



ROUTINE JACK MAINTENANCE BULLETIN

RJM 190

1 OF 3

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

PROCEDURE FOR REMOVING / INSTALLING TRIPOD JACK RAM(S)

When removing tripod jack ram(s) during maintenance operations, the following procedure is recommended: (Refer to jack maintenance manual)

- 1) Open release valve and collapse ram(s) completely.
- 2) Disconnect air supply from air pump if applicable.
- 3) Vent cylinder assembly:
 - 3.1 If the jack is equipped with an external reservoir, close the valve between the reservoir and hand pump. Remove the hose or hydraulic tube from the base of the cylinder.
 - 3.2 If the jack is equipped with an external reservoir and no valve between the reservoir and the hand pump, close the release valve. Remove the hose or hydraulic tube from the base of the cylinder.
 - 3.3 If the jack is equipped with an internal reservoir and a pressure gauge, close the release valve. Remove the hydraulic tube from the gauge.
 - 3.4 If the jack is equipped with an internal reservoir and no pressure gauge, drain the hydraulic fluid from the reservoir. Remove the hand pump from the jack.
- 4) Remove ram locknut(s).
- 5) Extend screw extension 3 to 4 inches.
- 6) Remove cylinder bushing snap ring. If no snap ring is present, unscrew cylinder bushing and remove.
- 7) Remove adapter from screw extension and install ram removal tool (P/N 9380-1, 9380-2 or equivalent) if applicable. Tighten setscrew.
- 8) Re-install ram locknut(s).
- 9) Connect ram removal tool to an overhead lifting device.



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PROCEDURE FOR REMOVING / INSTALLING TRIPOD JACK RAM(S) (CONTINUED)

NOTE: THE CYLINDER ASSEMBLY MUST BE VENTED TO ALLOW AIR IN AND OUT. THIS WILL STOP A VACUUM THAT CAN ROLL AND/OR PULL THE SEALS OFF THE RAM(S) INTO THE CYLINDER.

WARNING: KEEP CLEAR WHILE LIFTING RAM(S).

- 10) Using the overhead lifting device, carefully remove the ram(s) and cylinder bushing together as a unit.

When installing jack ram(s) during maintenance operations, the following procedure is recommended: (Refer to jack maintenance manual)

- 1) Install new seals per RJM 149.
- 2) Apply seal lubricant and clean hydraulic oil to the seals, ram piston(s) and the inside diameter of the cylinder.

CAUTION: JACK RAM LOCKNUT(S) MUST BE INSTALLED FOR RE-ASSEMBLY OF RAM(S) INTO CYLINDER.

WARNING: KEEP CLEAR WHILE LIFTING RAM(S) AND KEEP HANDS AND FINGERS CLEAR WHILE LOWERING THE RAM(S) INTO THE CYLINDER.

- 3) Using an overhead lifting device, carefully lower the ram(s) and bushing into the cylinder as a unit.
- 4) Remove the lifting device from the ram removal tool.
- 5) Remove ram removal tool, install adapter and tighten setscrew.
- 6) Remove ram locknut(s).
- 7) Install cylinder bushing snap ring. If no snap ring is present, screw in cylinder bushing.
- 8) Install ram locknut(s).



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- 9) Install hose assembly, hydraulic tube or hand pump as applicable.
- 10) Check hydraulic fluid reservoir and fill as required.
- 11) Open valve between reservoir and handpump if applicable.
- 12) Close release valve and cycle ram(s) several times to bleed any entrapped air from the system or open setscrew at the top of the ram and bleed air if applicable.
- 13) Perform "Recommended Annual Jack Certification Procedure" per RJM 147.
- 14) Jack is now ready for service.