INSTALLATION INSTRUCTIONS

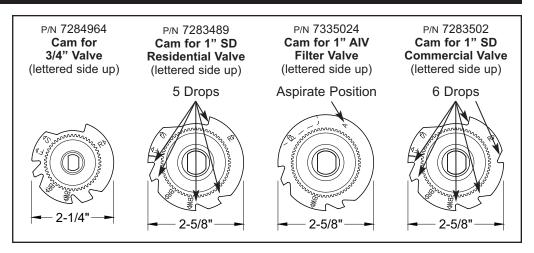
Dealer Replacement Motor/Metal Geared Cam Kit

MOTORS AND GEARED CAMS MUST BE REPLACED AS A SET

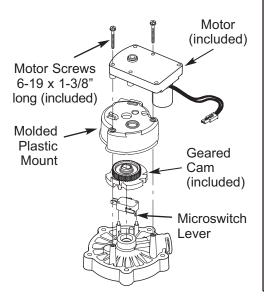
IMPORTANT: If the geared cam on your system's valve is black plastic (not silver colored metal), it is incompatible with the new motor contained in this kit. When replacing an old motor and/or an old geared cam, you must replace both with the ones provided in this kit.

DETERMINE WHICH CAM TO USE

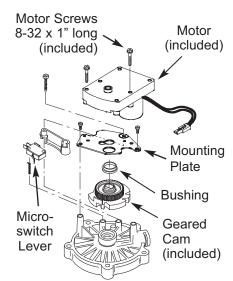
Compare the diameter and number of drops (notches) of the existing cam in your system's valve to determine which new cam to use. Use the same size and type new cam (see illustration at right).



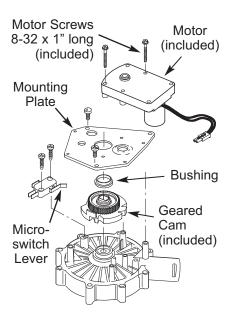
3/4" VALVE WITH MOLDED PLASTIC MOUNT



3/4" VALVE WITH METAL MOUNTING PLATE



1" VALVE



- 1. Push the system's bypass valve into the bypass position.
- 2. Unplug the system's power supply from electrical power.
- 3. Remove the top cover to get access to the valve.
- Locate the cable (red and black wires) running from the motor to the electronic control board and unplug the 2-pin connector.
- Remove the motor's mounting screws and lift the motor off the molded plastic mount.
- Lift the plastic mount off the valve cover and set this part aside, as it will be reused.
- 7. Lift the old geared cam off the stem of the valve rotor.
- Examine the hole in the center of the new geared cam and see how it has two flat sides, one longer than the other. Place it gently over the stem of the valve rotor, oriented the same way. Do not press it down yet
- Locate the lever on the microswitch and push it in (toward the switch body). Hold it in this position while gently lowering the geared cam onto the stem.
- Release the microswitch lever. It should be resting in an indent on the side of the cam - not bent down underneath the cam.
- 11. Put the molded plastic mount back in place onto the valve cover.
- 12. Install the new motor (screws provided) onto the mount and valve cover, making sure that the motor stem's teeth engage properly with the new geared cam.
- Plug the new motor's cable (red and black wires) into the corresponding 2-pin connector from the electronic control board.
- 14. Put the top cover back on the system, plug the power supply back into electrical power and place the bypass valve back into service position.
- 15. Start a recharge to make sure the motor runs and is properly engaged to the valve rotor. Advance the valve through all positions until it reaches service again.

- 1. Push the system's bypass valve into the bypass position.
- 2. Unplug the system's power supply from electrical power.
- 3. Remove the top cover to get access to the valve.
- Locate the cable (red and black wires) running from the motor to the electronic control board and unplug the 2-pin connector.
- 5. Remove the motor's mounting screws and lift the motor off the mounting plate.
- Remove the plate's mounting screws and lift the plate off the valve cover. Set these parts aside, as they will be reused.
- 7. Lift the plastic bushing off the old geared cam and set this bushing aside to be reused.
- 8. Lift the old geared cam off the stem of the valve rotor.
- 9. Examine the hole in the center of the new geared cam and see how it has two flat sides, one longer than the other. Place it gently over the stem of the valve rotor, oriented the same way. Do not press it down yet.
- 10. Locate the lever on the microswitch and push it in (toward the switch body). Hold it in this position while gently lowering the geared cam onto the stem.
- 11. Release the microswitch lever. It should be resting in an indent on the side of the cam - not bent down underneath the cam.
- 12. Place the plastic bushing over the center of the new geared cam.
- 13. Reinstall the motor plate with its screws onto the valve cover.
- 14. Install the new motor (screws provided) onto the plate, making sure that the motor stem's teeth engage properly with the new geared cam.
- 15. Plug the new motor's cable (red and black wires) into the corresponding 2-pin connector from the electronic control board.
- 16. Put the top cover back on the system, plug the power supply back into electrical power and place the bypass valve back into service position.
- 17. Start a recharge to make sure the motor runs and is properly engaged to the valve rotor. Advance the valve through all positions until it reaches service again.