



# HYDRAULIC LINE CONNECTION DIAGRAMS

## HWH® SPACEMAKER® SLIDE-OUT SYSTEMS

### **FEATURING:**

*Dual-Cylinder "Universal Straight-Out (USO)" Slide-Out System*

#### **HWH CORPORATION**

(On I-80, Exit 267 South)

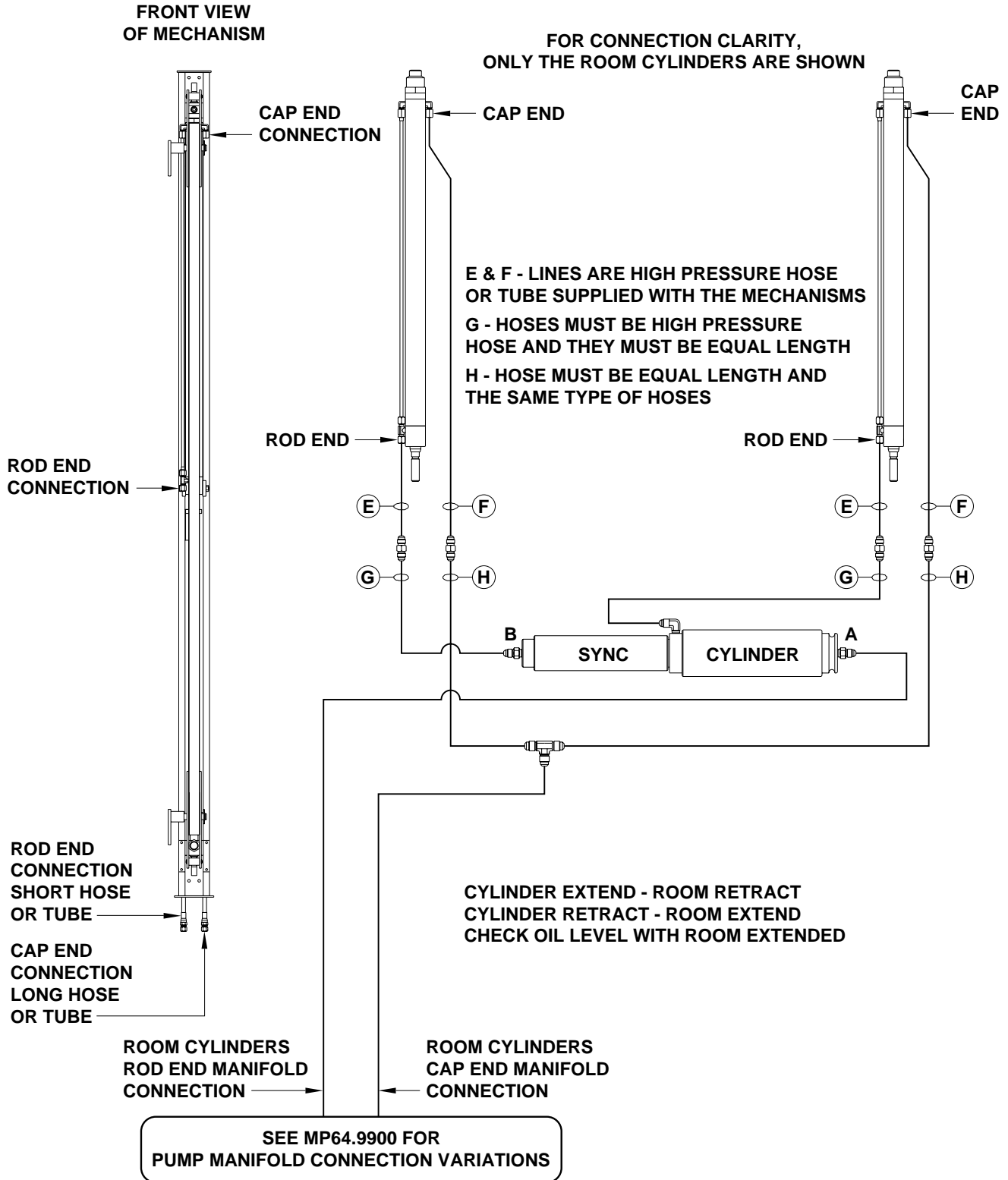
2096 Moscow Road | Moscow, Iowa 52760

Ph: 800/321-3494 (or) 563/724-3396 | Fax: 563/724-3408

[www.hwh.com](http://www.hwh.com)

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**20JUN12**

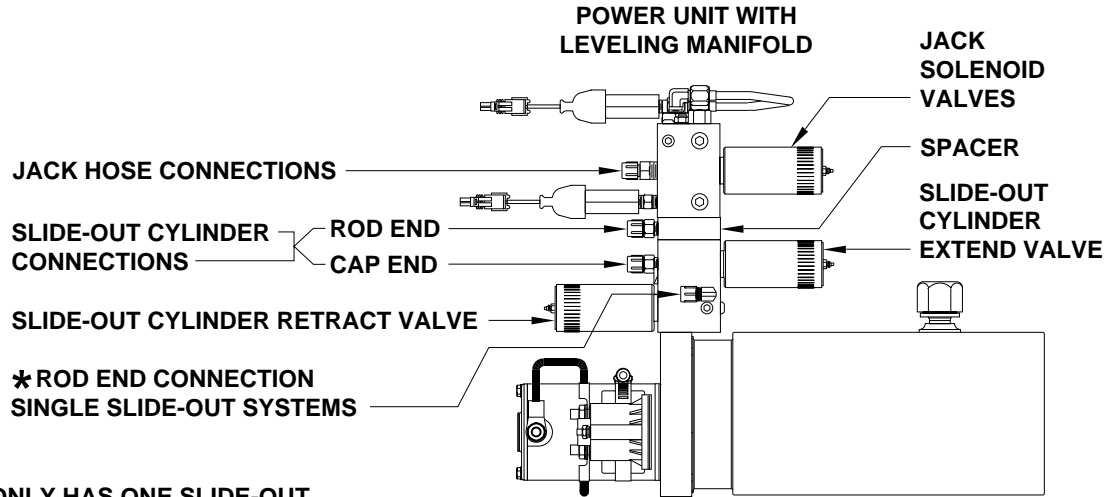
# GENERIC HYDRAULIC LINE CONNECTION DIAGRAM UNIVERSAL STRAIGHT OUT ROOM EXTENSION



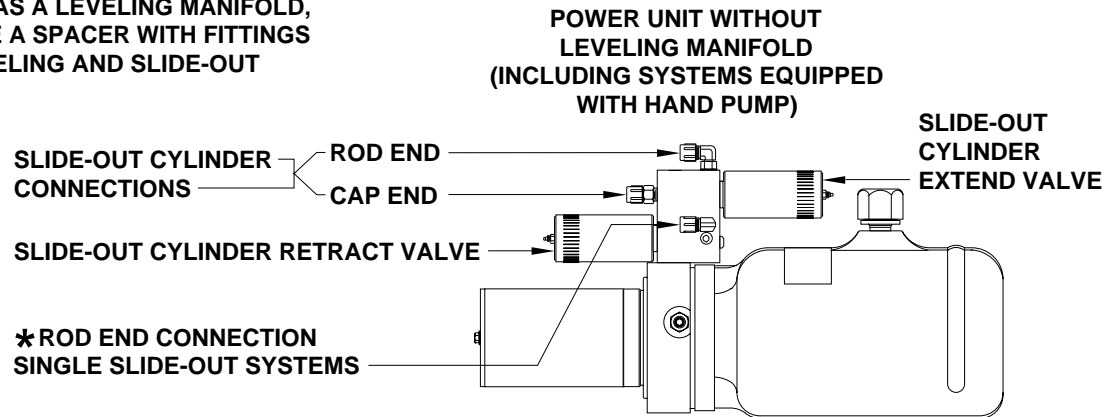
# HYDRAULIC LINE CONNECTION DIAGRAM

## SLIDE-OUT LINE CONNECTIONS AT THE MANIFOLD

### ALL HWH SLIDE-OUT MECHANISMS



\* IF THE VEHICLE ONLY HAS ONE SLIDE-OUT AND THE MANIFOLD IS NOT EQUIPPED WITH AN AUXILIARY HAND PUMP, THE ROD END HOSE CONNECTION MAY BE AT A FITTING THAT IS ON EITHER END OF THE SLIDE-OUT MANIFOLD. IF THE POWER UNIT HAS A LEVELING MANIFOLD, THERE WILL NOT BE A SPACER WITH FITTINGS BETWEEN THE LEVELING AND SLIDE-OUT MANIFOLDS.

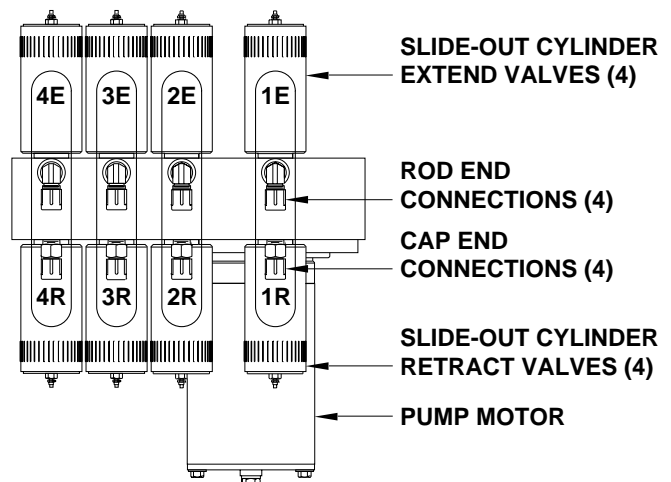


HOSE CONNECTIONS AT THE MANIFOLD ARE CRITICAL. IMPROPER HOSE ROUTING WILL CAUSE INCORRECT SLIDE-OUT FUNCTION AND CAN CAUSE SEVERE DAMAGE TO SLIDE-OUT CYLINDERS OR SOLENOID VALVES. IF A ROD AND CAP END HOSE ARE REVERSED FOR A SLIDE-OUT, THE SLIDE-OUT CYLINDER(S) WILL EXTEND BUT NOT RETRACT.

THE ROD AND CAP HOSES MUST GO TO THE CORRECT FITTINGS IN LINE WITH THE CORRECT EXTEND AND RETRACT VALVES FOR THE SLIDE-OUT. IF THE ROD END OR CAP END HOSES FOR TWO SLIDE-OUTS ARE SWAPPED, EXTREME PRESSURE WILL DAMAGE THE SOLENOID VALVES OR SLIDE-OUT CYLINDERS.

CONNECTION INFORMATION ON THIS PAGE IS THE SAME FOR SYSTEMS EQUIPPED WITH AUXILIARY HAND PUMPS OR REMOTE SLIDE-OUT MANIFOLDS.

TOP VIEW OF 4 SLIDE-OUT MANIFOLD

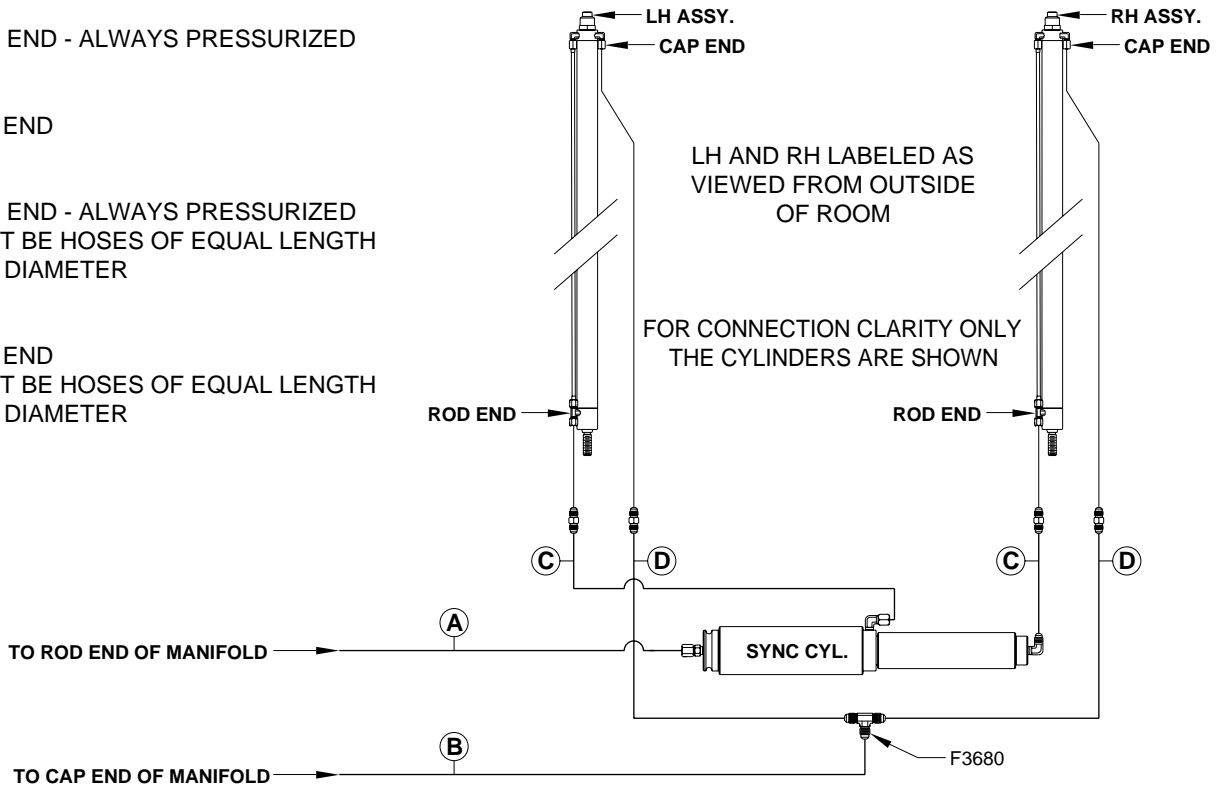


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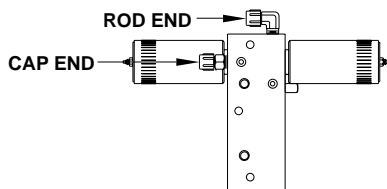
## GENERIC DIAGRAM FOR

### UNIVERSAL STRAIGHT OUT SLIDE-OUT

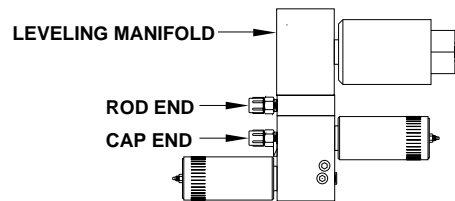
- Ⓐ ROD END - ALWAYS PRESSURIZED
- Ⓑ CAP END
- Ⓒ ROD END - ALWAYS PRESSURIZED  
MUST BE HOSES OF EQUAL LENGTH  
AND DIAMETER
- Ⓓ CAP END  
MUST BE HOSES OF EQUAL LENGTH  
AND DIAMETER



TOP VIEW  
SINGLE SLIDE-OUT MANIFOLD



SIDE VIEW  
MULTIPLE SLIDE-OUT MANIFOLD  
WITH LEVELING MANIFOLD



SIDE VIEW  
REMOTE MANIFOLD OR SLIDE-OUT MANIFOLD  
WITH NO LEVELING MANIFOLD OR  
WITH AUXILIARY HAND PUMP

