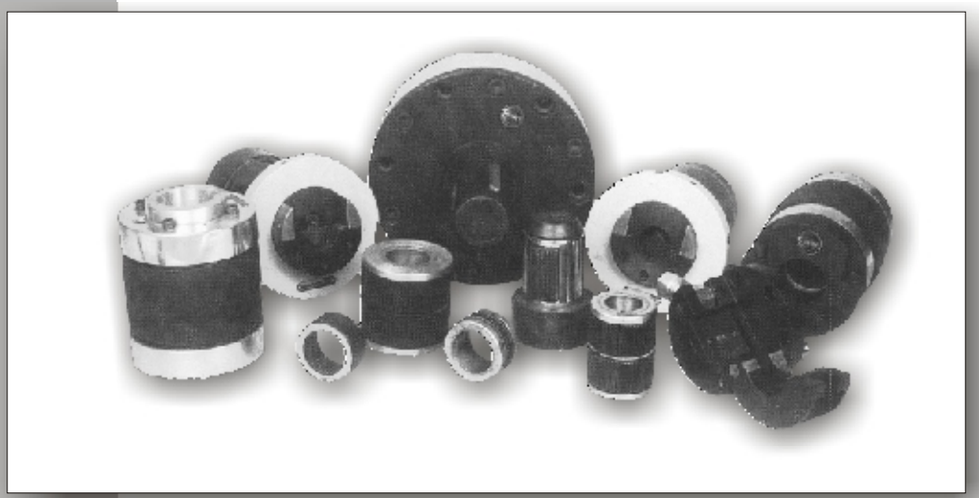
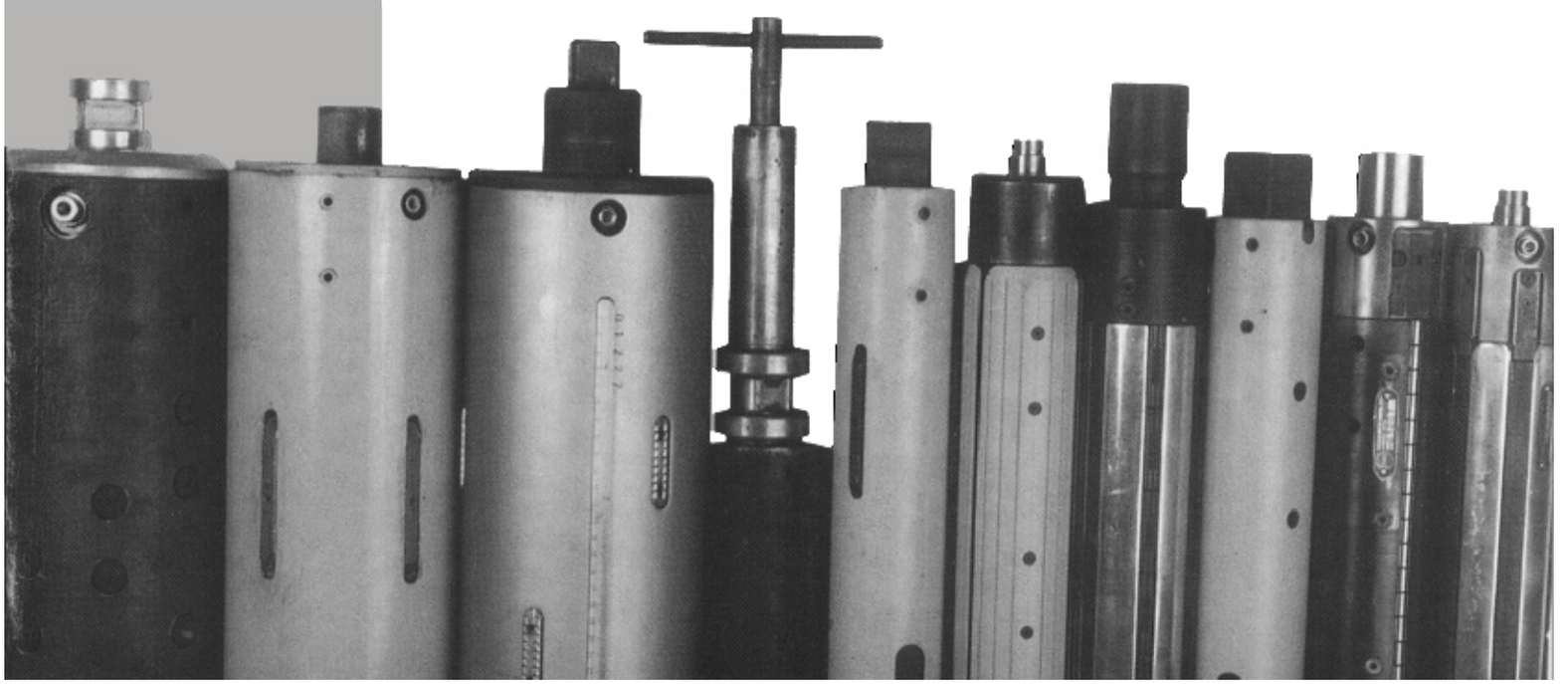


HANDLING & MAINTENANCE GUIDE



PART-1

AIR SHAFT OPERATING INSTRUCTION

1. Air Shaft should be used on the machine for which it is designed. The shaft design is based on the data sheet and design parameter provided by you. Some of them are Reel Weight, Core ID, Minimum Reel Width, Tension and speed. The shaft will get damaged in case of using it for unplanned parameters.
2. Air Shaft needs 5 to 6 Bar (70 to 80 psi) air pressure. Make sure the line pressure is above the required pressure. It is also advisable to use FRL (Filter, Regulator and Lubricator) unit near Air Shaft. (There is a myth that if you fill more air, the rubber bladder will get punctured. In fact, fill as much air as possible to get better gripping.)
3. Air Shafts are designed for a particular web width or reel width. When the total width is not used as shown in Figure 1, do not operate the shaft with open lugs. Life of the rubber tube will deteriorate. In such cases, use the dummy core on the sides to cover remaining lugs as shown in Figure 2.

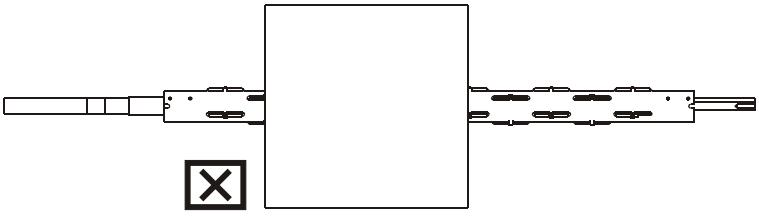


Figure 1: One Reel Mounted on the Shaft. Do not keep the Gripping Area open.

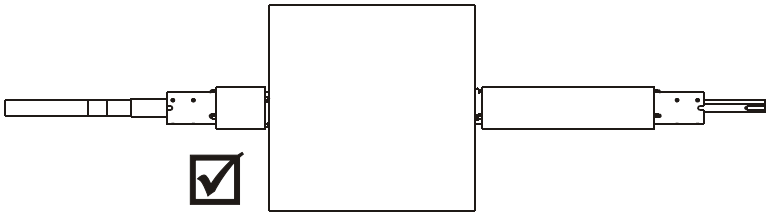


Figure 2: One Reel Mounted on the Shaft,sides cover with Dummy Core to avoid damage to Rubber Bladder.

4. To Grip the Core inflate the shaft: Press the Air Valve (NRV) by Air gun nozzle, shown in Figure 3. Press the Air Gun lever to the extent that the 5 - 6 Bar (70-90 psi) Air Pressure is developed in the bladder. For 3" Air Shaft, apply the air pressure for 45 seconds. For 6" Air Shaft, apply the air pressure for 80-100 seconds. Simpler solution is to count 1 to 50 for 3" shaft and 1 to 100 for 6" shaft, while filling air in the shaft. If you apply air for longer time, rubber bladder will not burst. In fact, it will give you better gripping.

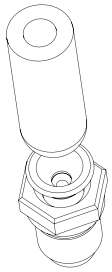


Figure 3: Air Gun Nozzle for Filling Air in the Air Valve. Keep it pressed for Air inflation.

5. To Release the Core. Deflate the Shaft; Press the top head of the Air Valve.

TROUBLE SHOOTING FOR AIR SHAFT:

1. During production, if you find the reel slipping over shaft, please check up following points:
   a. Check the incoming line pressure. It has to be between 5 to 6 Bar (75-90psi). This can happen if enough Air is not filled in the shaft.
   b. Check the Air Pressure inside the shaft. This can be done by applying Pressure gauge with nipple, similar to Vehicle tire check up. As mentioned above, a easier solution for operator is to count 1 to 50 for 3" shaft and 1 to 100 for 6" shaft, while filling air in the shaft.
   c. After trying both A & B Solutions, if you still face the problem then check for the Non Return Valve (NRV). NRV might be leaking. For testing, fill the full air in the core holder and then fill the valve input area with water. The air bubbles will start coming near and around the NRV if the valve is leaking. Then, immediate replacement is needed. (Figure 4.)

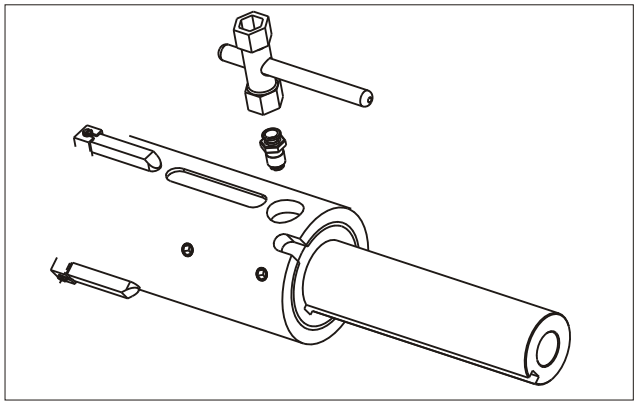


Figure 4: Checking Non Return Valve (NRV) With 19 X 22 Box Spanner

1. If leakage not found from NRV, then most probably internal O-Ring might have been damaged or rubber tube might be damaged. In that case, Air Shaft has to be opened.

OPENING OF AIR SHAFT:

1. First of all, hold the lugs (Rubber/Metal) with the help of M5 mm screws and holder. Tighten the lugs so that they do not fall down while disassembly. (Shown in Figure 5).

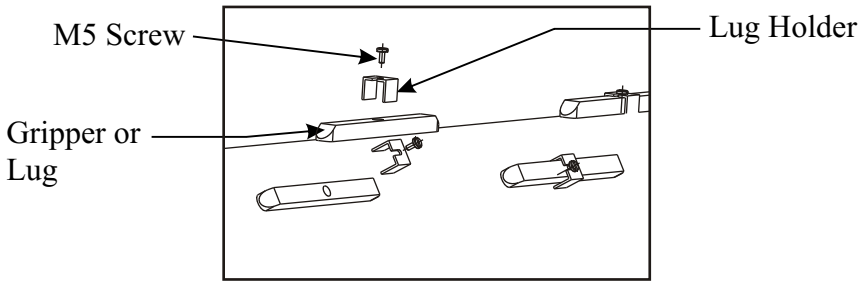


Figure 5: Lugs Are Being Held With Help Of M5 Screws And Lug Holders.

Shaft No.: _____
Used On: _____
Resource Drawing No.: _____
Manufacturing Date: _____
Notes: _____
_____

For Ordering Any Material or Any problem, contact us at
RESOURCE ENGIMECH (INDIA) PVT. LTD.:
459, Makarpura Ind'l Estate, Baroda 390 010, INDIA
T**ele:** +91 (0) 265 2632757, 2642718
Fax: +91 (0) 265 2638048
Email: info@resource.co.in