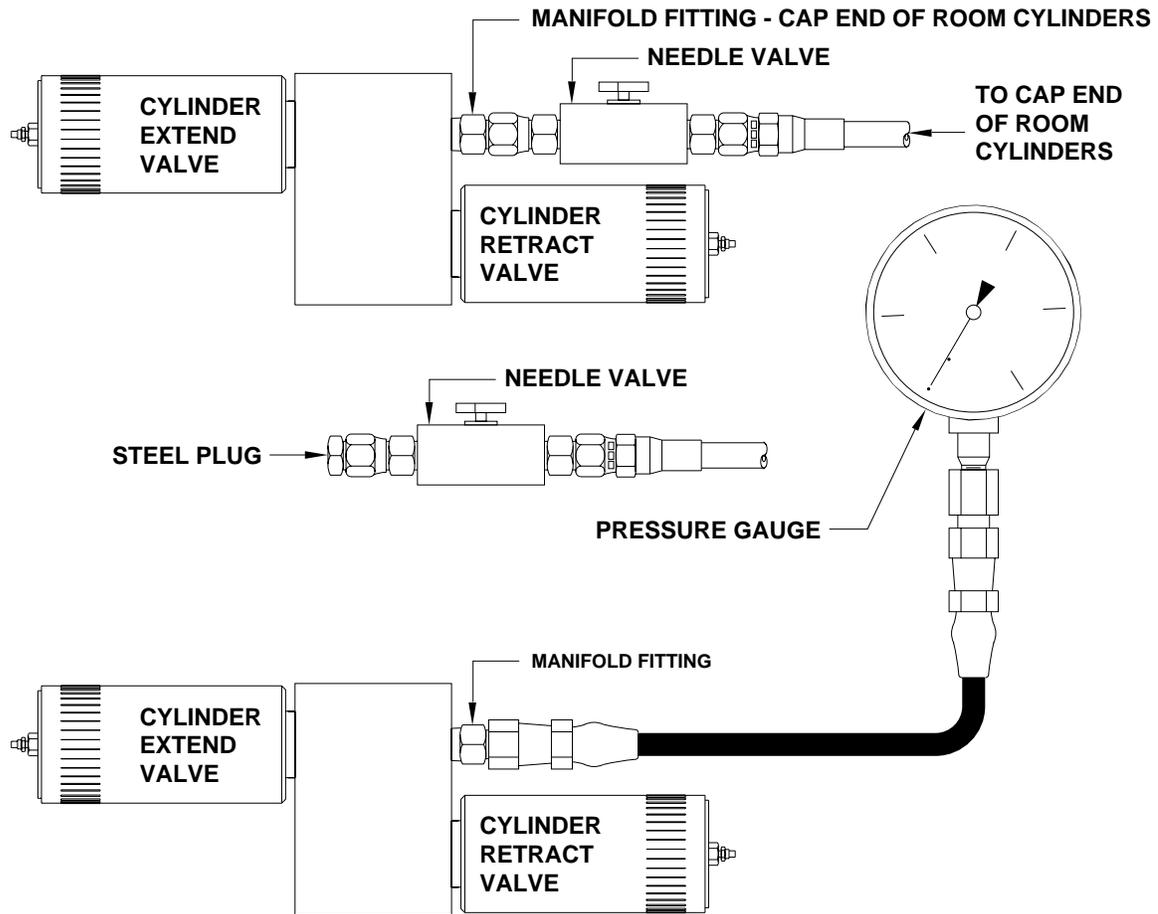


INSTRUCTION SHEET

PRESSURE TEST PROCEDURES FOR ROOM CYLINDER CREEP OUT (A STYLE ROOMS - ROOM CREEP OUT & B STYLE ROOMS - ROOM CREEP IN)



This test is only used for cylinder creep out problems. This test will help to determine if the problem is a leaky cylinder extend solenoid valve or a piston leak in a room cylinder. It is first important to determine if the room is an "A" style room (cylinder extend, room extend) or a "B" style room (cylinder extend, room retract). If the room is an "A" style room, this test is for a room creeping out problem. If the room is a "B" style room, this test is for a room creeping in problem. Refer to the "Instruction Sheet-Room Style Identification" on the reverse side of this sheet to determine what style room you are dealing with.

1. Put the room in the proper position, "A" style room fully retracted or "B" style room fully extended.
2. Install the needle valve assembly between the manifold fitting and the hose for the cap end of the room cylinder(s) as shown. Make sure the needle valve is open.
3. While holding the room control switch to retract for an "A" style room or extend for a "B" style room, completely close the needle valve. Have the room control switch released when the valve is closed.
4. Immediately remove the needle valve assembly from the manifold fitting. Use the steel plug supplied with the kit to plug the needle valve fitting. DO NOT remove the hose from the needle valve.
5. Attach the pressure gauge to the manifold fitting.

Important: Steps 4 and 5 need to be done as rapidly as possible after the room control switch is released and the pump shuts off.

6. Leave the system in this position for several hours or as long as it takes to complete the test. If the pressure gauge shows an increase in pressure (500+ psi) the cylinder extend valve is leaking. If the room creeps ("A" style out or "B" style in), the leak is in a room cylinder. It is important to note that a leaky room manifold check valve can allow a room to "loosen" or seem to creep a very slight amount. If this happens be sure to relay this information to HWH Technical Service when you contact them. If the room does not creep and the pressure gauge shows no increase in pressure, reconnect the needle valve to the manifold fitting, cycle the room several times and repeat the test. If the second test shows no definite problem, contact HWH technical service before continuing. Important: You should contact HWH technical service with the test results before ordering parts or completing the repair.

INSTRUCTION SHEET

ROOM STYLE IDENTIFICATION

HWH has two basic styles of room extensions. They are simply the "A" style and "B" style rooms. This is not the actual mechanism name, HWH manufactures many different types of mechanisms. There are single cylinder, dual cylinder, under floor slides, above floor slides, chain driven mechanisms, etc.

No matter what kind of mechanism it is, it falls within one of two categories. If the room extends when the room cylinder extends, it is an "A" style room. The room will retract when the room cylinder retracts. If the room extends when the room cylinder retracts, it is a "B" style room. The room will retract when the room cylinder extends.

When doing repairs or diagnosing room issues, it may be important to know which style of room, "A" or "B", you are dealing with. The following descriptions will help you identify the style of room you are working on.

Important: Some mechanisms that use a HWH cylinder are not designed nor manufactured by HWH. Contact the mechanism manufacturer to obtain operating style information.

Rail type mechanisms, either single or multiple cylinder mechanisms, are "A" style rooms. This includes under floor or in floor mechanisms.

Single cylinder above floor, hat or tube guided mechanisms, manufactured by HWH are "A" style rooms.

The **single cylinder cable driven** bed slide used by Four Winds is a "B" style room.

The **vertical arm** or scissors type mechanisms are "A" style rooms. These mechanisms mount to the floor.

The **four cylinder** rooms where the four room cylinders attach directly to the outer wall of the vehicle are "A" style rooms.

The **four cylinder train drive** rooms are "B" style rooms. Only Foretravel and Country Coach used these.

X-arm rooms are "B" style rooms. The x-arm mounts to the outer wall of the vehicle. The main arms are driven with a roller chain assembly and form a large X when the room is retracted.

All **universal** mechanisms are "B" style rooms. The universal rooms have a top and bottom roller chain assembly. There are no metal arms. Early universal mechanisms had the top chain closer to the middle of the room.

Lateral arm mechanisms mount directly to the outer wall of the vehicle. The mechanism cylinder drives a linkage assembly. There are two arms that attach to the room which the linkage assembly moves in unison. If the main arms that attach to the room **slant down**, the room is an "A" style room. If the main arms that attach to the room **slant up**, the room is a "B" style room.

To view the different room mechanisms go to "Room Extension Identification" under "Customer Support & Technical Service" at www.hwh.com.