



# CYLINDER BLEEDING PROCEDURE FOUR CYLINDER ROOM EXTENSION - TRAIN DRIVE (WITH SYNCHRONIZING CYLINDER)

This sheet is also used for changing a room cylinder or synchronizing cylinder.  
See "ROOM CYLINDER REPLACEMENT" or "SYNCHRONIZING CYLINDER REPLACEMENT" for specific instructions.

This procedure is intended to bleed the system if the room is installed but does not operate in a synchronized manner.

**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 operating the cylinders. DO NOT reverse direction of the cylinders unless the cylinders are fully extended or retracted.**

**NOTE:** With this model of room extension the room cylinder is retracted when the room is extended and extended when the room is retracted.

**ROOM CYLINDER REPLACEMENT:** When replacing a room cylinder, follow the bleed procedure as written except omit step 3. Replace the room cylinder between step 5 and step 6.

**SYNCHRONIZING CYLINDER REPLACEMENT:** Follow the bleed procedure completely, as written. Replace the synchronizing cylinder between step 5 and step 6.

1. Retract the room fully. Support the inner edge of the room.
2. Remove the outer rod mounting nut from all four cylinders.
3. Push room EXTEND until all four cylinders are completely retracted. (Omit when replacing a room cylinder.)
4. Open the RETRACT valve.
5. Open the EXTEND valve.

**IMPORTANT: DO NOT open valve release nuts, more than four turns.**

6. Remove hose A from the pump. Remove the breather cap and direct hose A into the tank. Cap fitting A with a steel cap.
7. Close the extend and retract valves.
8. Push and hold the room control switch to "RETRACT" until all four cylinders are fully extended plus 3 to 5 seconds.  
**Watch carefully that the cylinders do not extend too far. Make sure the rods are guided into the mounting holes.**
9. Reattach hose A to fitting A.

**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).**

10. Push and hold the room control switch to "EXTEND" until all four cylinders are fully retracted + 3 to 5 seconds. DO NOT reverse direction of the cylinders.

11. Repeat extending and retracting the cylinders fully at least 3 more times or until the cylinders are completely synchronized. Do not go from "RETRACT" to "EXTEND" until the cylinders are fully extended. Do not go from "EXTEND" to "RETRACT" until the cylinders are fully retracted. Check that there are no leaks and that hose routings are OK.

**NOTE:** When extending the cylinders (retracting the room) the bottom cylinders may start before and lead the top cylinders. This is a reaction caused by the pressure reducing valve for the top cylinders and is OK.

12. With the room fully retracted, reattach the cylinders to the room extension.

13. Extend the room watching carefully that the room does not bind up. If the room binds up, DO NOT try to retract the room. Open the extend and retract valves, and manually push the room in. Repeat Steps 2 and 10 thru 13. If the room will still not work properly, call HWH CORPORATION Customer Service at (800)321-3494 or at (563)724-3396.

14. If the room works properly, extend and retract the room several times. Watch carefully that the room does not extend too far or bind up. Check that the room seals are properly compressed with the room extended. If the room needs to retract more, loosen the outer in stop adjustment nuts and turn the inner adjustment nuts out until the room is seated properly. Tighten the outer adjustment nuts. If the room is retracted loosen the inner in outstop nuts and tighten the outer adjustment nuts until the room is seated properly. Tighten the inner adjustment nuts.

15. Check again for leaks and hose routings.

16. **Clean any oil spills from the room area.**

# HYDRAULIC CONNECTION DIAGRAM

## FOUR CYLINDER ROOM EXTENSION - TRAIN DRIVE

### WITH SYNCHRONIZING CYLINDER

