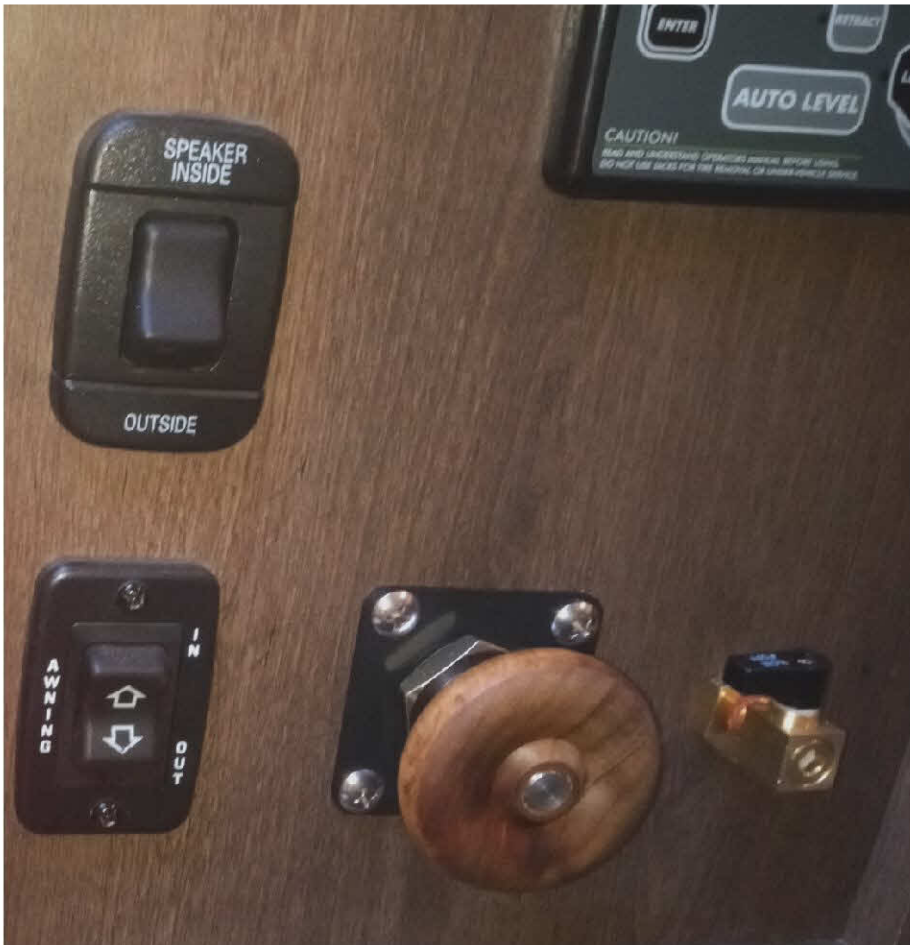


YANDINA RV PNEUMATIC DEADBOLT KIT INSTALLATION.

Patent Pending.

The Yandina air operated lock consists of a main air cylinder connected by a single 1/4" plastic tube to up to 12 storage lockers on RVs, work trucks, boats. With one stroke, all can be locked or unlocked from the main cylinder located within the secure premises. The deadbolt pistons do not hold the doors closed, they only limit the amount of movement if the existing door latch has been released.

Remember main control, PUSH door OPEN, PULL door SHUT.



To unlock all cylinders, open the air valve and pull the piston out, then close the valve and push in the main piston and hold while they operate.

To lock all cylinders, all the doors must be closed and latched, then pull the main piston out.

The Yandina pneumatic deadbolt does not maintain any air pressure. Friction in the lock pistons holds them in place.

Install Main Cylinder:

The main cylinder can mount on any surface with sufficient space behind it for the cylinder. Additional mounting surface space is needed in the vicinity for the manual vent valve.

If the mounting surface thickness is 1/8" to 3/8" and robust you can mount the main in a 30 mm (1 3/16") hole using the supplied 30mm hole saw, and use the mounting flange for stiffening if needed. Otherwise drill a 2" hole and attach with the mounting flange using 4 supplied #14 x 1/2" stainless self tapping screws.

Leaving the piston rod nut in place and being careful to avoid crossed threads, attach the wooden handle until the shaft end is flush then set in place with the nut. Assemble the 1/2" NPT to 1/4" tube fitting to the non-shaft end farthest from the mounting after discarding both cylinder shipping plugs.



Assemble the vent valve to the flange fitting. Use optional Teflon tape if needed. Remove and discard the Schrader valve core if still there and assemble to the relief valve. (A bobby pin works as a tool to remove the valve.) Discard the removable cap. This fitting will provide a connection for compressed air if needed for tracing leaks.

Drill a 9/16" hole and mount the assembly using a stainless washer each side of the hole. Connect the cylinder to the valve with 1/4" tubing. You will cut this tube and install a splitter later on when you add the first deadbolt.

Air leaks should be avoided. The plastic tube connections are push fit. Sometimes they feel like they hit bottom but push harder to make sure. Then test, you should not be able to pull the plastic out of the fitting without pressing the release ring. Check for leaks (see below) after **each** lock is installed, diagnosing leaks gets much more tedious after making multiple connections.

Apply air pressure to the tire Schrader valve fitting to help trace leaks if needed. If something goes wrong and a lock fails to open, you can apply up to 100 psi through the valve Schrader fitting to crack it loose.

Do not lubricate the pistons, even a very light oil will dry out or collect dirt and restrict motion. If necessary, use WD40 to wash off oil or grease.

Install Pneumatic Deadbolts:

Attach the 1/4" tube fitting with the M5 nylon washer to the end adjacent the piston rod. Hand tighten only, they break off easily if you use a wrench. Suction ejects/locks the deadbolt, pressure retracts/unlocks it. Assemble to the mounting bracket and tighten securely.

The deadbolt mounts on the door so that when extended it projects over the door jamb preventing the door from opening. It does not hold the door shut, it just limits motion if the latch is released. It should not contact anything that would add friction.



The deadbolt is mounted so when **retracted**, the piston clears the door jamb with up to 1/8" clearance as it closes. Use duct tape to reposition it until the retracted bolt just clears the door jamb and then screw in place. Do not use the existing latch as a guide.

When locked, the extended deadbolt should allow 1/8" to 1/4" free door motion before blocking it after the latch is undone. Add spacers under the mounting bracket if needed to guarantee clearance.

Run the 1/4" plastic tube from the lock past a door hinge and attach to the door to minimize flexing. Route to the nearest existing tube or the tube on the main cylinder and connect with the supplied splitter.

Before locking, first check operation is working fine with the door open! Extend the bolt manually about 1/4" and see that it contacts the door jamb as you close the door. Once clear you should still be able to close the door at least another 1/4" so the bolt ends up inside of the jamb.

Check for leaks before adding more locks, tracking a leak with multiple locks can be very tedious. Use the relief valve to position the main piston rod with ample room for the pressure test. Apply a good momentary pressure and release on the main piston and note its final position. Then repeat but hold the pressure for 10 seconds before releasing and check it returns to the same spot. If there is a leak the return will be short of the previous final position due to air escaping. If needed use compressed air into the relief valve Schrader fitting up to 100 psi to find your leak with soapy water.