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Introduction

Converting your Rug Loom from a mechanical dobby to a Compu-Dobby is a fast and easy process. You will remove the elements of the mechanical dobby, including some of the air lines and replace them with the parts that came with your new Compu-Dobby. For best results, read the directions through before attempting to attach your new Compu-Dobby

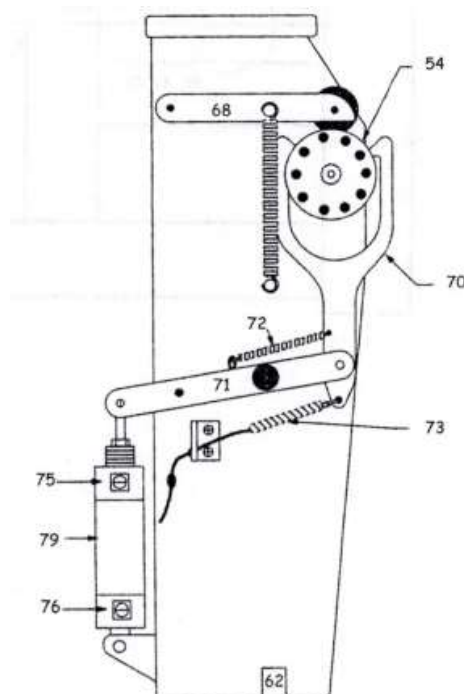
When converting your Rug Loom from a mechanical dobby to a Compu-Dobby, please make sure you observe every safety precaution.

- 1) Turn main air off.

Remove Mechanical Dobby parts

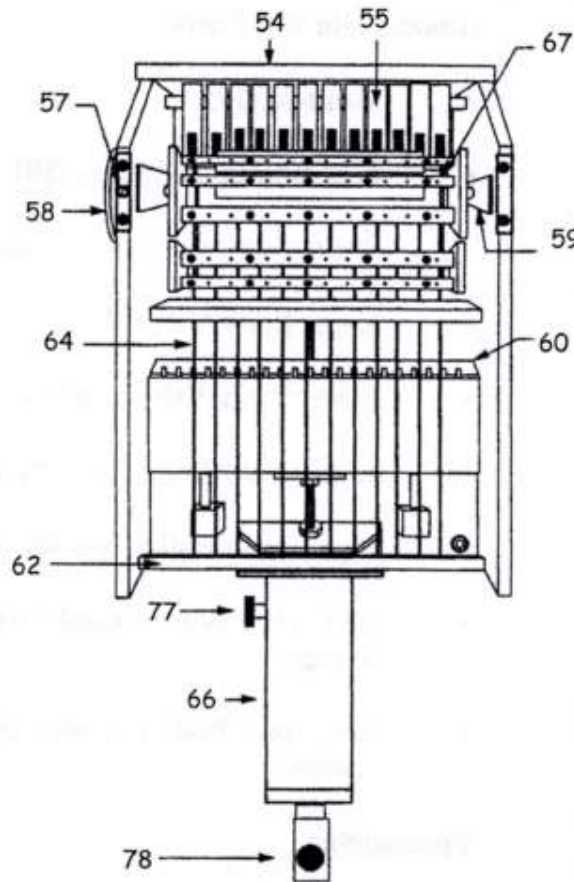
To begin, remove all dobby chain advancing mechanisms from the dobby in the order given below.

- 1) Remove the stop collars from the ends of the lever pivot posts that support the detent lever assembly (68) and the advancing hook assembly (71).





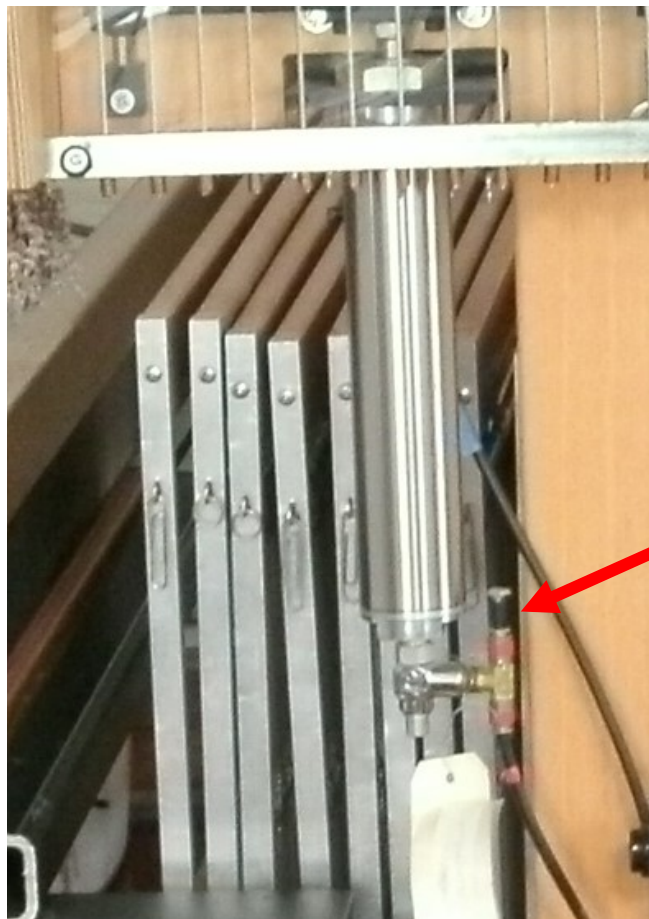
- 2) Remove the detent lever spring and detent lever assembly from the dobbie.
- 3) Unplug the air lines that go to the advancing hook air cylinder (75 and 76).
- 4) Remove the screws that fasten the advancing hook air cylinder (79) mount bracket, and the screws that fasten the reversing cord lock (73).
- 5) Once the screws are removed, you will be able to remove the entire advancing hook assembly from the dobbie.
- 6) Remove the screws that hold the brackets that retain the dobbie chain cylinder onto the dobbie (58).
- 7) Remove the entire chain cylinder assembly with mounting bearing blocks and springs from the dobbie (67).



Replace existing dobbie air lines

You no longer need the "T" air line fittings that provided air pressure to the advancing hook air cylinder, so you now need to remove the 2 air lines that contain the "T" fittings. Replace 1 line at a time to be sure the new line is placed into the correct air line fittings at the harness lift air cylinder and main dobbie air valve. The new lines will have no "T" fittings, just straight lines from the existing fittings in the valve and the air cylinder.

- 1) Locate the new lines that came with your compu-dobby and place them near the loom.
- 2) Locate the lines that run from the main dobbie air valve mounted on the inside of the bottom frame member, up to the large harness lift air cylinder.



Replace T fitting
with straight hose.

- 3) Remove one of the lines with the "T" fittings.
- 4) Place one of the new lines in the spot where you removed the existing line.

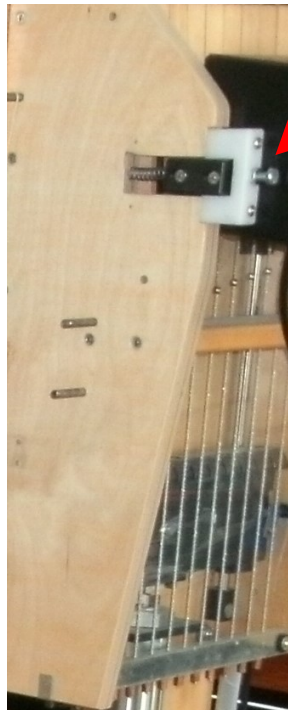


- 5) Connect all the air line fittings to the new line.
- 6) Repeat with the second line.

Install the new Compu-Dobby

It's now time to install the new Compu-Dobby. You will receive new adjustment springs and mounting brackets with the new Compu-Dobby.

- 1) Place the new springs into the holes where you removed the old ones at the end of the adjustment slot in the wooden dobbie sides.
- 2) Slide the new Compu-dobby into the adjustment slots where the chain cylinder used to be, guiding the ends of new springs into the holes in the Delrin pillow blocks that are fastened to the sides of the Compu-dobby.



- 3) Install the new Delrin adjustment brackets where the aluminum adjustment brackets used to be.

Install the new air pressure regulator

You'll need to install the new air pressure regulator in a location on the rear side of the wooden Compu-Dobby box so the inlet and outlet fittings can be easily accessed to install the new air lines. You'll be installing a new 1/4" air line that runs between the main 3/8" air line near the on/off hand-valve, up the rear side of the vertical frame part to the yellow fitting on the regulator.



You will also be installing a new 1/4" air line that runs between the green fittings on the regulator and Compu-dobby box. The regulator is to ensure excessive air line pressure is not applied to the valves in your new Compu-dobby. Your air line pressure should never exceed 45 PSI.

- 1) After installing the regulator on your Dobby box, cut the 3/8" main air line several inches below the on/off hand valve.
- 2) Install the new air line fitting assembly that has 2 places for 3/8" lines, and 1 place for a 1/4" line. Install the fitting assembly into the 3/8" line so the 1/4" line will be directed upward toward the regulator you just installed on the dobbie.
- 3) Cut and install a new 1/4" air line between the new yellow fitting in the 3/8" line, and the yellow fitting on the regulator you installed on the rear of the dobbie.
- 4) Cut and install a 1/4" air line between the green fittings on the new regulator, and the side of the Compu-Dobby box.

Install the new sensor assembly

The sensor assembly you received plugs into the RJ45 connector on the Compu-Dobby box, and the sensors strap onto the large air cylinder below the dobbie. The sensors are marked "up" and "down".

- 1) Plug in the RJ45 connector.
- 2) Fasten the "down" sensor and strap onto the air cylinder a few inches below center, and the "up" sensor and strap a few inches above the center. We'll make adjustments to these sensor positions in a few minutes.
- 3) Now with the RJ45 connector plugged in, and the sensors strapped onto the air cylinder, use the tie-down stick-on anchors and tie-downs to rout your sensor cable.
- 4) From the RJ45 plug, loosely loop the cable around the front of the dobbie, and then rout it under the top horizontal frame part, and down the front side of the vertical frame part to near where the sensors are located on the air cylinder.

Important:

While routing this cable remember to;

- 1. Keep it out of the way of all moving parts of the loom.**
- 2. Keep it away from any power cord.**



Adjust the sensors

The lower sensor initiates the events that get ready for the next pick, so the location of this sensor has a lot of margin. The upper sensor needs to be placed in a position that will activate the Compu-Dobby solenoids after the metal insert that catches the cable balls has moved above the balls.

- 1) Place the lower sensor 2" above the bottom of the cylinder.
- 2) For the upper sensor, watch the dobbie cables and slide plate interact while making the sensor adjustment.

Note:

Be careful not to over-tighten the sensor straps. Snug the screw only enough to keep the sensor from sliding down the cylinder during operation.