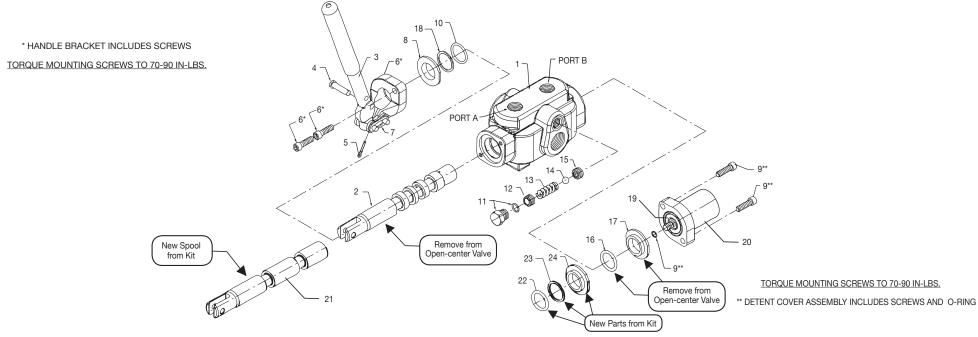


Energy Mfg. Co., Inc.

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INSTRUCTIONS FOR CONVERTING OPEN CENTER LOG SPLITTER VALVE (0C000908) TO CLOSED CENTER VALVE (0C000909)

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Note: If desired, the conversion can be made without removing the valve from the log splitter. If so, begin at step 2 below. In any case, be certain all hydraulic pressure is relieved by shifting the spool each direction several times with the tractor **NOT** running.

- 1. Place the valve horizontally in a vise by clamping on the mounting feet of the valve body (1).
- 2. Be certain the valve spool (2-original) is in the center position.
- 3. Remove the two screws (9) that retain the detent cover (20). Remove the detent cover (20). DO NOT shift the spool once the cover is removed.
- 4. The detent ball holder (19) has screwdriver slots milled in the end. Use a 9/16" wide screwdriver or drag link bit socket adapter to unscrew the detent assembly from the spool.
- 5. Remove the cotter pin (5) and clevis pin (4) to disconnect the control handle (3) from the valve spool (2-original).
- 6. Push the valve spool (2-original) out the detent end of the valve body (1). The seal retainer (17) and o-ring (16) will come out with the spool. Keep the original spool, seal retainer and o-ring in a clean, sealed container for potential future conversion back to open center configuration.
- 7. Take the new spool (21-kit) from the conversion kit and lightly coat it with clean oil. Insert the spool's slotted, handle end into the detent end of the valve body and gently slide it through the valve body until it is possible to insert the clevis pin (4) through the spool and the control handle (3). Install cotter pin (5).
- 8. Use the control handle to pull the spool out of the valve body toward the handle end of the valve body as far as it will allow. Install the new o-ring (22), backup ring (23) and seal retainer (24) from the kit in the detent end of the valve body. Hold the seal retainer in the valve body while using the control handle to shift the valve spool to the center position. The center position is when the threaded end of the valve spool and seal retainer are flush with the end of the valve body.
- 9. Thread the original detent subassembly (19) on to the valve spool (21-kit). Tighten it securely to 70 90 in. lbs. of torque.
- 10. Fasten the detent cover (20) to the valve body using the two original screws (9) and tighten them securely to 70 90 in. lbs. of torque.
- 11. Check the valve assembly for proper spring re-centering and detent function WITHOUT THE HYDRAULIC SYSTEM OPERATING. If the spool does not re-center when the control handle is released from the extend position, loosen the two screws (9) to realign the spring cover (20) on the valve body. Retighten the screws and check re-centering again until the spool properly re-centers when the control handle is released. If the valve will not re-center or hold in detent, discontinue use and call the Energy factory.
- 12. Remove the relief valve plug (11) and turn the slotted or hex-keyed set screw (12) clockwise until the spring (13) reaches solid height. Screw the relief valve plug (11) back in to the valve body.



CAUTION: IF THE RELIEF VALVE IS NOT ADJUSTED TO SPRING SOLID HEIGHT, YOU MAY DAMAGE YOUR HYDRAULIC SYSTEM.