



# **MANUAL SET UP OR REPAIR SYNCHRONIZING PROCEDURE FOR ROOM EXTENSIONS**

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# MANUAL SET UP OR REPAIR SYNCHRONIZING PROCEDURE FOR ROOM EXTENSIONS (PAGE 1 OF 2)

The following information is for multiple cylinder room extension mechanisms that use a synchronizing cylinder.

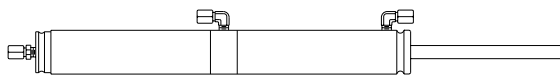
Anytime a room cylinder, a synchronizing cylinder or a room extension hose assembly is replaced, the synchronize procedure should be followed. Severe racking of the room and damage to the room or coach can occur if the system is not synchronized properly.

There are two basic types of room extension mechanisms: Type A: This mechanism will extend the room when the room cylinders extend. The room will retract when the room cylinders retract. Type B: This mechanism will extend the room when the room cylinders retract. The room will retract when the room cylinders extend.

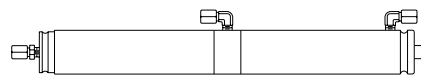
The basic synchronizing procedure is the same for either type of room mechanism. No matter which type of room is being repaired, the first motion during the synchronizing procedure, after making the repair, is to extend the room cylinders. If working on a type A room mechanism, the room control switch is pushed to ROOM EXTEND to extend the room cylinders when starting the synchronizing procedure. If working on a type B room mechanism, the room control switch is pushed to ROOM RETRACT to extend the room cylinders when starting the synchronizing procedure.

**FIRST:** All room cylinders must be disconnected from the room mechanism or if easier, the mechanism can be disconnected from the room. There must be ample room to run the cylinders or mechanisms without interfering with the coach or room when synchronizing the system. The room cylinders must be completely synchronized before they are reattached to the room.

**SECOND:** The synchronizing cylinder must be fully retracted before extending the room cylinders the first time after the repair.



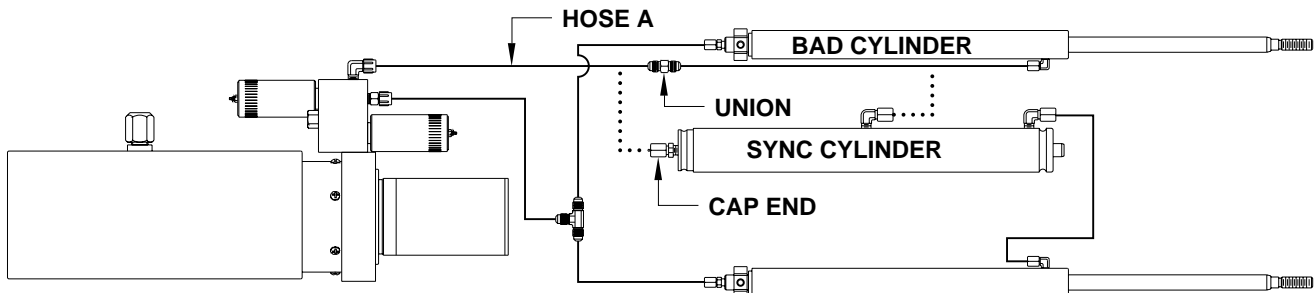
**SYNC CYLINDER  
EXTENDED**



**SYNC CYLINDER  
RETRACTED**

If replacing a sync cylinder, this is easily done by retracting the room cylinders before replacing the sync cylinder. The new sync cylinder will be shipped fully retracted and should be installed in that position.

If replacing a room cylinder, the new cylinder will be shipped fully retracted. Do not try to extend the replacement room cylinder before installing it. Extend the existing room cylinders before replacing the bad cylinder. This will retract the sync cylinder. The room cylinders can be extended before or after disconnecting the cylinders from the mechanism or the mechanism from the room, whichever is easier. In some cases, after extending the room cylinders, the bad cylinder may have to be retracted to remove it from the mechanism. This can be accomplished by removing hose A from the cap end of the sync cylinder. Then remove the hose between the sync cylinder and the bad cylinder at the sync cylinder. Connect the two hoses together with a union and push the room control switch to retract the cylinder. When the cylinder is retracted, reattach the hoses to the sync cylinder in the proper position.



**HOSE TIGHTENING PROCEDURE:** When tightening a new hose end onto a fitting, first make the hose end snug onto the fitting with the flare of the fitting and hose end touching. Tighten the hose end 1/3 of a turn, 2 flats of the fitting. When tightening an existing hose end onto a fitting, make the hose end snug onto the fitting with the flare of the fitting and hose end touching. Tighten the hose end about 1/4 of a turn or between 1 and 1 1/2 flats of the fitting.

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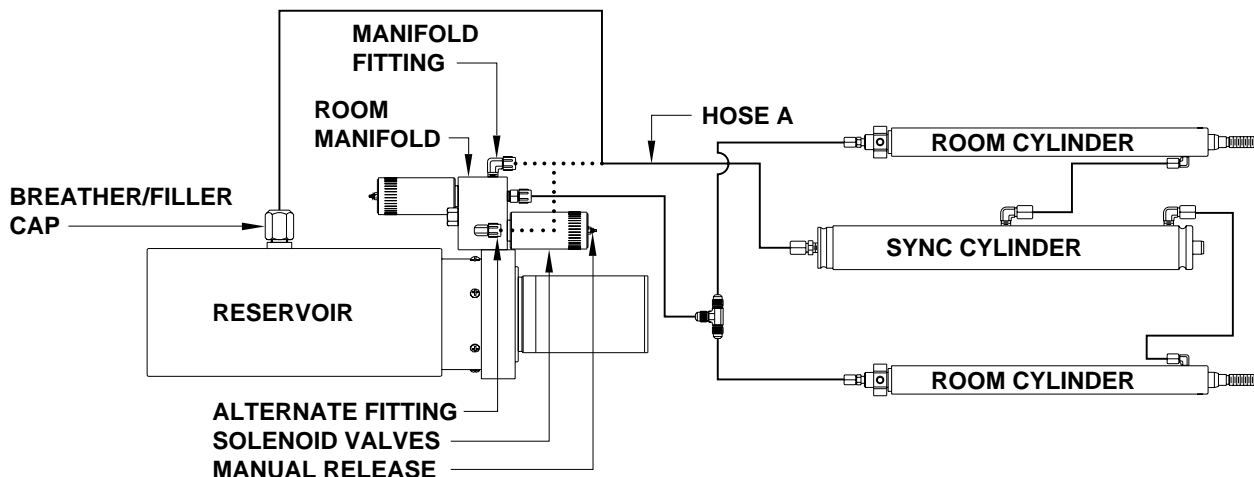
## MANUAL SET UP OR REPAIR SYNCHRONIZING PROCEDURE FOR ROOM EXTENSIONS (PAGE 2 OF 2)

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**THIRD:** After replacing the faulty part, disconnect hose A from the room manifold and cap the manifold fitting with a steel cap. Remove the breather/filler cap and direct hose A into the reservoir. Hose A may be directed into a bucket but if this is done, maintaining the reservoir fluid level will be critical.

**NOTE:** Make sure the reservoir is filled within 1 inch of the top of the reservoir and maintain this level while synchronizing the system. **DO NOT** allow the fluid level to become too low. This will introduce air into the system and slow the synchronizing process.

**NOTE:** Always relieve the pressure in the system before removing hoses. This decreases the chances of causing hydraulic spills. This is done by opening the manual release on the solenoid valves. The large valves have a T-handle. Turn the T-handle counter-clockwise until the T-handle stops turning. The small valves have a 1/4" release nut. **DO NOT** exceed 4 and 1/2 full turns counter-clockwise. The new style large valve has a dust cap in the center that has to be removed. Turn the 1/4" nut one full turn counter-clockwise. **DO NOT** over tighten the manual release when closing the valve.



**NOTE:** On many systems, hose A goes to an alternate fitting that may be on either end of the room manifold.

**FOURTH:** Push the room control switch to extend the room cylinders. Continue to hold the switch about five (5) seconds after all room cylinders are fully extended. Reconnect hose A to the room manifold fitting. Extend and retract the room cylinders until they are moving synchronized plus at least 3 complete cycles. Hold the room control switch about five (5) seconds each time the cylinders are fully extended or retracted. The cylinders **MUST** be moving synchronized before reattaching them to the room.

When all the room cylinders are moving synchronized, reattach the cylinders to the room or reattach the mechanisms to the room so the room can be extended and retracted. **PAY CLOSE ATTENTION TO THE ROOM WHEN FIRST EXTENDING AND RETRACTING THE ROOM AFTER REATTACHING THE CYLINDERS TO THE ROOM. IF EITHER SIDE OF THE ROOM STOPS MOVING, OR THE ROOM STARTS TO RACK MORE THAN ONE (1) INCH, RELEASE THE CONTROL SWITCH IMMEDIATELY.** Extend and retract the room several times to make sure the room is moving fairly smooth. One (1) inch or less of a racking motion is acceptable. Always hold the room control switch to the extend or retract position for several seconds after the room is fully extended or retracted.

The only adjustment, if any, that may need to be made after replacing a room cylinder is the out stop adjustment for the room. When replacing a sync cylinder, no adjustment to the room should be necessary after the repair is complete.