	Pressure gauge	1	
30	0513-30	Dust cover	1	
31	0513-31	Upper cover plate 2	1	
32	0513-32	Hexagon bolt M12x80	1	
33	0513-33	Spring washer D12	19	
34	0513-34	Flat pad D12	19	
35	0513-35	Backing plate	2	
36	0513-36	Hexagon bolt M12x30	18	
37	0513-37	Reinforcing plate	1	
38	0513-38	Hexagon bolt M10x30	2	
39	0513-39	Spring washer D10	2	
40	0513-40	Flat pad D10	2	
41	0513-41	Hexagon bolt M12x40	1	
42	0513-42	Hexagon bolt M16x120	4	
43	0513-43	Pull rod	2	

44	0513-44	Hexagon bolt M16x90	2	
45	0513-45	Front gear lever	1	
46	0513-46	Rear Cover Plate	2	
47	0513-47	Hexagon bolt M12x25	12	
48	0513-48	Chain mount	1	
49	0513-49	Hanger rod	1	
50	0513-50	Hexagon bolt M10	4	
51	0513-51	Chain	73	
52	0513-52	Hexagon M16x50	4	

## 2、Cutting roller assembly (0513-01)

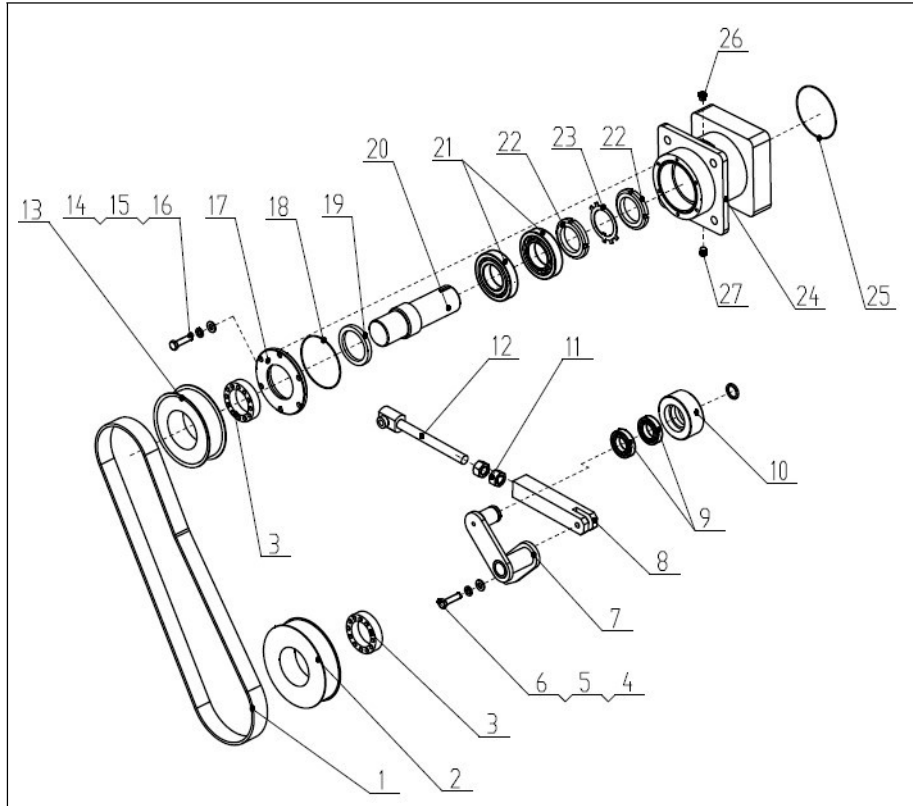


No.	Part NO.	Name	Quantity	Remark
1	0513-01-01	Hexagon bolt M6x25	6	GB5783
2	0513-01-02	Spring washer D6	6	GB93
3	0513-01-03	Flat pad D6	6	GB97.1
4	0513-01-04	Seal end cap A	1	
5	0513-01-05	O-ring 147x1.8	1	
6	0513-01-06	Round nut M65x2	1	
7	0513-01-07	Roller bearing	1	
8	0513-01-08	Bearing block	1	
9	0513-01-09	Purge Plug M12x1	1	
10	0513-01-10	Lock washer D65	1	

11	0513-01-11	Skeleton seal 80x100-10	2	
12	0513-01-12	Hexagon bolt M12x60	6	
13	0513-01-13	Spring washer D12	6	
14	0513-01-14	Flat pad D12	6	
15	0513-01-15	O-ring 133x1.8	1	
16	0513-01-16	Skeleton seal 60x80-10	1	
17	0513-01-17	Right cover plate	1	
18	0513-01-18	Drive shaft	1	
19	0513-01-19	Cutting cylinder	1	
20	0513-01-20	tool bit	49	
21	0513-01-21	Outer hexagon bolt M16x60	49	
22	0513-01-22	Flat pad D16	61	
23	0513-01-23	Spring washer D16	61	
24	0513-01-24	Right connecting shaft	1	
25	0513-01-25	Sealing cover	1	
26	0513-01-26	O-ring	1	
27	0513-01-27	Bearing block	1	
28	0513-01-28	Bearing	1	
29	0513-01-29	End cap	1	
30	0513-01-30	O-ring	1	
31	0513-01-31	Bolt M16x50	12	
32	0513-01-32	Bearing chock cover	1	
33	0513-01-33	Bolt M6x40	6	

3、Mechanical drive (0513-05)

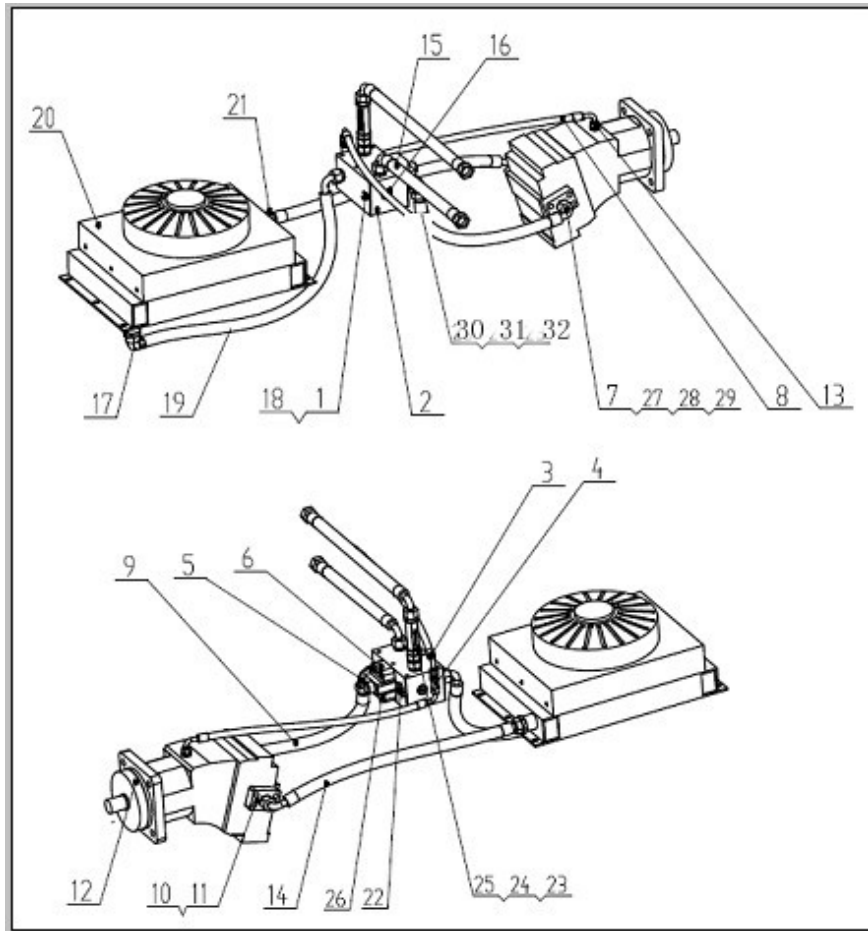




No.	Part NO.	Name	Quantity	Remark
1	0513-05-01	Synchronous belt	1	
2	0513-05-02	Driven wheel	1	
3	0513-05-03	Expansion sleeve Z2-60X90	2	
4	0513-05-04	Hexagon bolt M12x45	1	
5	0513-05-05	Spring washer D12	1	
6	0513-05-06	Flat pad D12	1	
7	0513-05-07	Rotating shaft	1	
8	0513-05-08	Square steel	1	

9	0513-05-09	Deep groove ball bearing	2	
10	0513-05-10	Tensioning wheel	1	
11	0513-05-11	Nut M20	2	
12	0513-05-12	Screw	1	
13	0513-05-13	Driving wheel	1	
14	0513-05-14	Bolt M6x25	6	
15	0513-05-15	Spring washer D6	6	
16	0513-05-16	Flat pad D20	6	
17	0513-05-17	Bearing end cover	1	
18	0513-05-18	O-ring	1	
19	0513-05-19	Skeleton seal	1	
20	0513-05-20	Output shaft	1	
21	0513-05-21	Cylindrical roller bearing	2	
22	0513-05-22	Lock nut	2	
23	0513-05-23	Stop gasket	1	
24	0513-05-24	Bearing chock	1	
25	0513-05-25	O-ring	1	
26	0513-05-26	Ventilating screen	2	
27	0513-05-27	Plug	1	

3、Hydraulic system (0513-25)



No.	Part NO.	Name	Quantity	Remark
1	0513-25-01	Pressure tap	1	
2	0513-25-02	manifold block	1	
3	0513-25-03	Drain hose A	1	
4	0513-25-04	Bulkhead adapter	1	
5	0513-25-05	Straight joint	4	
6	0513-25-06	Angle one-way valve	1	

7	0513-25-07	Straight joint	2	
8	0513-25-08	Drain pipe B	1	
9	0513-25-09	Motor hose A	1	
10	0513-25-10	Flange joint	2	
11	0513-25-11	O-ring 30X3.55-G-N	2	
12	0513-25-12	Axial piston-bent axis hydraulic motor	1	
13	0513-25-13	straight joint	1	
14	0513-25-14	Motor hose B	1	
15	0513-25-15	Motor hose C	2	
16	0513-25-16	Plug M18*1.5	2	
17	0513-25-17	Right angle combination joint	2	
18	0513-25-18	Pressure gauge (40MPa)	1	0513-29
19	0513-25-19	Radiator hose	1	
20	0513-25-20	Oil cooled radiator	1	
21	0513-25-21	Straight through joint	2	
22	0513-25-22	Plug	1	
23	0513-25-23	Tubular check valve	1	
24	0513-25-24	Straight through combined joint	1	
25	0513-25-25	Straight through joint	2	
26	0513-25-26	Bolt M10*50	4	GB2673
27	0513-25-27	Bolt M12x40		GB5783
28	0513-25-28	Flat pad D12	8	GB97.1
29	0513-25-29	Spring washer D12	8	GB93
30	0513-25-30	Inlet tube	1	
31	0513-25-31	Outlet tube	1	
32	0513-25-32	Drain tube	1	

