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Tube, Pipe & Section Manipulators

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# **Tubela Model 3 & Tubela Model 32 Air/Hydraulic Kit Assembly & Instructions**

If you have bought the Foot or Remote Air Hydraulic Pump, follow below. If you have just bought the Hydraulic Ram then jump to page 4.

Whats in the complete Air/Hyd Pump & Ram Kit:

- \*a Foot or Remote operated Air/Hydraulic Pump unit.
- \*a Tubela Hydraulic Ram for either the Model 3 or Model 32 tubebender.
- \*a 2m hydraulic Hose.
- \*a 1/4"BSPT male to 3/8"BSP male Hose to Air/Hyd Pump Adapter. (lightly screwed in the hose)
- \*a 1/4"BSP male to 3/8"BSP male Hose to Cylinder Adapter. (lightly screwed in the hose)
- \*a 2 into 1 T 1/4"BSPP & BSPT fitting to go into the Air inlet of the Air/Hydraulic Pump unit.
- \*a 1/4"BSPT Air Hose Tail with slip on Connector. (this goes to the Cylinder)
- \*2 off 1/4"BSPT male Air Inlet Quick Release Hose Tail adapter. (one is already secured in the Cylinder)
- \*a female Air Quick Release Coupling with a slip on Hose Tail adapter.
- \* 2l of hydraulic oil no. 37.



Fig 1. Foot Air/Hyd Pump.



Fig 2. Remote Air/Hyd Pump.



Fig 3. Supplied accessories.



Fig 4. Air/Hyd Pump with accessories installed.



Fig 5. Model 3 Hydraulic Ram



Fig 5. Model 32 Hydraulic Ram

## Pump Assembly

1. Study Fig 4 above and Fig 6 below. Clean the '1/4"BSPT male Air Inlet Quick Release Hose Tail adapter'. The '1/4"BSPT Air Hose Tail with slip on Connector' and the '2 into 1 T 1/4"BSPP & BSPT fitting'. Apply some silicone sealant or loctite to the male threads. Fit the two male fittings into the 2 into 1 fitting by holding the 2-1 T in a vice. And tighten.

2. Remove the plastic plug at the Air end (right hand side as pictured in fig 4) of the Pump. Apply some silicone sealant or loctite to the male thread that goes into the Pump. Screw in and tighten. All parts need to be very tight to help create a good seal.

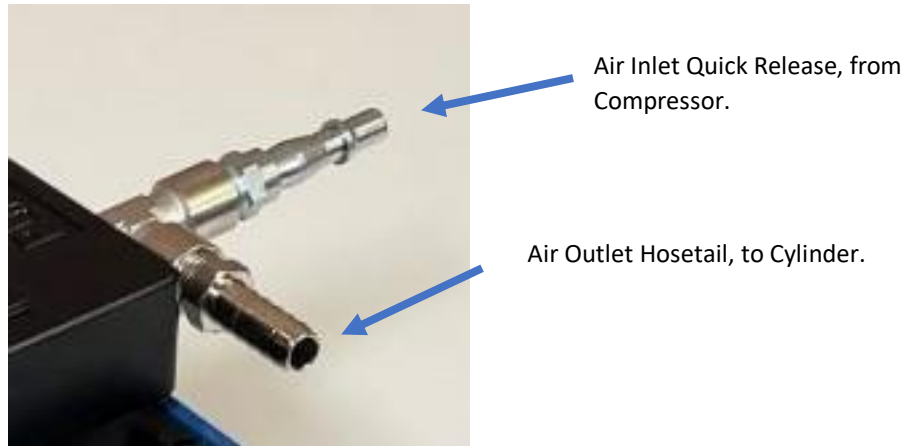


Fig 6. Air Supply fitted to Pump and ready for hoses.



Fig 7. Oil end of the Pump

3. See fig 7 below. Remove plug. Clean and apply some sealant to the 3/8" tapered end of the hose adapter that is already lightly screwed into the hose. Screw in fitting into the pump and tighten!

4. Now tighten the hose to the fitting and pump. Taking care to position the hose in the direction you would like it to run.

5. Connect a 1-1.5m length of air hose to the Air outlet and fit the supplied 'female Air Quick Release Coupling with a slip on Hose Tail adapter', secure using jubilee clips.

6. Connect your Air Compressor feed to the Quick Release Air Inlet connector.

7. You can now fill the Air/Hyd Pump with Oil. Capacity is 1.6l. Remove brass Filler/ Air Breather Cap with a 19mm spanner, as pictured in Fig 7. Fill slowly, so the oil is 20mm approx. from the top. Refit Filler.

8. IMPORTANT - Release Air Breather Cap, knurled knob on the Brass Filler. Fig 7.

**\*\*YOU MUST RELEASE the Air Bleed/filler valve when using the Pump.  
Failure to do so will damage the pump\*\***

## Installing the Hydraulic Ram

### Model 3

9. You have to remove the Handle Assembly by undoing the 2 x 3/4" nuts & bolts. Transfer the 1"OD Spacer from the slid through the Handle Assembly and insert it into the hole on the Rams Collar. And re-build the Model 3 with the Ram in place.

10. Take the 8mm Pull Pin from the manual Handle Extension. This goes through the end of the Ram. And allows the Ram to pull the Drive Arm back when returning.

11. Finally fit the hydraulic hose and tighten the 1/4"-3/8"BSP adapter into the Ram and hose. You may need to undo the other hose end that goes into the Pump to avoid any twist.

### Model 32

12. You have to remove the Handle Assembly by slackening off both 3/4" nuts & bolts. then removing the 3/4" bolt with the Handle Assembly. Remove the Handle Assembly and spacer then re-fit the bolt and spacer and lightly tighten both bolts.

13. The Model 32's Ram slides into the Tubebender and it fixed with the supplied M24 Bolts through the 1"OD holes in front of the main 3/4" bolts you have just adjusted.

14. Lightly tighten the M24 bolts. Then fully tighten the 3/4" bolts once you have aligned the tubebender plates with your 1"1/4 Pins. The Ram should be free to move from side to side.

15. Take the 8mm Pull Pin from the manual Handle Extension. This goes through the end of the Ram. And allows the Ram to pull the Drive Arm back when returning.

16. Finally fit the hydraulic hose and tighten the 1/4"-3/8"BSP adapter into the Ram and hose. You may need to undo the other hose end that goes into the Pump to avoid any twist.



17. The Clevis on the end of the Ram fits around the Drive Arm Spacer.

Your updated Hydraulic Powered Tubela Model 3 or Model 32 is now ready to run.

**\*\*CAUTION – When operating the Hydraulic Kit and especially the Air Return, keep Hands away from the moving Drive Arm and Tubebender\*\***