



**READ  
INSTRUCTIONS  
THOROUGHLY  
BEFORE  
PROCEEDING**

## **ROOM EXTENSION CYLINDER REPLACEMENT DUAL CYLINDER ROOM EXTENSION WITH SYNCHRONIZING CYLINDER NO LEVELING SYSTEM/REVERSIBLE PUMP**

**IMPORTANT:** The following instructions must be followed or air lock of the synchronizing cylinder and unsynchronized operation of the room cylinders may result causing damage to the room. Please read the instructions before replacing the cylinder. **DO NOT reverse direction of the room unless the room is fully extended or retracted.**

1. Extend the room fully. There is an access hole on the inner sliding tube to access the cylinder rod mounting nuts. If the room cannot be fully extended the inner sliding tube access hole must be extended far enough to access the cylinder rod mounting nuts.

2. Loosen the emergency retract valve at the pump.

3. Remove the two nuts and washers from the cylinder cap end mounting plate for both the front and rear room cylinders.

**IMPORTANT:** Steps 3 and 4 must be done to protect the room from being damaged while bleeding air from and synchronizing the the room cylinders.

4. Remove the cylinder rod outer out stop adjusting nut for both the front and rear room cylinders.

5. Remove and cap the hoses at the end of the cylinder that is to be replaced.

6. Remove the cylinder that is to be replaced from the room extension tube.

**NOTE: Do not remove the caps from the new cylinder hose connections until you are ready to reattach the hoses. Save the caps.**

7. Remove the cylinder cap end mounting plate from the old cylinder and attach it to the new cylinder.

8. Install the inner out stop adjusting nut and lock washer completely onto the threaded rod of the new cylinder.

**IMPORTANT: DO NOT PULL THE CYLINDER ROD OUT OF THE NEW CYLINDER. INSTALL THE NEW CYLINDER WITH THE ROD RETRACTED AS IT WAS SHIPPED.**

**IMPORTANT: BEFORE INSTALLING THE NEW CYLINDER, CLEAN ALL EXCESS OIL FROM THE ROOM EXTENSION TUBE. SWAB THE TUBES THOROUGHLY WITH A MILD SOLVENT AND RAGS. EXCESS OIL LEFT IN THE TUBES MAY LEAK OUT GIVING THE APPEARANCE OF A LEAKY CYLINDER OR HOSE CONNECTION.**

**NOTE:** Before installing the new cylinder, clean all excess oil from the room extension tube.

9. Install the new cylinder in the room extension tube. **DO NOT** install the two cylinder cap end mounting plate nuts and washers.

10. Attach the hoses to the cylinder. Do not over tighten the hose ends. See MP45.945B for hose tightening.

11. Remove hose A from the pump. Remove the breather cap and direct hose A into the tank. Cap fitting A with a steel cap from the replacement cylinder.

12. Close the emergency retract valve.

13. Push and hold the room control switch to "EXTEND" until the new cylinder is fully extended plus five seconds.

**NOTE: The cap end of the cylinder will push the cylinder cap end mounting plate off the room extension tube. This is ok.**

14. Reattach Hose A to fitting A.

15. Push and hold the room control switch to "RETRACT" until both cylinders are fully retracted. Extend and retract the cylinders at least twice or until they are running fully synchronized. **DO NOT** reconnect the cylinders until they are running fully synchronized.

**CAUTION: DO NOT TRY TO LINE THE ROOM CYLINDER ROD UP WITH THE MOUNTING HOLE WHILE THE ROD IS EXTENDING.**

16. Slide the cylinder rod thru the rod mounting plate hole on the inner sliding tube. Install the nuts and lock washers on the cylinder cap end mounting plate. Turn the cylinder rod inner adjusting nut into place and install the cylinder rod outer adjusting nut. Make the nut snug only, as a final adjustment will have to be made. Do this for the front and rear cylinders.

17. Push the room control switch to retract and hold until the room is fully retracted plus 5 seconds. Watch for excessive racking of the room. Some racking can occur do to air in the system. If the room starts to bind up, release the room control switch immediately. **DO NOT TRY TO EXTEND THE ROOM.** If the room does not bind up, proceed to Step 19. If the room is bound up, go to Step 18.

18. If the room is bound up, repeat Steps 3 and 4. Manually push the room out to its full extension. Now repeat Steps 15 thru 17. If the room will still not run properly, contact HWH CORPORATION Customer Service at (800)321-3494 or at (563)724-3396.

19. Extend the room fully again. Do not reverse direction until the room is fully extended. Repeat retracting and extending the room several times being careful not to reverse directions until the room is fully extended or retracted.

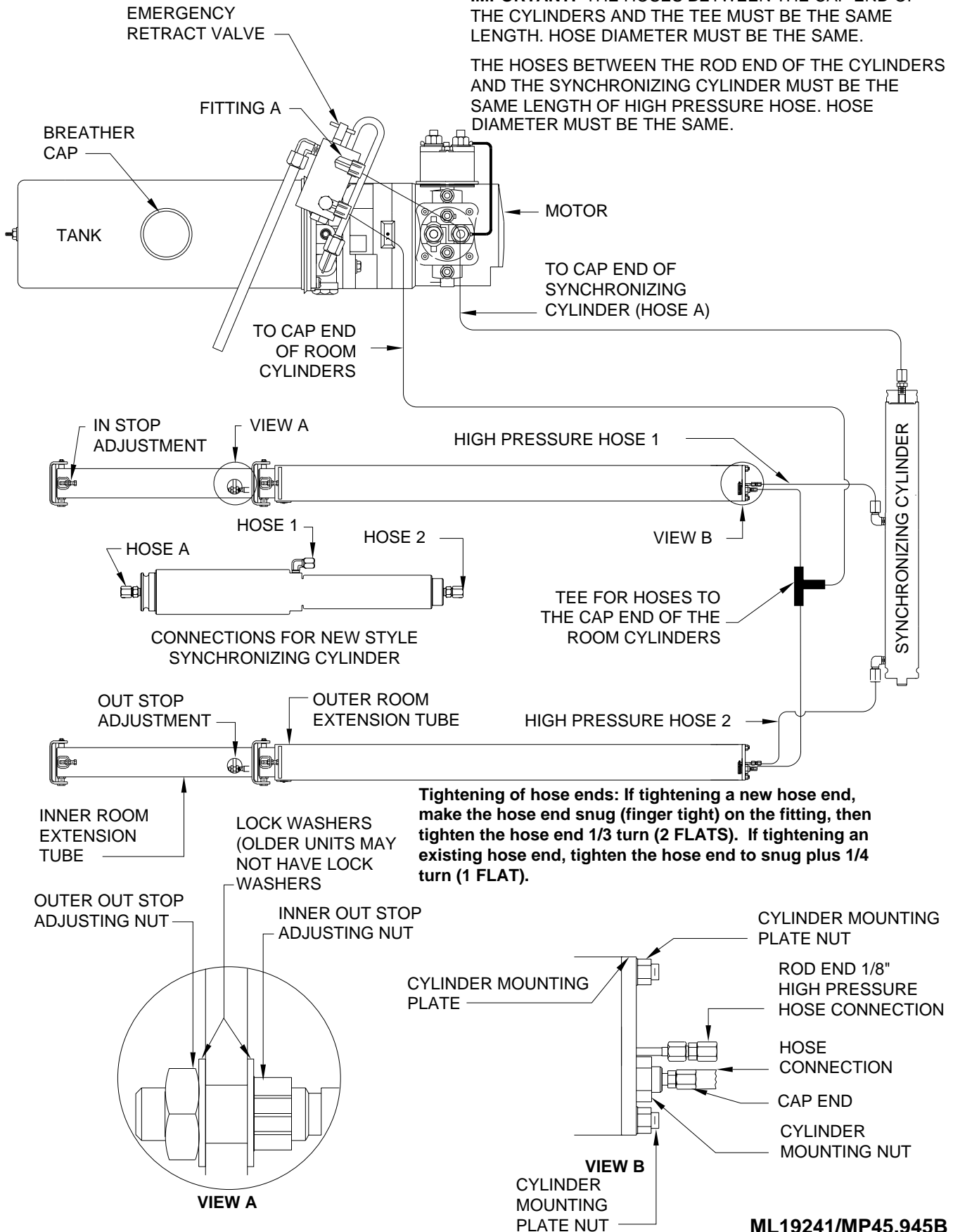
20. With the room fully extended, check seals for proper compression. If the seal is not compressed or needs more compression, loosen the cylinder rod outer adjusting nut and tighten the cylinder rod inner adjusting nut. If the seal is compressed too much, loosen the cylinder rod inner adjusting nut and tighten the cylinder rod outer adjusting nut.

21. Check all hose connections and mounting nuts and bolts for tightness and leaks.

# CYLINDER REPLACEMENT DUAL CYLINDER ROOM EXTENSION WITH SYNCHRONIZING CYLINDER NO LEVELING SYSTEM / REVERSIBLE PUMP

**IMPORTANT:** THE HOSES BETWEEN THE CAP END OF THE CYLINDERS AND THE TEE MUST BE THE SAME LENGTH. HOSE DIAMETER MUST BE THE SAME.

THE HOSES BETWEEN THE ROD END OF THE CYLINDERS AND THE SYNCHRONIZING CYLINDER MUST BE THE SAME LENGTH OF HIGH PRESSURE HOSE. HOSE DIAMETER MUST BE THE SAME.



CONNECTIONS FOR NEW STYLE SYNCHRONIZING CYLINDER

**Tightening of hose ends:** If tightening a new hose end, make the hose end snug (finger tight) on the fitting, then tighten the hose end 1/3 turn (2 FLATS). If tightening an existing hose end, tighten the hose end to snug plus 1/4 turn (1 FLAT).