LESLIE CONTROLS, INC.
A subsidiary of CIRCOR International, Inc.
12501 Telecom Drive • Tampa, FL 33637-0906

CONTROL PILOT

Transfer Valve 1/4" Class S

See Drawing 20/7 4 1 For Installation Sketch.

INSTALLATION

Install Transfer Valve in a convenient location Connect the various components as shown on drawing Use 1/4" non-corrosive 40 schedule piping or tubing with equivalent internal diameter

OPERATION

Setting Transfer Point

Set transfer point of the Transfer valve as described below before putting the system into operation (No pressure in controlled line)

1 Set a temporary compression on the piston springs by turning pin (1) clockwise as far as it will go with easy manual turning

2 Supply 20 psig air pressure to the primary control pilot and through the pilot to the "A" connection of the transfer valve Air will pass through the transfer valve to the diaphragm connection of the valve and to the small piston on upper side of Transfer valve via the "F" connection in the spring case

3 Determine desired transfer point Supply controlled air pressure through the secondary control pilot of a value equal to the desired transfer point This pressure will build up on large piston (14) via connection "E" and to the closed port at "C"

4 Turn pin (1) counterclockwise (removing compression from piston springs) until transfer takes place When transfer operates air pressure from "B" connection to control valve and "F" connection in spring case will bleed off)Primary control valve will close) and port "C" will be connected to port "D" supplying air pressure to diaphragm of secondary control valve "Secondary control valve will open) to a point corresponding to transfer pressure

5 *Testing for Transfer from Secondary control circuit back to primary*
Reduce air pressure through secondary control pilot When air pressure is reduced by a value equal to the dead band curve (shaded area) shown on the drawing, transfer will operate port "C" shutting off low of air to port "D" and reconnecting port "A" with port "B" Air pressure from port "D" to secondary control valve will bleed off (Secondary Control valve will close) Air pressure from port "B" will pass to primary control valve (Primary Control valve will open) Test several times Transfer valve is now set to operate at pressure values used for testing To operate at any other transfer point adjust compression on piston springs to suit Increasing compression raises transfer point, decreasing compression lower transfer point Width of dead band remains constant for any given output of primary control pilot

6 *Putting controlled System into Operation*
Increase air supply pressure of secondary control pilot to 20 psig Place controlled system into operation and readjust both primary and secondary control pilots to operate at desired pressures (See appropriate control Pilot Instruction) Adjust secondary control pilot to operate at a controlled pressure value slightly lower than that of the primary control pilot About 1psig differential (minimum) should prove satisfactory

MAINTENANCE

DISMANTLING

1 Shut off air supply disconnect air lines at transfer valve connections Position valve in a protected jaw vise
DO NOT squeeze excessively

2 Relieve compression on piston springs by turning pin (1) counterclockwise Remove bottom flange nuts (18), bottom flange (17), gasket (16), large piston (14) and spool piece of sleeve/spool assembly (12)

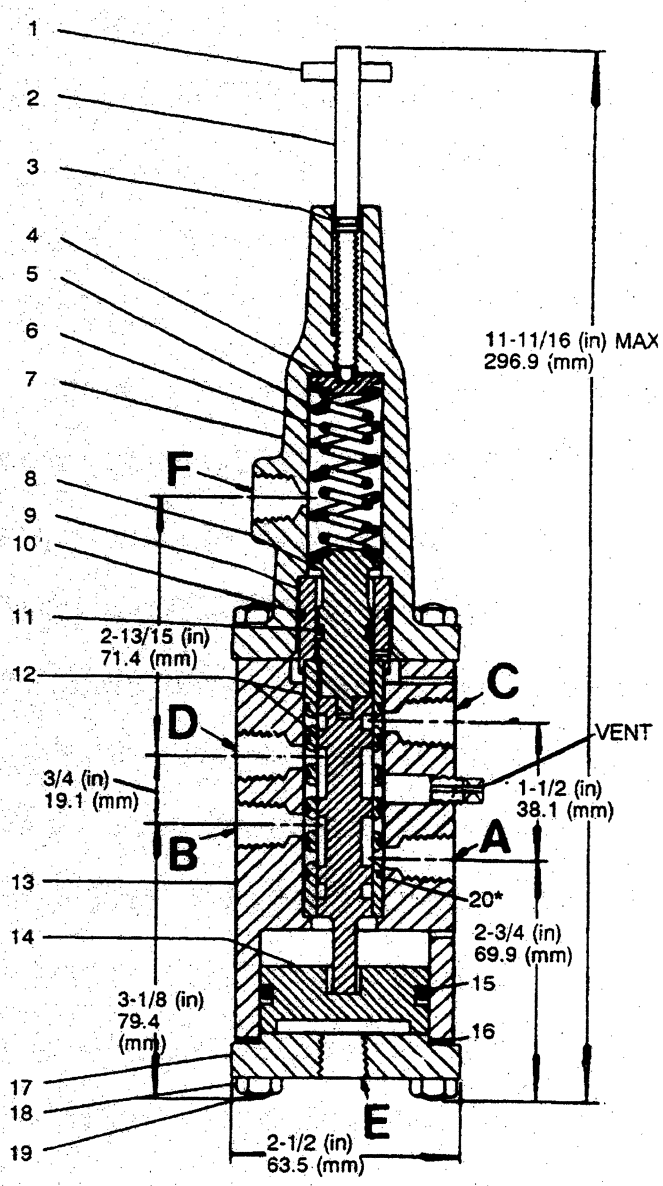
3. Take out stud bolts (19). Lift off spring case (7), top spring seat (4) outer and inner piston springs (5/6), small piston (8) and cylinder liner (9). Lift out sleeve of sleeve/spool assembly (12).

4. Clean all parts carefully. Do not use abrasive or gritty materials for cleaning. Remove "O" rings. Clean grooves. Replace any worn or damaged part. Before replacing "O" rings grease lightly with grease suitable for air service.

DISMANTLING

5. Replace sleeve of sleeve/spool assembly (12) in valve body. Position cylinder liner (9) on sleeve. Insert small piston (8) in cylinder liner. Position outer and inner piston springs (5/6) on small piston. Place top spring seat (4) on piston springs. Reassemble spring case (7) and stud bolts (19) (with nuts on top end) to valve body. Insert adjusting screw (2) in spring case.

6. Replace spool of sleeve/spool assembly (12) in sleeve, with recessed end toward small piston (8). Insert large piston (14) in valve body with small recess toward stem of spool. Reassemble gasket (16) and bottom flange (17) to valve body. Attach nuts (18) to studs bolts (19). Tighten. Reinstall in line and reset as described under "OPERATION".



ALL THREADED CONNECTIONS ARE 1/4" PIPE THREAD EXCEPT VENT IS 1/8" NPT

***Included with Part No. 12**

PRINTED IN USA 895 1C