

Model No. DTM588 - Tyre Changer - Commercial

Instruction Manual Maintenance Manual Spare Parts

(Rev. 01 - 27.02.2015)

The specifications stated in this manual are not binding, due to the process of continuous improvement and development we reserve the right to change any specification without prior notification.

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Main operation parts indicated in Fig 1

- 1. Main switch (Fig 4)
- 2. Lift arm
- 3. Hydraulic clamp
- 4 . Tire support platform
- 5. Operation control switch
- 6. Clamp control switch
- 7 . Tire rotation control (clockwise/counter
- clockwise)
- 8. Trailer
- 9. Tool rack
- $1 \ 0$. Tool rack lock rod
- 11. shock-absorber
- 1 2 . Round bead breaker disk
- 1 3. Nose tool
- 1 4 . Positioning handle controlling the nose tool and round bead breaker disk





Technical parameter

Rim suitabl	е	14'-26"
Max. wheel	weight	1500Kg
Max.	wheel	1000 mm
breadth		
Max.	wheel	1500 mm
diameter		
Pump moto	or	1.5KW-380V-3phase

Gearbox motor	1.8KW-380V-3phase
Operation	130 bar -150bar
pressure	
Noise	<75db
Net weight	585Kg

Installation

Installation site: Choose the safety location in accordance with the related safety regulation. The tire changer should be connected with the electrical network and you should choose a location suitable to connect with the electrical circuit. The installation space should be convenient for the operator to operate (Fig 2 indicates the dimension). If installed outdoors, it should equip the machine with the rain protective shed.



! It is forbidden to use the machine in the open field.

Installation foundation as shown in Fig 3. The floor should be flat. The machine chassis should be fixed by the bolt through a fixing hole. When the gradient relative to the horizontal plane is larger than 2.5‰, it should be lever up to achieve compensation.



• Electrical connection; Note:

- The installation site should be equipped with the effective protective ground loop and connect in accordance with the ground marks of the machine.
- ◆ The power system should be equipped with the automatic circuit breaker, setting at 3 0 A.
- Connect the tire changer with the electrical supply and close the switch. Check if the running direction of the motor is the same to the direction of the arrow (Fig 5). If the direction is reverse, it needs the professional personnel to change the phase.



! If the generator exists reserve for seconds, it will be burned.

! All the work must with the tool rack's condition set to be "non-operation" (9)



Fig5

! All the electrical operation should be executed by the professional technicians.

Note: The main shaft motor and hydraulic pump more all have the overload protection device installed in the Fig 4.

Running test

Before use the tire changer, it must performs test run. To test if the installation is correct and the running is normal.

- •When perform the test run; position the tool rack (9) at the non-operation position. Pull the tool rack lock rod (10) to unlock the tool rack (9). Pull out and set at the non-operation position.
- ♦ Connect the main switch of the electrical cabinet (1) and start the hydraulic motor. Step down the pedal switch (7): When step the left side pedal, the hydraulic clamp will rotate counterclockwise and if step the right side pedal, the hydraulic clamp will rotate clockwise.

! If weight of the tire to be demounted exceeds 1000kg, the machine must be fixed via the anchor bolts.

Operate control switch (5): Push along the directions of a and b, the vertical arm (2) will descend or ascend. If push along the directions of c and d, bracket will move leftward or rightward. Push the clamp control switch (6) rightwards, the hydraulic clamp will open automatically. And if push the clamp control switch (6) leftwards, the hydraulic clamp will close automatically.



Fig6

! When the lifting arm vertically move or the hydraulic clamp opens, it may cause the damage. So you should always work outside of its range of motion.

∕‴Use

Use instruction

! Ignoring the instruction and warning may cause the damage to the operator and the third party, therefore you should not start the machine before you read the manual.

All the operators must be properly trained before use the machine and the other personnel is not allowed to enter the work location. Do not place the objects on the tire changers to prevent the dangerous when operation. Without the permission of the manufacture, you should not modify or change the tire changer. You should pay attention to safety when work. You should not wear long hair, loose garment, necklace, bracelet, ring and watch. All these objects are easy to be hooked.

- Emergency stop: switch the main switch to
 0 or cut off the electrical supply.
- Rim clamping

This machine is adapt to the 1 4 "-2 6 "rim with the center hole the min. diameter of 120 m to 700 m. The type of the rim is different, the clamp method and position is different. See Fig7.

Position the tire vertically on the tire bracket. Push the control handle to lift up the tire slightly and push rightward the clamp control switch to clamp the tire and rim tightly and move them to the height of the operation.





Demount the tubeless tire

Use the circular disk to complete the bead breaking.

- 1. Secure the tire is fixed and deflated.
- 2. When work, adjust the tool rack (9). Use the corresponding tool and use the tool rack lock rod $(1 \ 0)$ to hook the bracket.

! You should always check if the tool rack lock rod correctly hook the trailer(8)

3. Use the control switch ($5\)\,$ to make the circular

bead breaker disk(12)firmly lean against the edge of the rim as shown in Fig8.



4. Turn the tire and meanwhile move the circular bead breaker disk (12) forward.

5. Continually move forward until the edge of the tire is detached. To make the operation convenient, you should spread the grease on the edge of the tire avoiding the damage to the tire and rim.

! Be careful ! Do not grip the finger between the tire and the tool to prevent from any possible danger. When operate the external rim, rotate clockwise and when internal rim, rotate counterclockwise.

6. Move the circular bead breaker disk (12) from the rim of the wheel. Release the tool rack lock rod $(1 \ 0)$. Lift the support arm to the non-operation position. Shift the circular bead breaker disk (12) to the inside.



and damage to the human body.

ternal rim, ternal rim, r disk (12) the tool rack arm to the incular bead Fig12 7.Repeat the above operation until the edge of the tire at the other side is come off as indicated in Fig 9. • Demount tire: 1) Push the test rack (0) to the

Fig11

1) Push the tool rack (9) to the non-operation position outside of the wheel. Secure the nose tool point to the tire or detach the positioning handle (14). Rotate the tool head by 180° and then lower down it to hook the bracket.

2) Control operation switch and adjust the

position of the nose tool $(1 \ 3)$ to the tire. Move it in between the tire and rim and insert into the edge of the tire to hook the tire.

3) Move down the bottom edge of the wheel to prevent the edge of tire separate from the nose tool.

4) Move outwards the nose tool till reaching the external rim of the rim.

5) Under the nose tool, insert the crowbar in between the rim and tire.

6) Press downwards the crowbar and lower the wheel until the distance from the rim of the wheel to the nose tool is 5 mm (as Fig 1 0).

7) Rotate the wheel counter clockwise till the edge of the tire completely come off from the rim (as Fig11).

8) Move the tool bracket to the inside of the tire and lean the circular bead breaking disk firmly against the edge of the tire. Counter clockwise rotate the wheel making the internal edge of the tire completely come off the wheel and the whole tire is detached. (as Fig $1\ 2$)

Mount the tire:

- 1) Secure the rim is firmly clamped by the hydraulic clamp.
- 2) Spread the grease on the rim and side wall of the tire.
- 3) Clamp the pliers at the highest position outside of the rim of the wheel(as Fig 1 3)



! If the tire is heavy duty or extra-large, you should equip the suitable lifting device for fear the injury to the human body

4)Place the tire on the bracket. Lower down the lifting arm to adjust the position of the tire bracket to the lifting arm. Hook the inside of the tire on the rim clamped with the pliers. Secure the pliers at the highest position of the rim.

5) Lift up the rim and tire and clockwise rotate by 15—20mm. The rim and tire lean against each other crossly.

6)Check if the nose tool towards one side of the tire. If not, detach the positioning rod and rotate by 180° and fix.

7) Use the control switch to align the nose tool with the external rim of the wheel at the distance of 5mm.

8)Clockwise rotate until the pliers at the lowest position.

9)Detach the pliers from the rim of the wheel and remove the tool from the tire.

10)Move the tool rack to the external of the tire and fix.

11) Clamp the pliers at the external of the rim and rotate the nose tool to the upper of the nose tool.

12) Counter clockwise rotate the tire till the pliers at the lowest position and mount the external edge of the tire.

13) Remove the pliers.

14) Position the tire bracket under the wheel and lower the hydraulic clamp bracket to place the wheel on it.

15) Open the hydraulic clamp and remove the tire carefully. In this process, you should prevent the

tire from rolling down. Pay attention to the safety.









Be carefully! When operate, do not place your finger in between the tire and tool to prevent the danger.

• <u>Demount the tire with tube</u>

! When deflate the tire, unscrew the bushing fixing the valve to make the valve fall into the inside of the edge of the wheel to prevent the block to the bead breaking.

Continue the above steps. To the tire with tube, you should stop the movement of the disk when the bead is breaking to prevent the damage to the core.

1) Push the tool rack (9) to the non-operation position outside of the wheel. And at this position, hook the tire.

2) Rotate the shaft and move the nose tool inserting in between the rim and tire till the tire is hooked.

3) Move the rim of the wheel down by 4—5cm to prevent the rim of the wheel being detached from the tool.

4) Move outwards the nose tool till to the rim of the wheel.

5) Under the right of the tool, insert the crowbar in between the rim and tire.

6) Press down the crowbar and lower the wheel

until the distance from the rim of the wheel to the nose tool is 5mm.

7) Counterclockwise rotate the wheel until the edge of one side of the tire come off completely.

8) Move the tool rack to the non-operation position and lower down the tire making it contact with the tire support platform ④. Move the tire support platform outwards slightly for leaving the space to take out the tube.

9) Take out the tube and once more lift tire.

10) Move the tool rack to the inside of the tire. Rotate the nose tool by 180° and lower the support arm to the work position and inset in between the rim and tire. And then rotate the wheel.

11) Move the rim by 4—5cm to prevent the rim coming off from the tool.

12) Move the node tool making it at the position of3cm inside the tire.

13) On the right side of the nose tool, plug the rodin between the rim and the edge of the wheel. (Fig17)

14) Press down the crowbar and lower the wheel until the distance from the rim of the wheel to the nose tool is 5mm. Counterclockwise rotate the wheel until the edge of one side of the tire come off completely.

! When the tire detached from the rim, the wheel will fall down. So you need secure

7

there are no unauthorized personnel at the work location.

Mount the tire:

1) If the edge of the wheel has been detached from the hydraulic clamp, lock as per the instruction in the section of clamp the rim.

2) Spread the grease on the rim of the tire and rim.

3) Clamp the pliers at the top position of the external edge of the rim.(Fig18)

Secure the pliers is firmly fixed to the rim of the wheel.



4) Lower the lifting arm and place the tire on the tire support platform.

5) Hold the pliers at the highest position to hook the inside rim of the tire.

 6) Lift the rim with the tire and counterclockwise rotate by 15—20cm and the tire will tilt automatically.

7) Move the tool support arm to the non-operation position and move it to the inside of the tire and hook again

8) Secure the nose tool at one side of the wheel.

9) If not, rotate by 180°.

10) Move forward the nose tool to align it with the external rim of the rim and keep the distance of 5mm.

11) From the position of the wheel, visual check if the position is correct. If it is wrong, you should adjust. And then counterclockwise rotate the hydraulic clamp till the pliers at the lowest position and the inside of the tire is mounted Remove the pliers (Fig 19) Take off the tool from the tire.

12) Move the tool supporting arm to the non-operation position and move to the outside of the tire.

13) Rotate the parts by 180°.

14) Rotate the main shaft to make the valve

hole under the rim. Place the tire support platform(4) under the wheel and lower the lifting arm tomake the tire contact the tire support platform.Move the tire support platform outwards slightly toleave the space to insert the tube.

- Note: Maybe the valve hole not aligned to the center of the rim. In this case, mount the tube as per Fig20. Insert the core into the hole and use the locknut to lock.
- 15) Mount the tube into the groove of the rim. Note: For convenient operation, we suggest to rotate the main shaft at the same time.



16) Inflate the small amount of air into the tube till without too much folders to guarantee the other side of the tire will not be damaged for the press. 17)Install the extension pipe on the valve and take out the lock ring. Note: The operation purpose of this operation is to loose valve to prevent the come off of one side.

18) Lift the tire and clamp the pliers at the other side at the 20cm right to the valve.

19) Clockwise rotate the main shaft till the pliers at the position of 9 O'clock.

20) Move the tool rack to the operation position.

21) Move the nose tool to the position 5mm from the external rim of the wheel.

22) Clockwise rotate the main shaft till the tire completely mounted on the rim of the wheel.

23) Take off the pliers and counter clockwise rotate to take off the tool and move outwards.

24) Move the tool rack to the non-operation position.

25) Place the tire support platform under the tire and lower the lifting arm until the tire contact the tire support platform.

26) Lean the wheel against the tire support platform. Check is the valve is align to the intake hole right. If not, slightly rotate the main shaft to adjust the position. Use the lock ring nut to fix and take off the extension pipe. 27) Carefully release the hydraulic clamp and hold on the wheel for fear of falling down.

28) Move the tire support platform to release the tire from the clamp and take off the tire again.

Demount the tire with bead press ring

1) As per the above description, clamp the tire and secure it has been deflated.

2) Lower the took rack to the work position and use the tool rack lock rod to lock.

3) Press circular disk into the flange (as Fig 21)



! The unauthorized personnel is not allowed to maintenance and repair.

If there is tube, carefully! Once the edge of the rim is torn, stop immediately to avoid the damage to the core and the tube.

4) Rotate the main shaft and move the disk forward gradually until the bead press ring completely detached from the rim. Please note that the grease must be applied.

5) As shown in Fig 22, use the crowbar to move the open of the bead press ring on the edge of the rim and then use the disk to press from inside and rotate the main shaft counterclockwise.





6) Insert the core into the rim for feat that it will be tore when demounts the tube. Move the tool rack(9) to the non-operation position and move the tool rack to the outside of the wheel.

7) Lower the support arm to the non-operation arm.

8) Close the disk towards the tire until half of the tire comes off.

9) Move the tool rack to the non-operation position.

10) Lower the lifting arm until the wheel placed on the wheel support platform making the tire completely come off from the rim. Care about the core. Mount tire

 Fix the rim and position the core on the rim at the bottom and spread the grease.

2) Move the tire support platform outwards and place the tire on it and position the core on the rim at the bottom.

3) Move the tire support platform until the rim completely into the tire.

4) Move the tool rack to the outside and disk towards the wheel and lean against the rim.Rotate the main shaft and meanwhile forward the disk making the whole rim into the tire.

Place the open ring on the edge of the wheel and install the ring with the help of the bead breaking disk (Fig 24)



5) Move the tool rack to the non-operation position and release the clamp. Move the tire support platform and remove the wheel safely.

Maintenance and Repair

Periodically repair and maintain as per the instruction manual is the basis to use the tire changer correctly. It can prolong the work life of the machine and guarantee the reliability of the running of the machine. To secure the safety, before repair and maintenance, you should pull out the power plug and use the original parts. It should use the professional personal to change the parts with problems. Use diesel oil to clean the following parts and fill the lubrication oil. (1) bracket quide rail (2) tool rack horizontal shaft (3) lift oil tank. The connect shaft of the dual tool should be added with grease in summer and gear oil in winter periodically. Use oil lever to check the hydraulic oil in the hydraulic oil tank and its quality (Fig 25) . If the oil is not enough, please add 30# hydraulic oil. Periodically(one time per quarter) add the 320# gear oil to the gearbox. The oil level should be higher than half of the oil window. (5) Check the tension of the motor belt. If need adjustment, remove the plastic cover and use the adjustable screw to adjust the belt.

Storage: You should store properly if long time no use (3~4 months); ①Descend the lifting arm ②

Make the lifting arm without loading ③Take out the electrical supply ④ Spread the grease on the bracket guide rail ⑤ Empty the oil tank ⑥Spread the grease on the tool rack horizontal shaft.

Transportation, package and storage

The machine must be transported in the original package and place as per the location indicated on the packing box. The forklift can meet the capacity to carry the machine. The position of the fork is as indicated in the Fig 26. Open up the packing box and then you should secure the tire changer is intact in the process of transportation. Take out the standard accessory and the package material should be treated properly. The storage condition should be: max. RH is 95% and the temperature range is -5°C to +40°C.





Phydraulic scheme



1.oil tank2.filter3.oil pump4.motor5.solenoid valve6.overflow valve7.one way valve8.trailer oil tank9.oil guide10.hydraulic lock11 vertical movement oil tank12 main shaft oil tank

Technical parameter

- 1. Motor: 1.5KW/380V/220V; 1400r/m in ; 3-phase
- 2. oil pump: output;3.1ML/r; rated work pressure15MPa
- 3. control voltage: DC24V $_{\circ}$
- 4. The motor oil pump is designed to be separated from the valve plate

PLC588 Electrical scheme



*****Voltage conversion scheme



D	TM588			DUNLOP GA	RAGE EQUIPMENT			
(TC	2-12-00000	00 LC588STRUCK	TIRE	CHANGER	FINISHED	PRODUCT	DRAWING	REVISION A-01
				<u>(</u>	6 7 4 5			
ITEM	PART. No	DESCRIPTION.	QU	JANTITY				
1	TC-10-9200000	EXPORT STEEL BEND PLYWO PACKAGE (COMMON)	DOD	1		3	2	1
2	TC-12-1000000	TIRE CHANGER ASSEMBLE GENERAL		1				
3	TC-10-6000000	ACCESSORY (STANDARD)		1				
4	TC-40-0000001	RUBBER GASKET		3				
5	GB5782-M8×65	HEXANGULAR BOLT		3				
6	GB96. 2-8	LARGE WASHER C GRADE		6				
7	GB41-M8	HEXANGULAR NUT		3				

TC-12-0000000





	DTM588S			REV 15A-01	
ITEM	PART. No	DESCRIPTION.	QT	REMARKS	Number
1	TC-12-1100000	BODY ASSEMBLE WELDING	1		
2	TC-12-1200000	RACK AND TIRE PRESS TOOL	1		
3	TC-10-1000005	SHORT PIN SHAFT	1		6000997
4	GB894.1-A24	ELASTIC RETAINING RING	8		
5	TC-10-1020000	TRAIL OIL TANK COVER	1		6001006
6	TC-10-1500000	TRAIL ASSEMBLY	1		
7	GB5783-M10×25	HEXANGULAR BOLT	5		
8	GB93-10	SPRING WASHER	10		
9	GB95-10	FLAT WASHER	13		
10	GB5783-M8×16	BOLT	5		
11	GB93-8	SPRING WASHER	3		
12	GB95-8	FLAT WASHER	5		
13	TC-10-1000002	ARM LINK SHAFF	2		6000951
14	$\texttt{GB5783-M12}{\times}25$	HEXANGULAR BOLT	1		
15	TC-10-1300002	CIRCULAR GUIDERAIL WAHER	1		6001001
16	TC-10-1000016	ARM SUPPORT SHAFT	1		6000950
17	TC-10-1000003	WEAR PAD 1	2		
	TC-10-1000004	WEAR PAD 2	4		
18	TC-10-1700000	OIL TANK ASSEMBLY	1		6001098
19	GB889.2−M24×2	LOCK NUT	1		
20	TC-10-1400000	RIM CLAMPING DEVICE	1		
21	TC-10-1000007	SUPPORT ANGLE IRON	2		6001044
22	GB70.1- M5×10	SCREW	3		
23	TC-10-1000033	COVER	1		6001149
24	TC-10-1000030	BRACKET	1		
25	$\texttt{GB5783}\text{-}\texttt{M10}\times40$	BOLT	4		
26	TC-10-1000014	SMALL PULLEY	1		6001056
27	TC-10-1000010	COVER PLATE	1		6001053
28	TC-10-1000017	V-BELT-A710	2		
29	GB819.1−M10×30−H	SCREW	2		
30	TC-10-1000015	CONNECTING PIN	2		6001058
31	TC-10-1000012	PULLEY COVER	1		6001150
32	$GB1096-8\times7\times40$	KEY	1		
33	TC-10-1000027	MOTOR 380V	1		5500006
34	TC-20-1230014	FLAT WASHER	6		
35	GB5783-M10×45	BOLT	6		
36	TC-10-1010000	OIL TANK COVER	1		

	DTM588S			REV 15A-01	
ITEM	PART. No	DESCRIPTION.	QT	REMARKS	Number
37	TC-10-1600000	OIL TANK ASSEMBLY	1		
38	TC-10-2360010	OPERATION ELECTRICAL LINE	1		
39	TC-10-1000024	O-RING	1		
40	TC-10-1900000	TOOL BOX	1		
41	TC-10-1200000	VERTICAL ARM ASSEMBLY	1		
42	TC-10-1030000	HYDRAULIC STATION ASSEMBLY	1		
43	TC-10-1000026	WIRING CHANNEL 60*30	1		
44	TC-10-1B00000	CONSOLE	1		6001084
45	TC-10-2131311	ELECTRICAL BOX	1		
46	TC-10-2231380	ELECTRICAL CONTROL CABINET	1		
47	TC-10-1000006	LONG PIN SHAFT	1		6001066
48	TC-10-1800000	TRAIL OIL TANK ASSEMBLY	1		6001109
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(TC-10-120000	10			
	TC-10-120000	2 VERTICAL ARM ASSEMBLY		VER 15	A-01
ITEM	PART.No	DESCRIPTION.	QT	REMARKS	Number
1	TC-10-1210000	WELDING VERTICAL MOVABLE ARM	1		
2	TC-10-1200001	BEARING BUSHING	2		6000948
3	TC-10-8400006	OIL CUP M6	1	Upto2013.6	
4	TC-40-1200023	OIL FILLING NOZZLE	1		5006100



TC-12-1200000 REV 15A-01 ITEM PART. No DESCRIPTION. QT REMARKS Number TC-12-1210000 BRACKET ASSEMBLY WELDING 1 1 2 GB70. 1-M10×35 4 SCREW 3 12 GB70. $1-M10 \times 70$ SCREW 4 TC-10-1300001 GUIDERAIL SUPPORT 6000956 4 5 GB95-10 FLAT WASHER 16 6 GB93-10 SPRING WASHER 16 7 GB41-M10 NUT 21 TC-10-1300009 EXTENSION SPRING 8 1 9 GB5783-M8×30 BOLT 1 10 NUT 2 GB41-M8 TC-10-1300010 6000979 11 ECCENTRIC SHAFT 1 12 GB6171-M18×1.5 NUT 1 13 TC-10-1340000 DOUBLE TOOL ASSEMBLY 1 14 TC-11-1240000 HOOK 1 6008909 15 TC-10-1300015 HANDLE 1 BOLT 16 GB5783-M8×45 1 1 17 TC-12-1200001 PRESS SPRING 18 TC-12-1220000 WITHIN THE CYLINDER WELDING 1 TC-11-1200004 19 INDENTER 1 1 20 TC-10-1300007 POSITION STUD 6000974 21 TC-10-1300006 PIN-FIX 1 6000973 22 TC-10-1300008 PRESS SPRING 1 5000118 23TC-10-1300005 CONNECT PLATE 1 6001180 2 $\mathbf{24}$ GB879. 2-6×20 PIN 25GB879. $2-6 \times 30$ PIN 1 FIX LOCK PRESSER 26 TC-10-1300004 1 6000970 27 $GB65-M6 \times 10$ SCREW 1 SCREW 28 GB70. 1-M10×150 1 29 TC-12-1240000 TOOL SUPPORT 1 6000957 30 TC-11-1200001 TRAILER CIRCULAR GUIDERAIL 1 6001002 TC-11-1200003 2 31 SELF-LUBRICATING BEARINGS 32 TC-11-1200002 CIRCULAR GUIDERAIL WAHER 2 6001001 33 GB95-12 FLAT WASHER 2 2 34 GB5783-M12×25 BOLT GB5783-M10×35 BOLT 4 35



ITEM	PART. No	DESCRIPTION.	QT	REMARKS	Number
1	TC-10-1340100	DOUBLE TOOL ASSEMBLY	1		
2	TC-10-1340004	NUT	2		6000988
3	TC-10-1340003	FIX SCREW	2		6000987
4	TC-10-1340002	PIN	1		6000986
5	TC-10-1340001	FINGER TOOL	1		6000985
6	TC-10-1340005	EXTENSION SPRING	1		
7	GB/T 889.1 - M27	LOCK NUT	1		
8	TC-10-1340008	SPRING CONNECT PLATE	1		
9	TC-10-1340010	BEARING	2		6000976
10	TC-40-1200023	OIL FILLING NOZZLE	1		5006100
11	TC-10-1341000	TURNTABLE	1		6000993
12	TC-10-1340006	SPINDLE	1		6000989
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	TC-10-1400000		REV 15A-01		
ITEM	PART. No	DESCRIPTION.	QT	REMARKS	Number
1	TC-10-1420000	MAIN SHAFT AND CLAMP	1		
2	GB1096-20×12×50	KEY	1		
3	TC-10-1400004	WASHER	1		6001032
4	TC-10-1400007	WORM SHAFT	1		6001040
5	GB297-94 30205	ROLLING BEARING	2		
6	GB3452.1-48.7x1.8	O-RING	1		
7	TC-10-1400018	ADJUST WASHER	1		5010138
8	TC-10-1400008	PAPER WASHER	2		6001148
9	GB95-6	WASHER	12		
10	GB93-6	SPRING WASHER	12		
11	GB70.1−M6×25	SCREW	12		
12	$\text{GB77-M10} \times 30$	SCREW	1	Upto2014.2	
13	GB41-M10	NUT	1	Upto2014.2	
14	TC-10-1400017	WORM CASE REAR COVER	1		
15	TC-10-1400016	WASHER	1		6001032
16	GB3452. 1−100×5. 3−G	O-RING	1		
17	GB3452.1 300x2.65	O-RING	1		
18	TC-10-1400003	WORM CASE COVER	1		
19	GB3452. 113. 2×2. 65−G	O-RING	2		
20	TC-10-1400014	OIL DISPLAY M27X1.5	1		5500002
21	TC-10-1400013	BOLT	2		6001155
22	GB70.1-M6×16	SCREW	12		
23	TC-10-1410000	WORM	1		
24	TC-10-1400005	WASHER	1		6001032
25	TC-10-1400001	MAIN SHAFT ADJUSTING	1		6001033
26	TC-10-1400002	WORM CASE	1		
27	$GB1096-8\times7\times36$	KEY	1		
28	TC-10-1400011	PULLEY RETAINING RING	1		6001043
29	GB5783-M8×20	BOLT	1		
30	TC-10-1400010	LARGE PULLEY	1		6001042
31	TC-10-1400009	WORM CASE FRONT COVER	1		
32	TC-10-1400015	SEALING WASHER W42X25X7	1		5000016



	TC-10-1420000)		REV 15A-01	
ITEM	PART. No	DESCRIPTION.	QT	REMARKS	Number
1	TC-10-1421000	CHUCK ASSEMBLY WELDING	1		
2	TC-10-1420011	MAIN SHAFT BUSHING	1		6001031
3	TC-10-1420012	O-RING	1		
4	TC-10-1420010	SHIM	24		
5	GB95-6	WASHER	8		
6	GB70.1−M6×10	SCREW	8		
7	TC-10-1420013	PROTECTIVE PANEL	4		6001048
8	TC-10-1420009	ROLLING STUD	4		6001028
9	GB889.1-M14	LOCK NUT	12		
10	TC-10-1421200	CLAMP SUPPORT	4		6001018
11	TC-10-1420014	THREAD PIN	12		
12	TC-10-1420007	GRIPPING CLAW B	4		6001026
13	TC-10-1420015	GRIPPING CLAW B	4		6001026
14	GB70.1−M8×16	SCREW	12		
15	TC-10-1420006	CLAMP	4		6001027
16	TC-10-1420005	PULLING PLATE	4		6001024
17	TC-10-1420004	PIN SHAFT	8		6001023
18	$GB79-M6 \times 10$	SCREW	8		
19	TC-10-1420002	CENTER LOCK	1		
20	TC-10-1420003	PAD	1		6001022
21	TC-10-1420001	PROTECTIVE COVER	1		





				REV 15A-	-01
		MAIN SHAFT OIL TANK ASSEMBLY			
)
ТЕМ	PART.No	DESCRIPTION.	QT	REMARKS	Number
<u></u>	PART.No TC-10-1611000	DESCRIPTION. MAIN SHAFT OIL TANK ASSEMBLY GENERAL	QT 1	REMARKS	Number
<u>ГЕМ</u> 1 2	PART.No TC-10-1611000 JB982-14	DESCRIPTION. MAIN SHAFT OIL TANK ASSEMBLY GENERAL SEALING COMPOLIND	QT 1 2	REMARKS	Number
TEM 1 2 3	PART.No TC-10-1611000 JB982-14 TC-10-1612000	DESCRIPTION. MAIN SHAFT OIL TANK ASSEMBLY GENERAL SEALING COMPOUND OIL PIPE JOINT ASSEMBLY WELDING	QT 1 2 1	REMARKS	Number





ITEM	PART.No	DESCRIPTION.	QT	REMARKS	Number
1	TC-10-1621000	OIL GUIDE ASSEMBLY	1		
2	JB982-14	SEALING COMPOUND	4		
3	TC-10-1620004	PRESSURE GAUGE JOINT	1		
4	TC-10-1620003	AIR REGULATOR WASHER	1		5006557
5	TC-10-1620007	PRESSURE GAUGE	1		5500015
6	TC-10-1620002	NUT-LOCK	1		6001125
7	TC-10-1620006	CLAMP BUSHING	1		5500016
8	TC-10-1620001	OIL PIPE DOUBLESCREW ROD	1		6001124
9	TC-10-1620005	OIL ROUTE DOUBLE SCREW ROD	2		6001136
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O-RING

PISTON

ASSEMBLY SEALING

LOCK NUT

10

11 12

13

GB3452.1-15×2.65

TC-10-1720001

TC-10-1720003

GB889.2-M16×1.5

2

1

1

1

18.

6001104

5500036





ITEM	PART.No	DESCRIPTION.	QT	REMARKS	Number
1	TC-10-1811000	OIL TANK BODY	1		6001110
2	TC-10-1812000	PISTON ROD ASSEMBLY WELDING	1		6001114
3	GB3452.1-43.7×3.55-G	O-RING	1		
4	GB3452.1-48.7×3.55-G	O-RING	1		
5	TC-10-1720002	THE END COVER	1		
6	TC-10-1720006	SUPPORT RING 25X30X5.6	1		5500031
7	TC-10-1720007	Φ25 LADDER LETTER	1		
8	TC-10-1720005	U SEALING RING 25x33x8.2	1		5500033
9	TC-10-1720004	DUST-PROOF RING LBH-25	1		5500034
10	TC-10-1720003	ASSEMBLY SEALING	1		5500036
11	TC-10-1720001	PISTON	1		6001104
12	GB3452.1-15x2.65	RING	2		
13	GB889.2-M16×1.5	LOCK NUT	1		
)









	TC-10-1031200			REV 15A-01		
ITEM	PART. No	DESCRIPTION.	QT	REMARKS	Number	
1	TC-20-1031204	THE FUEL TANK	1		5509354	
2	TC-20-1031209	THE CUP	1			
3	GB5781-M6×12	BOLT	4			
4	GB95-6	WASHER	4			
5	GB70.1−M8×80	SCREW	2			
6	TC-20-1031212	RETURN PIPE	2			
7	TC-20-1031205	THE PRESSURE REGULATING	1			
8	TC-20-1031206	CHECK VALVE	1			
9	GB3452. 1-100×5. 3-G	O-RING	1			
10	GB70.1−M6×35	SCREW	4			
11	TC-20-1031202	COUPLING	1			
12	TC-20-1031203	CONNECTION PLATE	1			
13	TC-40-1032009	TECHNOLOGY OF PLUG	1			
14	TC-20-1031201	PUMP	1			
15	TC-20-1031211	FILTER POLE	1			
16	TC-20-1031210	FILTER	1			
17	TC-20-1031213	THROAT BUCKLE	1			
18	TC-20-1031207	DRAIN PLUG	1			
					1	
					1	



	TC-10-1B00000			REV 15A-01	
ITEM	PART. No	DESCRIPTION.	QT	REMARKS	Number
1	TC-10-1B10000	CONSOLE WELDING	1		6001500
2	TC-20-1700003	SWITCH TEN223	1		5000083
3	TC-20-1700002	COVER	1		
4	GB95-4	FLAT WASHER	20		
5	GB93-4	SPRING WASHER	12		
6	GB818-M4×10-H	SCREW	4		
7	TC-10-1B00001	CROSS SWITCH COVER	1		6001158
8	TC-20-1700006	SWITCH TMRN304	1		5500003
9	TC-20-1700004	SWITCH PROTECTION BOX	1		5509302
10	$GB77-M6 \times 30$	SCREW	1		
11	GB41-M6	NUT	2		
12	GB818-M4×12-H	SCREW	4		
13	TC-20-1730000	DIRECTION CHANGING SHAFT	1		6001160
14	TC-20-1720000	BRACKET	1		6001501
15	TC-20-1700001	TORSION SPRING	1		5500100
16	GB6170-M4	NUT	9		
17	$GB77-M4 \times 8$	SCREW	1		
18	TC-20-1740000	BUSHING	1		6001502
19	TC-20-1700005	MICROSWITCH YBLXW	2		5500005
20	GB818-M4×30-H	SCREW	4		
21	TC-20-1700009	PLATE	1		
22	GB95-5	FLAT WASHER	4		
23	GB818-M5×10-H	SCREW	4		
24	TC-E-7700125	CABLE LOCK ASSEMBLY	1		



	TC-10-2231380)		REV 15A-01	
ITEM	PART. No	DESCRIPTION.	QT	REMARKS	Number
1	TC-E-7600001	ELECTRICAL BLOCK BOARD	1		6001833
2	TC-E-7500003	SWITCH HOLDER	1		6001835
3	ТС-Е-2460020	SWITCH	1		
4	TC-E-4110804	DISJUNCTOR	1		
5	TC-E-4110806	OVERLOAD	1		
6	$\texttt{GB818}\text{-}\texttt{M4}\times\texttt{10}\text{-}\texttt{H}$	SCREW	13		
7	GB93-4	SPRING WASHER	7		
8	GB95-4	FLAT WASHER	11		
9	TC-E-5130000	FIXTURE CLAMP	4		
10	TC-E-5120025	POWER-LINE TERMINAL	3		
11	ТС-Е-7858803	NUMBER PLATES	1		
12	TC-E-5110025	POWER-LINE TERMINAL	22		
13	ТС-Е-7363520	LONG FIXED PLATE 220mm	1		5500046
14	ТС-Е-7363535	LONG FIXED PLATE 235mm	1		
15	ТС-Е-4201224	AC CONTACTOR S-P12	2		
16	ТС-Е-7103510	RECTIFIER BRIDGE BLOCK	1		
17	ТС-Е-3838001	TRANSFORMER ASSEMBLY JBK-100	1		
18	ТС-Е-7152001	FUSE-6A	1		
19	ТС-Е-7152004	FUSE-6A	2		
20	GB95-5	FLAT WASHER	3		
21	GB818-M4×14-H	SCREW	1		
					1
					1

