

CHAPTER VI INSTALLATION & OPERATION OF THE ASSISTANT ARM

PL330 (left assistant) and AL335(right assistant) are the important assisting device of the tire changer. They can independently or combined together on the tire changer dealing with the tires with the diameter of more than 20" to help demount and mount the stiff and flat tire to complete the work that only the operator can hardly complete of impossible to complete.

6.1 INSTALL THE LEFT ASSISTANT



Before installation, the power and air source must be cut off!

6.1.1 The left and right side of the base plate of body of the tire changer which can handle the tire with the diameter of more than 20" all have the installation hole for the left assistant prepared. Before installation, you can remove the side panel and take off the installation rubber plug. If there being the tool box, you should detach the tool box.

6.1.2 Detach the package of the PL330assistant. Check the accessory according to the pack list. After confirmation, takeout the base assembly(fig34) and remove the screw and washer on it.

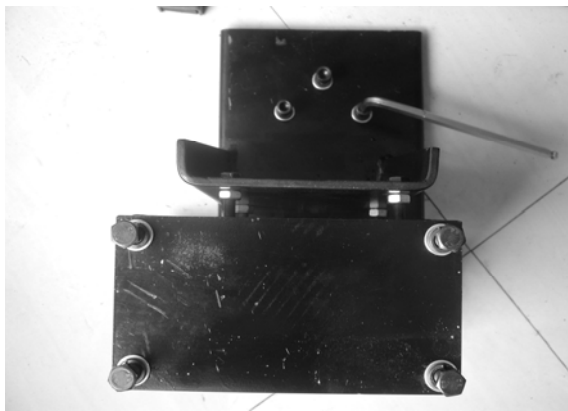


Fig34

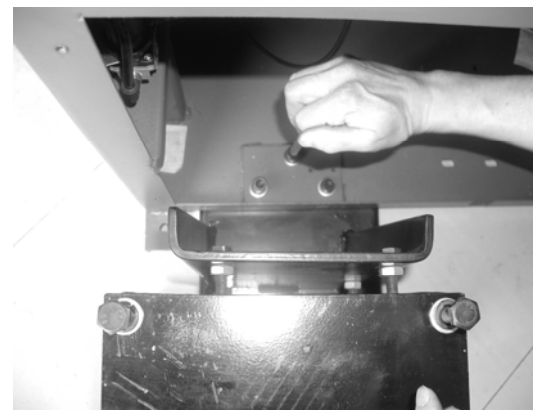


Fig35

6.1.3 Push the platform of the base plate of the base assembly into the body through base plate on the left-back side of the body. Align the thread hole to the reinforce hole and use the bolt and washer to fix. (fig35) .

6.1.4 Install the body bracket (fig36-1) on the seat assembly. Align. Use the screw removed before to fix and not tighten

6.1.5 Use the fix supporting bracket (fig37-1) to connect the body bracket and the body and insert the screw to fix.

6.1.6 Connect the air source hose(fig38-2) and use Y Tee to connect the outlet hose and the other end connect with the inlet of the assistant pressure adjusting valve.

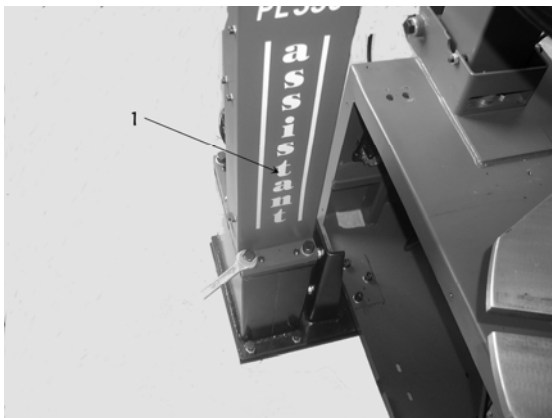


Fig36

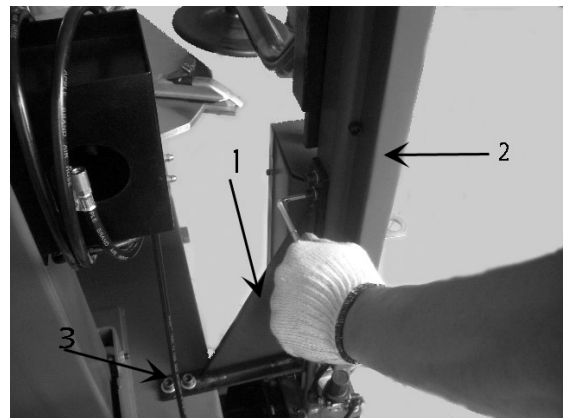


Fig37

6.1.7 Connect the air source, insert the press cone roller connect rod (fig39-1) into the rotation shaft hole(fig 39-2)

of the rotation arm. Handle manual direction change valve to make the tip of the press cone roller coincide to the center of the turntable (fig40) . If not coincide, use the screw to adjust the position of the base to realize the coincide. After adjustment, fix the bolt.

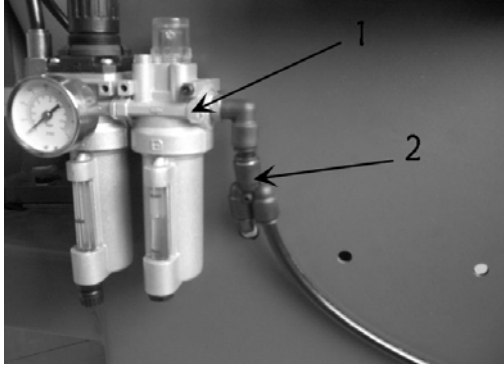


Fig38



Fig39

6.1.8 According to the fig41, fix the fix bracket on the body and fix the tool box on the fix bracket and then use the lock nut to tight.

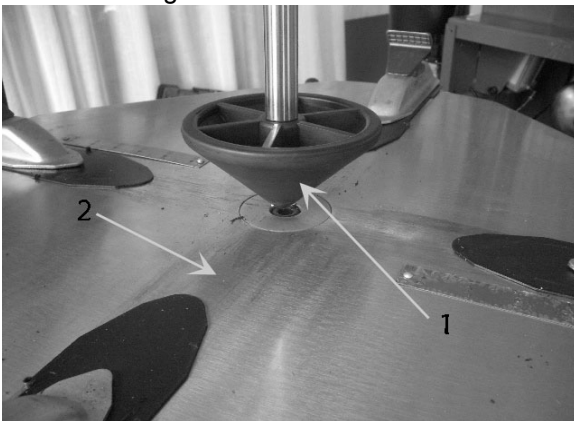


Fig40



Fig41

6.1.9 As fig42, fix the cone support on the body bracket and install the press cone on the bracket.

6.1.10 Loose the nut below the base and turn the screw clockwise until it against the ground and tight (fig43) and install

The side panel and tool box removed in the 6.1.1. At this moment, the installation of the left assistant completed.

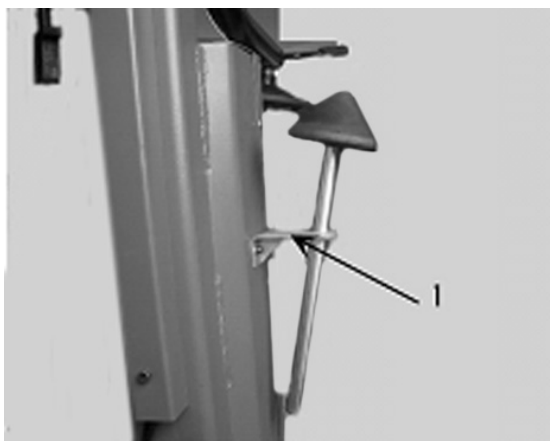


Fig42

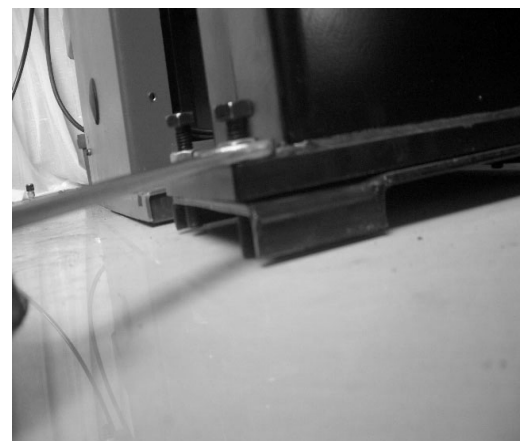


Fig43

6.2INSTALL THE RIGHT ASSISTANT

6.2.1After detach the tire from the rim according to the instruction of the chapter IV, we can execute the following operations.

6.2.2 First, position the claw according to the dimension of the tire and then clamp the rim by the claw and position

the tire

press cone roller at the center of the rim(fig44) . Push down the manual valve to press down the rim until the external rim of the rim is lower than the surface of the claw. At this moment, you can immediately lock the rim. Lift up the support arm

and place it at the working position and take off the press cone roller and place it on the support. (fig42-1)。



Fig44

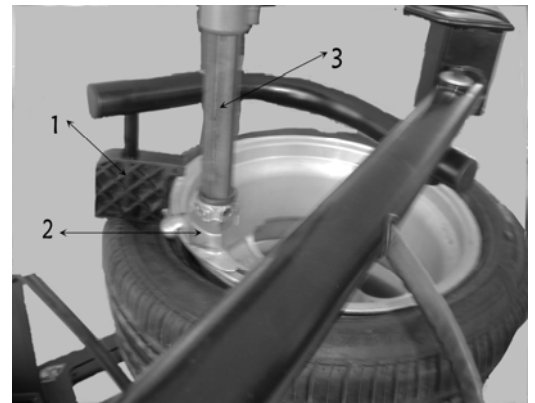


Fig45

6.2.3 Use the press(fig45-1) to press down the tire section by section rim detached from the mouth and use the brush to spread the lubricant on edge of the lip. Position the demount tool(fig45-2) in the demount position. Place the press beside of the demount tool to press down the lip and insert the crowbar below the demount tool in between the rim and lip (fig46), Lift up the press and move it to the position opposite to the demount tool and press the lip into the tire detach groove and then rotate the crowbar to lift the lip onto the demount tool (fig47) . Rotate the turntable to detach the upper lip.

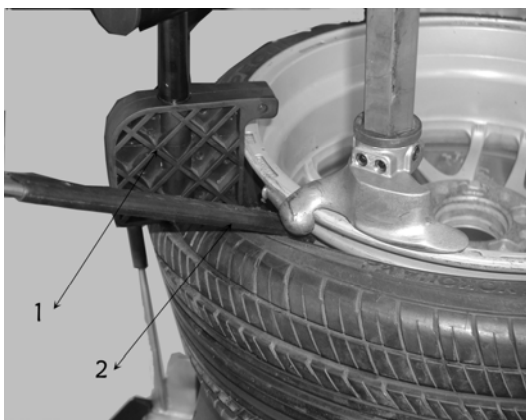


Fig46



Fig47

6.2.4 DETACH THE LOWER LIP: Use the disk to lift up the bottom of the tire from the bottom of the mouth (fig48) and detach the lower lip (fig49) according to the step (4.1.5) .



Fig48



Fig49

6.2.5 MOUNT TIRE

First, according to the step (4.2.1) ~ (4.2.3), install the lower lip and use the press to press the lower lip as shown in the fig50. Rotate the turntable by about 90°. And then clamp the press in the demount tool (fig51) and continually rotate the turntable until the completion of the operation.



Fig50



Fig51

6.3 INSTALLATION OF THE RIGHT ASSISTANT



You must cut off the power source and air source!

6.3.1 Depackage the package carton and check according to the accessory list and the figure 52. Clean up for assembly. The assembly appearance is as shown in the fig53. And prepare the required tool.

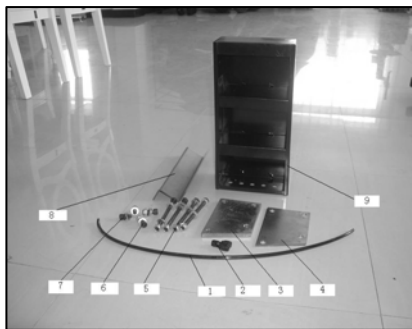


Fig52



Fig53

ACCESSORY LIST: ①ø8PU hose ②ø8 Y-Tee ③plate ④cushion ⑤screw M10X130 (nut, flat washer) 4sets ⑥screw M10X25 (nut, flat washer) 2sets ⑦screw M10X20(flat washer) 2sets ⑧fix plate ⑨tool box



Fig54

6.3.2 First, place the cushion (fig52-4) on the indicated position on the U-steel (fig54) to make the 4holes of the

cushion aligned.

6.3.3 Upright the body of the assistant on the cushion and use the screw (fig52-5) to fix. Insert the corresponding screw (fig56), assemble the flat washer and use the nut to tight (fig57).

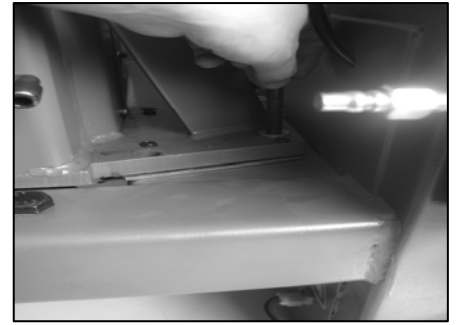


Fig55

6.3.4 Remove the hose from the end of the air source fitting and use a small section of the $\varnothing 8$ PU hose to connect the Y Tee with the outlet and another connected with the air source hose (fig58)



Fig56

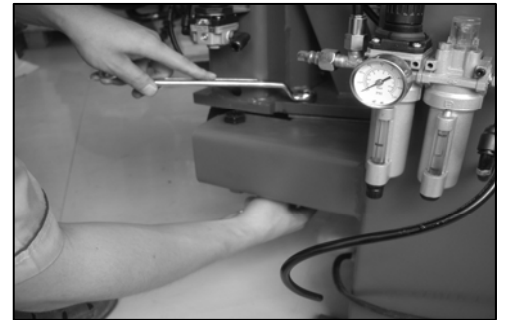


Fig57

6.3.5 Insert one end of the $\varnothing 8$ PU hose (fig 52-1) into the idle adapter of the Y Tee and another end connected with the inlet of the pressure adjust valve of the assistant.

6.3.6 Use part (fig 52-7) to fix the part (fig52-8) on the corresponding position on the assistant column and tighten. Use part (fig52-6) to fix the part (fig52-9) together with the part (fig52-8) and tighten (fig59).



Fig58



Fig59

6.3.7 Adjust the vertical of the assistant column: According to the situation, you can loose the screw (fig52-5) to adjust the tight screw on the base plate of the assistant to make the position of the column reach vertical (fig60). If the column tilt outwards, you should clockwise twist the 2 adjusting screws outside to make the column in the vertical position and if the column tilt inwards, you should clockwise twist the 2 adjusting screws inside to make the column in the vertical

position.

After adjustment, you should tighten another 4 fix screws.



Fig60



Fig61

6.3.8 Connect the air source and push upwards the control valve handle and the assistant movable base will slide upwards.

If the handle downwards, the base will downwards. If not exist the phenomenon of air leakage, crawl and climb and normal

slide of each p[art], the installation of the right assistant completed.

6.4 RIGHT ASSISTANT OPERATION

6.4.1 Prepare according to the normal demount method and clamp the tire on the turntable.

6.4.2 Gradually use the cylindrical press roller to press down the tire and meanwhile rotate the turntable and use the brush

6.4.3 to spread the thick soap liquid or the lubricant on between the tire and the rim. (fig61).

Position the column in the working position and fix the demount tool in the required position to demount tire. (fig62).



Fig62



Fig63

6.4.4 Insert the crowbar into between the tire and rim (fig 62) and use the handle valve to lift up the press roller and return Back. Turn over the crowbar to position the lip above the demount head (fig63) . Rotate the turntable clockwise until the entire upper lip detached.

6.4.5 Make the demount head as the support point and insert the crowbar into the lower lip. Use the circular disk to lift up the bottom of the tire to make it move up until it to the upper edge of the rim (fig 64) and then lower down the disk until ti moves to the un-working position.



Fig64



Fig65

6.4.6 Turn over the crowbar to let the down lip rotate upwards until on the demount head (fig65). Rotate the turntable clockwise until the tire is completely taken out of the rim.

6.4.7 MOUNT TIRE:

Before mounting the tire, you must clean up then oil and dust and spread the lubricant on the upper and lower lip. First assemble the lower lip (fig 66) .

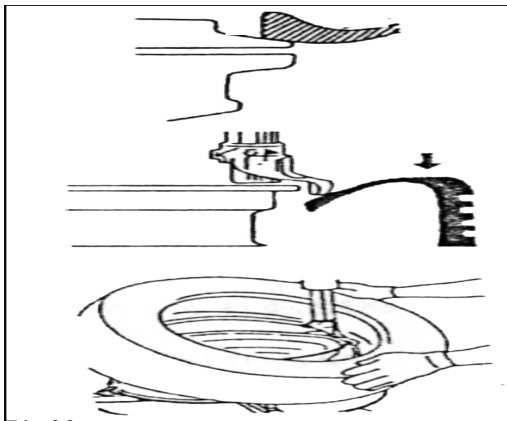


Fig66



Fig67

6.4.8 Place the upper lip on the tail of the demount head and then press cylindrical press roller on the tire to make the upper lip lower than the head of the demount head. Clockwise rotate the turntable. After rotate by 90°, you need add the tire press assist device (fig68) . If apply the dual assistant, you can use the left assistant to press the lip to the tire detach groove (fig68) & keep on rotating the turntable until the tire is completely mounted.



Fig68