



# **ROUTINE JACK MAINTENANCE BULLETIN**

RJM 184

1 OF 2

## **TO PROVIDE COMPLETE INFORMATION ON SERVICING ColumbusJACK/REGENT QUALITY GROUND HANDLING EQUIPMENT**

### **PROCEDURE FOR TESTING RHINO JACK WITHOUT JACK TESTER SERIES 8398**

It is imperative that both safety relief valves, one for the hand pump and one for the air pump, on Series 8398 be set in accordance with the following procedure when a jack tester is not available: (Refer to Maintenance Manual)

1. Open release valve (Fig. 3 Item 6) and lower lifting arm completely.
2. Check fluid level in reservoir and fill as required.
3. Remove plug (Fig. 3 Item 17) from same side of pump block as release valve and install a calibrated pressure gauge (0-10,000 psi).
4. Close release valve and using either the hand pump or air pump, raise lifting arm fully to completely extend cylinder ram (Ref 4.1 and 4.2 of Manual) against internal stop.
5. Open release valve and lower cylinder ram 1/4 to 1/2 inch, then close release valve.

#### **CAUTION**

**DO NOT EXCEED 6400 PSI AGAINST THE RAM STOP WHILE  
SETTING RELIEF VALVES. THIS HIGH PRESSURE COULD  
RESULT IN JACK FAILURE AND SERIOUS INJURY.**

To set Hand Pump Relief Valve: (Fig. 3 Item 8)

- A. Operate hand pump and extend cylinder ram against internal stop. Slowly operate hand pump while monitoring pressure on gauge. Pump handle shall "drop" or "go soft" at an indicated pressure of 6200 psi. If the pressure is either too high or too low, perform the following:
  1. Open release valve until indicated pressure is "0". Close release valve.
  2. Remove plug (Fig. 3 Item 17) from opposite side of release valve.
  3. Insert a 1/8 inch Allen Wrench in hole and into setscrew in relief valve (Fig. 3 Item 8).
  4. Rotate the Allen Wrench 1/4 turn (clockwise to increase pressure and counterclockwise to decrease pressure). Remove Allen Wrench and re-install plug.



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5. Open release valve and operate hand pump 10 to 20 times to remove any air from the system. Close release valve.
6. Repeat step A to verify pressure setting.
7. Repeat steps 1 thru 6 as required until pressure setting is 6200 psi.
8. Open release valve and lower lifting arm completely. Check fluid level in reservoir and fill as required.

### **CAUTION**

**DO NOT EXCEED 6400 PSI AGAINST THE RAM STOP WHILE  
SETTING RELIEF VALVES. THIS HIGH PRESSURE COULD  
RESULT IN JACK FAILURE AND SERIOUS INJURY.**

To set Air Pump Relief Valve: (Fig. 2 Item 44)

- B. Operate air pump and extend cylinder ram against internal stop. Slowly operate air pump while monitoring pressure on gauge. The maximum indicated pressure should be 6200 psi. If the pressure is either too high or too low, perform the following:
  1. Open release valve until indicated pressure is "0". Close release valve.
  2. Remove plug (Fig. 2 Item 50).
  3. Insert a 7/32 inch Allen Wrench in hole and into setscrew (Fig. 2 Item 44).
  4. Rotate the Allen Wrench 1/4 turn (clockwise to increase pressure and counterclockwise to decrease pressure). Remove Allen Wrench and re-install plug.
  5. Open release valve and operate air pump 30 to 40 seconds to remove any air from the system. Close release valve.
  6. Repeat step B to verify pressure setting.
  7. Repeat steps 1 thru 6 as required until pressure setting is 6200 psi.
  8. Open release valve and lower lifting arm completely. Check fluid level in reservoir and fill as required.