

This is a legacy product document supported by Resideo. It is no longer manufactured

VCZZ1, VCZZ6 SERIES

REPLACEMENT CARTRIDGES FOR 2-WAY & 3-WAY VC VALVES

INSTALLATION INSTRUCTIONS

Models:



Models:

Replacement Cartridge		Valve to be Serviced		
Model No.	X-code	Model No.	X-code	Cv
VCZZ1032/U	X15091317010	VCZAS1000	X13680258010, X13680551010	7.0
		VCZAS1132	X13680258020, X13680551020	6.6
		VCZAA1132	X13680506010, X13680553010	3.3
VCZZ1132/U	X15091317010	VC6930BB1132	X13611047020	3.3
		VC6930AR1132	X13611051010	6.6
		VC6930AL1132	X13611049010	4.7
VCZZ1432/U	X15091317030	VCZAA1432	X13680506020, X13680553020	2.3
VCZZ1532/U	X15091317040	VCZAA1532	X13680506040, X13680553040	0.6
VCZZ1632/U	X15091317050	VCZAA1632	X13680506030, X13680553030	1.1
VCZZ1832/U	X15091317110	VC6930BB1832	X13611047010	1.9
VCZZ6032/U	X15091317060	VCZMS6000	X13680259010, X13680552010	9.0
VCZZ6132/U	X15091317080	VCZNL6132	X13680509010, X13680556010	7.4
		VCZNE6132	X13680508010, X13680555010	8.3
		VCZMS6132	X13680259020, X13680552020	7.4
		VCZMA6132	X13680507010, X13680554010	3.8
		VC6934NB6132	X13611060030	3.8
		VC6934MA6132	X13680561010	3.8
		VC6934MK6132	X13611061010	6.6
VCZZ6432/U	X15091317080	VC6934ML6132	X13680562010	6.6
		VC6930NB6132	X13611048020	3.8

Replacement Cartridge		Valve to be Serviced		
Model No.	X-code	Model No.	X-code	Cv
VCZZ6532/U	X15091317090	VC6930MK6132	X13611050010	6.6
		VCZMA6432	X13680507020, X13680554020	2.7
		VCZMA6532	X13680507040, X13680554040	0.7
		VC6934NB6532	X13611060010	0.7
		VC6934MA6532	X13680559010	0.7
VCZZ6632/U	X15091317100	VCZMA6632	X13680507030, X13680554030	1.5
		VC6930NB6632	X13611048010	1.5
VCZZ6832/U	X15091317120	VC6934NB6832	X13611060020	2.2
		VC6934MA6832	X13680560010	2.2

Cross-Reference:

Valve to be Serviced			Replacement Cartridge	
X-code	Model No.	Cv	X-Code	Model No.
X13611047010	VC6930BB1832	1.9	X15091317110	VCZZ1832/U
X13611047020	VC6930BB1132	3.3	X15091317020	VCZZ1132/U
X13611048010	VC6930NB6632	1.5	X15091317100	VCZZ6632/U
X13611048020	VC6930NB6132	3.8	X15091317070	VCZZ6132/U
X13611049010	VC6930AL1132	4.7	X15091317020	VCZZ1132/U
X13611050010	VC6930MK6132	6.6	X15091317070	VCZZ6132/U
X13611051010	VC6930AR1132	6.6	X15091317020	VCZZ1132/U
X13611060010	VC6934NB6532	0.7	X15091317090	VCZZ6532/U
X13611060020	VC6934NB6832	2.2	X15091317120	VCZZ6832/U
X13611060030	VC6934NB6132	3.8	X15091317070	VCZZ6132/U
X13611061010	VC6934MK6132	6.6	X15091317070	VCZZ6132/U
X13680258010	VCZAS1000	7.0	X15091317010	VCZZ1032/U
X13680258020	VCZAS1132	6.6	X15091317020	VCZZ1132/U
X13680259010	VCZMS6000	9.0	X15091317060	VCZZ6032/U
X13680259020	VCZMS6132	7.4	X15091317070	VCZZ6132/U
X13680506010	VCZAA1132	3.3	X15091317020	VCZZ1132/U
X13680506010	VCZAA1132	3.3	X15091317020	VCZZ1132/U
X13680506020	VCZAA1432	2.3	X15091317030	VCZZ1432/U
X13680506030	VCZAA1632	1.1	X15091317050	VCZZ1632/U
X13680506040	VCZAA1532	0.6	X15091317040	VCZZ1532/U
X13680507010	VCZMA6132	3.8	X15091317070	VCZZ6132/U
X13680507010	VCZMA6132	3.8	X15091317070	VCZZ6132/U
X13680507020	VCZMA6432	2.7	X15091317080	VCZZ6432/U
X13680507030	VCZMA6632	1.5	X15091317100	VCZZ6632/U
X13680507040	VCZMA6532	0.7	X15091317090	VCZZ6532/U



95C-10934-005

Cross-Reference:

Valve to be Serviced			Replacement Cartridge	
X-code	Model No.	Cv	X-Code	Model No.
X13680508010	VCZNE6132	8.3	X15091317070	VCZZ6132/U
X13680509010	VCZNL6132	7.4	X15091317070	VCZZ6132/U
X13680551010	VCZAS1000	7.0	X15091317010	VCZZ1032/U
X13680551020	VCZAS1132	6.6	X15091317020	VCZZ1132/U
X13680552010	VCZMS6000	9.0	X15091317060	VCZZ6032/U
X13680552020	VCZMS6132	7.4	X15091317070	VCZZ6132/U
X13680553010	VCZAA1132	3.3	X15091317020	VCZZ1132/U
X13680553010	VCZAA1132	3.3	X15091317020	VCZZ1132/U
X13680553020	VCZAA1432	2.3	X15091317030	VCZZ1432/U
X13680553030	VCZAA1632	1.1	X15091317050	VCZZ1632/U
X13680553040	VCZAA1532	0.6	X15091317040	VCZZ1532/U
X13680554010	VCZMA6132	3.8	X15091317070	VCZZ6132/U
X13680554010	VCZMA6132	3.8	X15091317070	VCZZ6132/U
X13680554020	VCZMA6432	2.7	X15091317080	VCZZ6432/U
X13680554030	VCZMA6632	1.5	X15091317100	VCZZ6632/U
X13680554040	VCZMA6532	0.7	X15091317090	VCZZ6532/U
X13680555010	VCZNE6132	8.3	X15091317070	VCZZ6132/U
X13680556010	VCZNL6132	7.4	X15091317070	VCZZ6132/U
X13680559010	VC6934MA6532	0.7	X15091317090	VCZZ6532/U
X13680560010	VC6934MA6832	2.2	X15091317120	VCZZ6832/U
X13680561010	VC6934MA6132	3.8	X15091317070	VCZZ6132/U
X13680562010	VC6934ML6132	6.6	X15091317070	VCZZ6132/U

TO REPLACE CARTRIDGE

IMPORTANT

Installation of a replacement cartridge requires draining the hydronic system or isolating the valve from the system.

With the VC actuator mounted on the VC valve body, put the manual lever in the open (down) position to allow system flushing. On 3-way valves, put the lever in the closed (up) position to flush the B-port piping. This may be done with or without electrical hook-up.

Alternatively, reusable flush caps, Honeywell part # 272866, may be purchased separately for use in initial flushing of dirty hydronic systems.

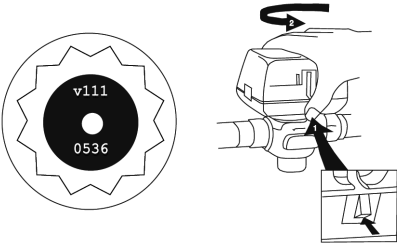


Fig. 1.

Fig. 2.

INSTALLATION

CAUTION

- 1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
- 2. Always conduct a thorough checkout when installation is completed.

IMPORTANT

For trouble-free operation of the product, good installation practice must include initial system flushing, chemical water treatment, and the use of a 50 micron (or finer) system side stream filters.

Do not use boiler additives, solder flux and wetted materials which are petroleum based or contain mineral oil, hydrocarbons, or ethylene glycol acetate. Compounds which can be used, with minimum 50% water dilution, are diethylene glycol, ethylene glycol, and propylene glycol (anti-freeze solutions).

VC-series valves are serviced by replacing the control cartridge. This rebuilds the valve and restores it to factory conditions.

Two-way cartridges fit all two-way bodies. Three-way cartridges fit all three-way bodies. The Cv rating of a valve can be changed by replacing the cartridge, allowing for unique combinations.

- 1. Check replacement part number for match with the old cartridge assembly for suitability with your valve. (See Figure 1 for location of cartridge type identity.) Cartridges with silver, 14 lbf. springs are marked "VCxx". Cartridges with red, 20 lbf. springs are marked "V1xx" and directly replace 14lbf. models.

NOTE: VCZZ1 series cartridges are used for 2-way VC valves. VCZZ6 series cartridges are used for 3-way VC valves.

- 2. Disconnect power supply before servicing to avoid electrical shock or equipment damage. On 24V systems, never jumper the valve coil terminals, even temporarily. This may damage the thermostat.
- 3. Depending on the installation, it may be necessary to disconnect leadwires to valve actuator, or depress tab on Molex™ connector and remove. Where appropriate, label wires for rewiring.
- 4. Remove valve actuator by pressing up on the latch mechanism located directly below the white manual open lever with thumb (See Figure 2). Simultaneously press the actuator down towards the valve body with moderate hand force and turn the actuator counter-clockwise by 1/8 turn (45°). Lift actuator off the valve body.

IMPORTANT

Note whether the existing cartridge is flush with the top of the valve body, or if the top flange is exposed. The new cartridge will fit either body style, but must be installed the same way.

5. To replace a cartridge, isolate flow to the valve using installed shutoff valves or other service equipment designed for this purpose. Remove old cartridge with 40007029-002 wrench supplied with the replacement unit (See Figure 3). It may be necessary to use pliers or other tools to remove the old cartridge due to calcium or dirt buildup in the valve body.

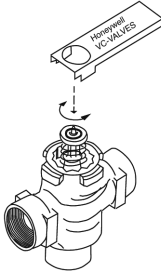


Fig. 3.

6. Clean the valve surfaces marked * (all valves) and ** (3-way valves only) in Figure 4 to ensure the new cartridge O-rings seal at these points. Use care to avoid damage to these surfaces.

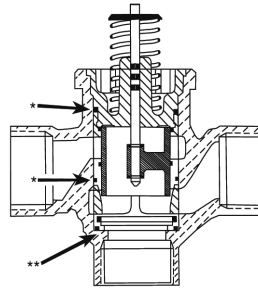


Fig. 4.

7. Remove the pre-lubricated cartridge assembly from its plastic bag or clamshell. Thread it by hand into the valve body and tighten it down with the enclosed wrench until it bottoms out. DO NOT OVER TIGHTEN: maximum torque is 40 in-lb. (4.5 Nm).
8. Replace valve actuator by reversing the process in (4).

NOTE: The actuator head automatically latches to the valve.

9. Reconnect leadwires or Molex™ connector if necessary.
10. Refill hydronic system or restore system flow by opening isolating valves. Restore system pressure slowly to the valve to allow any trapped air to escape.
11. Restore power, and checkout operation of cartridge in valve, making sure of no internal seat leakage or external body leakage.

