ROOM EXTENSION CYLINDER REPLACEMENT
DUAL CYLINDER FLAT FLOOR ROOM EXTENSION
(WITH SYNCHRONIZING CYLINDER)

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 until the rod mounting pin is visible. Make sure the room is not starting to "LOWER". Support the room

NOTE: Some rooms may need to be fully extended and supported to access the pin.

2. Remove the mounting pin from both front and rear cylinders.

3. Push the room control switch to "EXTEND" until both cylinders are fully extended.

4. Open the extend valve "T" handle or valve release nut.

5. Open the retract valve "T" handle or valve release nut.

NOTE: Valve release nuts should not be opened more than four (4) turns.

6. Remove trunnion bolts (2) that mount the rear of the cylinder that is to be changed.

7. Mark the hoses so they are replaced in the correct position. Remove and cap the hoses from the cylinder connections.

8. Remove the cylinder. The cylinder may need to be lifted slightly so the rod eye does not catch on the STORE-MORE mounting that protrudes inside of the inner tube.

9. Measure the cap end cylinder mounting nut on the bad cylinder. Make sure the mounting nut is in the same position on the new cylinder.

10. Install the rod end hose from the old cylinder onto the new 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).

11. Install the new cylinder. Support the cylinder so the rod eye does not catch the STORE-MORE mounting.

12. Install the trunnion bolts (2).

13. Attach the hoses to the new cylinder. DO NOT reverse hose connections.

14. Remove hose A from the room extension manifold. Use a steel cap from the new cylinder to cap the fitting in the manifold. Direct hose A into the fluid reservoir.

15. Close the "T" handles or valve release nuts.

IMPORTANT: When extending or retracting the cylinders when the rod eye is not connected to the tube, the rod eye may catch on the STORE-MORE mounting. If necessary place a small block under both cylinders to raise the rod eye above the "STORE-MORE" mounting. Make sure it is not blocked so high it interferes with anything else in the tube. MOST OF ALL PAY ATTENTION.

16. Push and hold the room control switch to "EXTEND" until the new cylinder is fully extended plus 5 seconds.

17. Open the extend valve then the retract valve "T" handles or valve release nuts.

18. Reattach hose A to the room extension manifold.

19. Close both valve "T" handles or valve release nuts.

20. Push and hold the room control switch to "RETRACT" until both cylinders are fully retracted plus five seconds. Repeat extending and retracting the cylinders AT LEAST 2 more times or until the cylinders are running fully synchronized.

21. Fully extend the cylinders then retract the cylinders so the hole in the rod eye and inner tube line up and install the pin and snap rings for both cylinders. It may be necessary to loosen the trunnion jam nuts to line up the mounting holes. Make sure the trunnion (cylinder mounting nut) is in the same position after tightening the jam nuts.

22. 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 due to air in the system. If the room does not bind up, proceed to STEP 24. If the room is bound up proceed to STEP 23.

23. If the room is bound up and the rod eye pins are not visible, repeat STEP 6 for both cylinders and manually do STEP 1 then 2. Repeat STEPS 12 and 20 thru 22. If the room will still not run properly, contact HWH Customer Service 1-800-321-3494.

24. Extend the room fully again. DO NOT reverse direction until the room is fully extended. Repeat retracting and extending the room several times. DO NOT reverse directions until the room is fully extended or retracted.

25. Check and make room adjustments in this order: drop, extend and then retract.
CYLINDER REPLACEMENT
DUAL CYLINDER "FLAT FLOOR" ROOM EXTENSION
WITH SYNCHRONIZING CYLINDER

NOTE: ROD AND CAP END HOSE CONNECTIONS WILL BE THE SAME FOR MULTIPLE ROOM EXTENSIONS.

VERTICAL ADJUSTMENT PROCEDURE:
LOOSEN JAM NUT ROTATE PIVOT BOLT WITH 5/16 HEX KEY TO MOVE BRACKET UP OR DOWN. TIGHTEN JAM NUT TO LOCK VERTICAL ADJUSTMENT.

RETRACTED POSITION ADJUSTMENT:
LOOSEN NUTS, ROTATE STOP BOLT TO ADJUST RETRACTED POSITION IN OR OUT. TIGHTEN NUTS TO LOCK RETRACTED POSITION.

DROP ADJUSTMENT PROCEDURE:
LOOSEN JAM NUTS, ROTATE JAM NUTS IN OR OUT TO MOVE DROP ADJUSTMENT UP OR DOWN. TIGHTEN JAM NUTS TO LOCK DROP ADJUSTMENT.

FLOOR SUPPORT ADJUSTMENT PROCEDURE:
LOOSEN JAM NUT ROTATE STUD TO MOVE FLOOR SUPPORT TUBE UP OR DOWN. TIGHTEN JAM NUT TO LOCK FLOOR ADJUSTMENT.

SYNCHRONIZING CYLINDER

ROD END HOSE CONNECTION

CAP END HOSE CONNECTION

TRUNNION - CYLINDER MOUNTING NUT

TRUNNION MOUNTING BOLT (2)

STOP BOLT

HOSE A

ROOM MANIFOLD USING SOLENOID VALVES WITH VALVE RELEASE NUTS

RETRACT SOLENOID VALVE

ROOM EXTENSION MANIFOLD

VALVE RELEASE "T" HANDLES

CAP THIS FITTING

HOSE A

HOSE 1

HOSE 2

ROOM CYLINDERS

VALVE RELEASE NUT

SYNCHRONIZING CYLINDER

ROD EYE

STORE MORE MOUNTING BOLT

ROD MOUNTING PIN

NOTE: ROD AND CAP END HOSE CONNECTIONS WILL BE THE SAME FOR MULTIPLE ROOM EXTENSIONS.