

40003916-003 Replacement Powerhead for V4073A Mid-Position Valves

INSTALLATION INSTRUCTIONS

APPLICATIONS

The 40003916 replacement heads are for field replacement of heads in Honeywell V4073 mid position valves. They can be used to replace the valve heads removable without draining the system and also valves which require draining the system. A head which does not require the system to be drained is identified by a small round bump on the cover and the "6" or higher suffix number after the OS number. Also only two screws and two locating pegs are used to connect the head to the body.

For older style heads which require the system to be drained, an adaptor kit 40003918-007 must be used with the 40003916 head.

SPECIFICATIONS

Voltage: 230V ~ 50Hz

Power Consumption: 6W (0.04)

Lead Supplied: 1 metre

Operating Temperature Range: +5 to +88° C

Maximum Ambient Temperature: +52° C

Zone Valve	Replacement Head Number	Adaptor Kit Number
V4073A1005	40003916-003	40003918-007
V4073A1039	40003916-003	40003918-007
V4073A1054	40003916-003	40003918-007
V4073A1062	40003916-003	40003918-007
V4073A1088	40003916-003	40003918-007



INSTALLATION

REMOVING OLD STYLE HEAD FROM OLD STYLE BODY



CAUTION

It is not necessary to remove the valve body from the pipeline but the system must be drained of water before removing the old valve unless isolating valves have been fitted.

This product MUST be installed by a competent person. The installation MUST conform to I.E.E. Regulations and with The Electricity at Work Regulations.

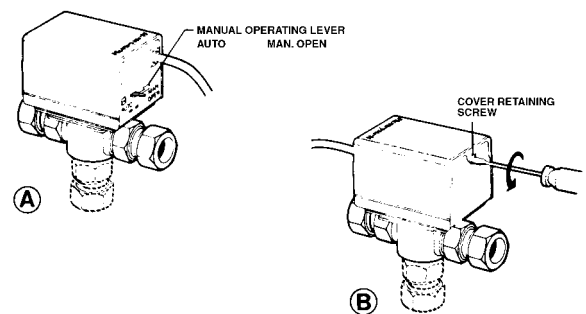


Fig. 1. Removing Cover



1. Switch power supply OFF. Disconnect electrical leads noting the position and colour of each lead.
2. Place the manual operating lever in the "MAN. OPEN" position. (See Fig. 1A.)
3. Remove cover. (See Fig. 1B.)
4. Remove the four screws that secure powerhead to the valve body and remove the powerhead and O-ring. (See Fig. 2.)

V4073A incorporates a manual lever, the lever should normally be in "AUTO" position, but can be moved to "MAN. OPEN" position for system drain down and filling purposes only.

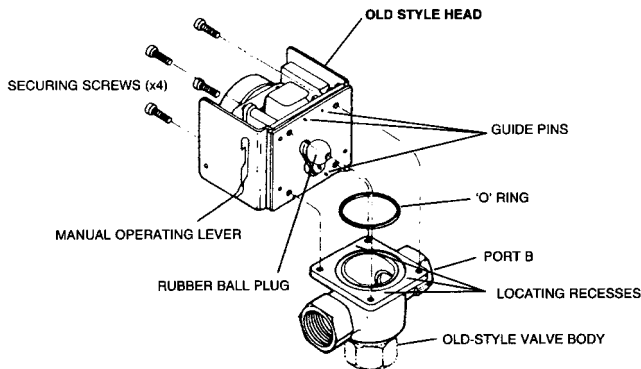


Fig. 2. Removing Powerheads

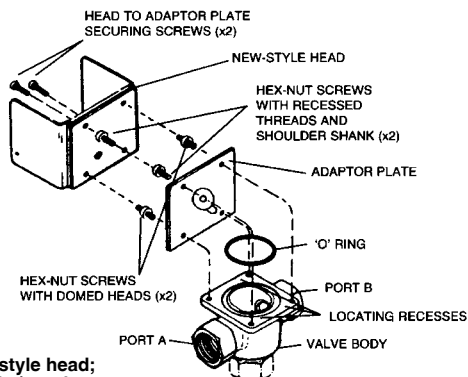


Fig. A. New style head; old style body (requires an adaptor kit)

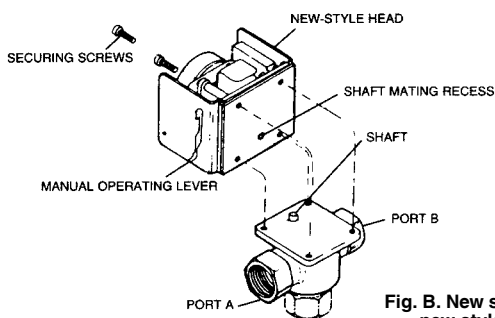


Fig. B. New style head; new style body

Fig. 3. Installing Replacement Heads

INSTALLING REPLACEMENT HEAD ON OLD STYLE VALVE BODY (REQUIRES THE ADAPTOR KIT)

1. Insert the new O-ring (supplied with the Adaptor Kit) into the circular slot on top of the valve body. (See Fig. 3A.)
2. Place the adaptor on the valve body and secure it with the four hex-nut screws provided - ensuring that the three guide pins engage in their mating recesses.
3. Place the manual operating lever of the replacement head in the "MAN. OPEN" position and fit the head onto the valve body assembly - ensuring that the shaft seats correctly.
4. Secure the head to the valve body adaptor assembly with the two screws provided.
5. Reconnect the wiring as shown in Fig. 4 or follow the steps in the section Relay Model Replacement.

REMOVING NEW STYLE HEAD FROM NEW STYLE VALVE BODY (OR OLD STYLE VALVE BODY WITH ADAPTOR)

NOTE: It is not necessary to drain the system if the new style valve body or old style valve body with adaptor remain in the pipeline.

1. Switch power supplies OFF. Disconnect electrical leads, carefully noting the position and colour of each lead.
2. Place the manual operating lever in the "MAN. OPEN" position. (See Fig. 1A.)
3. Remove cover. (See Fig. 1B.) Remove the two screws that secure the head to the valve body assembly and remove powerhead.

INSTALLING NEW STYLE HEAD ON NEW STYLE VALVE BODY ASSEMBLY (OR OLD STYLE BODY WITH ADAPTOR ATTACHED)

1. Place manual operating lever on the replacement head in the "MAN. OPEN" position and fit the head onto the valve body, ensuring that the shaft seats correctly. (See Fig. 3B.)
2. Secure the head to the valve body with the two screws provided and replace cover.

OPERATION AND CHECKOUT

Check the wiring and ensure manual operating lever is in the "AUTO" position. With the time control switched ON, check the valve functions as follows:

1. Switch the room thermostat OFF and set the cylinder thermostat to maximum setting. The boiler and pump should switch ON and the flow pipe to the cylinder begin to warm up. Set the cylinder thermostat to minimum setting. The boiler and pump should go OFF.
2. Set the cylinder thermostat to minimum and room thermostat to maximum setting. The boiler and pump should switch ON. The valve will open to central heating and the radiators begin to warm up. Set the room thermostat to minimum. Boiler and pump should go OFF. However, it is a characteristic of the valve that it will remain in its last port of call and the motor will remain warm.
3. Set the room and cylinder thermostat to maximum. Hot water should flow to both heating and hot water. RESET BOTH THERMOSTATS TO DESIRED SETTINGS.

RELAY MODEL REPLACEMENT

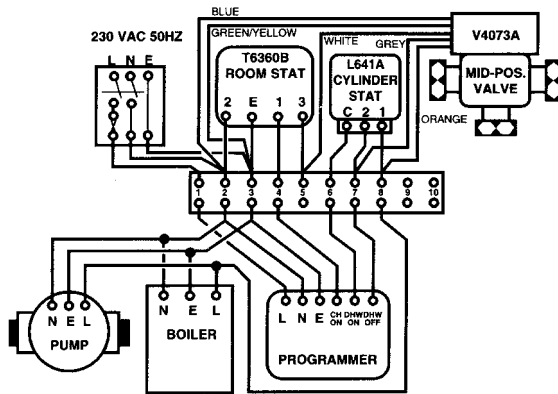


Fig. 4. Wiring Diagram

When replacing the old 6 wire valve with relay, wire the new valve colour-for-colour apart from the Brown wire which is missing from the new valve.

ON SINGLE OUTPUT TIME SWITCHES

Omit Brown wire and reverse C&1 on the cylinder thermostat.

ON DOUBLE OUTPUT PROGRAMMERS

(i.e. separate switching outputs for Heating and Hot water circuits)

Omit Brown wire and reverse C&1 on the cylinder thermostat.

1. For Programmers capable of selecting heating only: **Run extra cable from the Grey wire on the valve to the HOT WATER OFF terminal on the programmer.**
2. For Programmers NOT capable of selecting heating only: **This extra cable is NOT required and MUST NOT be included.**

EXCEPT**1. ON RANDALL 4033 PROGRAMMER**

Remove wire that connects to cylinder thermostat 1 at junction box end and reconnect to orange wire connection of mid-position valve. Disconnect wire at terminal 1 on programmer, isolate and make safe. Add link in programmer back plate between terminals 1 and 6. NB. If the Randall 4033 has been used as a junction box, any wires going into terminal 1 should be removed and re-connected into a spare terminal connector. (Not supplied by Honeywell.)

2. ON SANGAMO 410 FORM 1 PROGRAMMER

Follow instructions for Randall 4033, except on Programmer base plate, disconnect wire on terminal 3 and add link between 3 and 6 on base plate of programmer.

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The wiring diagrams and installation instructions in this publication are provided for guidance purposes when installing recognised standard systems only. Any application of this product not shown here, or any deviation from these instructions, is neither recommended nor advised. Any such application or deviation should be referred to Honeywell for technical assistance.

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95C-10656—07 M.S. Rev. 10-13
Printed in United States

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