



Date: December 20, 1999
Subject: Gas Water Heater Conversion Policy
To: All Accounts

No. 137 Rev. 2

* This supersedes all previous letters and field bulletins concerning residential and commercial water heater conversion.

GAS WATER HEATER CONVERSION POLICY

All A.O. Smith Water Products Company's residential and commercial gas water heaters are designed certified by CSA or UL, under ANSI Standards for operation on one type of gas only, as indicated on the water heater's model number and rating plate.

A.O. Smith realizes that there may be certain situations where a field conversion may be necessary and in order to facilitate such a conversion, A. O. Smith complies with CSA or UL regulations ensuring that a field conversion be appropriately and safely completed.

An improper field conversion from one type of gas to another could cause potentially dangerous conditions that may cause an explosion or fire resulting in property damage, bodily injury or both.

A.O. SMITH WILL ONLY ALLOW THE CONVERSION OF GAS WATER HEATERS FROM LP GAS (PROPANE) TO NATURAL GAS. THE CONVERSION OF A GAS WATER HEATER FROM NATURAL GAS TO LP GAS (PROPANE) IS NOT ALLOWED UNDER ANY CIRCUMSTANCES.

A.O. Smith will provide kits as demand warrants through our Parts Department, phone no. 1-800-433-2545. Prices, dimensions and specifications are subject to change without notice.

Each conversion kit is to be installed by an A.O. Smith service agent or a gas utility serviceman in accordance with A.O. Smith's written instructions and all codes and requirements of the authority having jurisdiction. Failure to follow instructions could result in serious injury or property damage. The utility performing this work assumes responsibility for this conversion.

Changing the Input on Gas Water Heaters

The only changes to the input of a gas water heater allowed are:

- Adjustments to match that shown on the rating plate of the heater. The installation instructions supplied with the heater indicate if adjustments to input are a required procedure.
- Changes made as required to adjust the heater for proper operation at high altitude as determined by a qualified service technician. Service manuals include the proper procedure for adjusting heaters at high altitudes.

Conversion of Gas Water Heaters

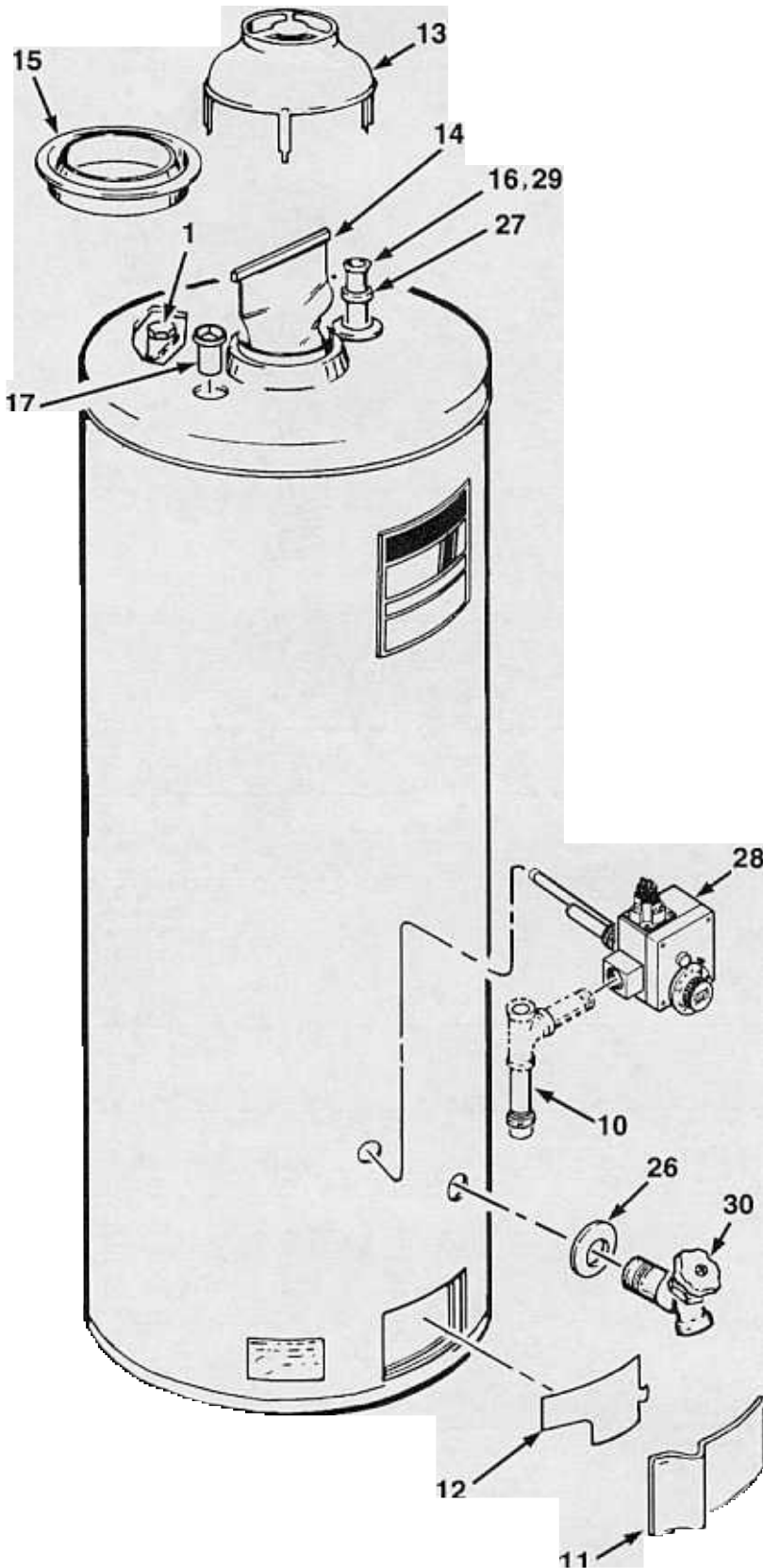
The conversion of LP gas (Propane) to Natural gas is ONLY allowed providing:

- The conversion is done as part of a gas utility's program where propane appliances were installed anticipating the completion of natural gas service to the area. The conversion must be done under the direct supervision of the utility and by their service representatives.

Claims of damage or injury arising from the unauthorized conversion of any A.O. Smith water heater not design certified for conversion will be the complete and total responsibility of the person or entity making the conversion.

If you have any questions regarding the above policy, please contact the A.O. Smith Parts Department at 1-800-433-2545 or our Technical Information Center at 1-800-527-1953.

A.O. SMITH WATER PRODUCTS CO., INC.
5621 W. 115TH STREET • ALSIP, ILLINOIS 60803
PHONE: 1-800-433-2545
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RELIEF VALVE

Temperature & Pressure
 AUTOMATIC (SELF CLOSING) TYPE

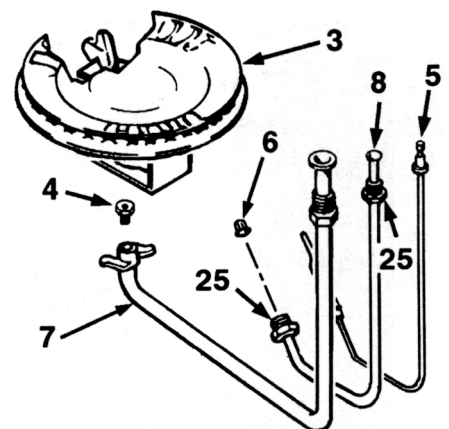
| PRESS. | TYPE | SIZE | TEMP RELIEF |
|----------|-------|-------------|-------------|
| 150 lbs. | T & P | 3/4" X 3/4" | 210° |

PART NO.
 23740-1

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MAIN GAS SHUTOFF

[2] BURNER ASSEMBLY



| Item | Description | FSG/PGX-30 216/217 | FSG/PGX-40 216/217 | FSG/PGX-40C 216/217 | FSG/PGX-50 216/217 |
|------|---|-----------------------|-----------------------|------------------------|-----------------------|
| 1 | ANODE | | | | |
| | FSG Models | 43817-25 | 43817-29 | 43817-29 | 43817-35 |
| | PGX Models | 180618-44 | 180618-42 | ---- | 180618-44 |
| 2 | BURNER ASSEMBLY, MAIN - Natural | 181091-4 | 181087-4 | 181087-4 | 181089-0 |
| | BURNER ASSEMBLY, MAIN - Propane | 181091-5 | 181087-5 | 181087-5 | 181089-1 |
| 3 | Burner Head/Pilot - Natural | 180940 | 180940 | 180940 | 180940 |
| | Burner Head/Pilot - Propane | 180940-1 | 180940-1 | 180940-1 | 180940-1 |
| 4 | Orifice, Main Burner - Natural | 29366-37 | 29366-37 | 29366-37 | 29366-31 |
| | Orifice, Main Burner - Propane | 181510-52 | 181510-52 | 181510-52 | 181510-48 |
| 5 | Thermocouple | 23675 | 23675 | 23675 | 23675 |
| 6 | Orifice, Pilot - Natural | 180814 | 180814 | 180814 | 180814 |
| | Orifice, Pilot - Propane | 180824 | 180824 | 180824 | 180824 |
| 7 | Tube, Main Burner - Natural | 41246-1 | 41246-2 | 41246-2 | 41246-3 |
| | Tube, Main Burner - Propane | 41246-1 | 41246-2 | 41246-2 | 41246-3 |
| 8 | Tube, Pilot | 23330 | 23330 | 23330 | 23330 |
| 9 | * Cover, Cleanout | ---- | ---- | 38445 | ---- |
| 10 | Dirt Leg Assembly - Propane | 181206 | 181206 | 181206 | 181206 |
| | DOOR | | | | |
| 11 | Outer | 180522 | 180522 | 180522 | 180522 |
| 12 | Inner | 180596 | 180596 | 180596 | 180596 |
| 13 | Draft Hood | 39664 | 39664 | 39664 | 39664 |
| 14 | Flue Baffle | 181211 | 181211 | 181211 | 180819 |
| 15 | Flue Restrictor | ---- | ---- | ---- | 34894 |
| | HEAT TRAP (*T* Models) | | | | |
| 16 | Inlet | 181068-33 | 181068-33 | ---- | 181068-35 |
| 17 | Outlet | 181235 | 181235 | ---- | 181235 |
| 18 | * Insulation | ---- | ---- | 43307 | ---- |
| | LABEL | | | | |
| 19 | * Flammable Vapor Warning | 181139 | 181139 | 181139 | 181139 |
| 20 | * Lighting & Operating | 180310 | 180310 | 180310 | 180310 |
| 21 | * Scald Warning | 181138 | 181138 | 181138 | 181138 |
| 22 | * Temperature | 182734 | 182734 | 182734 | 182734 |
| 23 | * Instruction Manual | 181658 | 181658 | 181658 | 181658 |
| 24 | * Instruction Sheet | ---- | ---- | 180879 | ---- |
| 25 | Nut, Compression | 32365 | 32365 | 32365 | 32365 |
| 26 | Pipe Collar | 20172-14 | 20172-14 | 20172-14 | 20172-14 |
| 27 | Spacer, Inlet Tube | 42589-1 | 42589-1 | 42589-1 | 42589-1 |
| 28 | THERMOSTAT | | | | |
| | Natural | 180193-2 | 180193-2 | 180193-2 | 180193-2 |
| | Propane | 180192-2 | 180192-2 | 180192-2 | 180192-2 |
| 29 | Tube, Inlet | 160374-26 | 160374-26 | 160374-26 | 160907-35 |
| | VALVE | | | | |
| 30 | Drain | 42037 | 42037 | 42037 | 42037-1 |
| 31 | Main Gas Shutoff | 181737 | 181737 | 181737 | 181737 |
| | SMR S44 | | | | |
| 16 | Heat Trap, Inlet | 181295-33 | 181295-33 | ---- | 181295-35 |
| 29 | Tube, Inlet | 160375-26 | 160375-26 | 160375-26 | 160501-35 |
| | SMR H43 | | | | |
| 16 | Heat Trap, Inlet | 181295-33 | 181295-33 | ---- | 181295-35 |
| 29 | Tube, Inlet | 160375-26 | 160375-26 | 160375-26 | 160501-35 |
| | Valve, Relief | 76527 | 76527 | 76527 | 43151 |
| | SMR R99 | | | | |
| 2 | BURNER ASSEMBLY, MAIN - Natural | ---- | ---- | ---- | 181089-6 |
| 3 | Burner Head Assembly | ---- | ---- | ---- | 180940-2 |
| 4 | Orifice, Main Burner - Natural | ---- | ---- | ---- | 29366-34 |
| 23 | Manual, Earthquake Instruction | ---- | ---- | ---- | 181809 |
| | Nox Flame Spreader Assembly - Natural | ---- | ---- | ---- | 181101 |
| | Wing Nut, Flame Spreader | ---- | ---- | ---- | 160629 |
| | SMR S06 | | | | |
| 2 | BURNER ASSEMBLY, MAIN - Natural | ---- | ---- | ---- | 181089-2 |
| 4 | Orifice, Main Burner - Natural | ---- | ---- | ---- | 29366-32 |
| 23 | Manual, Earthquake Instruction | 181809 | 181809 | 181809 | 181809 |
| | SMR S19 | | | | |
| 1 | ANODE | | | | |
| | FSG Models | 43816-42 | 43816-38 | 43816-38 | 43816-44 |
| | PGX Models | 29109-44 | 29109-42 | ---- | 29109-44 |
| | SMR K32 | | | | |
| 2 | BURNER ASSEMBLY, MAIN - Natural | 181091-6 | 181087-6 | 181087-6 | 181089-3 |
| 4 | Orifice, Main Burner - Natural | 29366-40 | 29366-40 | 29366-40 | 29366-33 |
| | SMR S29 | | | | |
| 1 | Anode | ---- | 43816-38 | ---- | 43816-42 |
| | Nipple | ---- | 38460-10 | ---- | 38469-10 |
| | SMR S45 | | | | |
| 1 | Anode, Outlet | 181125-42 | 181125-42 | ---- | 181125-42 |
| | Nipple | 38469-4 | 38469-4 | ---- | 38469-4 |
| | Pipe Plug | 92650 | 92650 | ---- | 92650 |
| | Valve, Relief | 98987 | 98987 | ---- | 98987 |
| | SMR S22 | | | | |
| 10 | Dirt Leg Assembly - Propane | 181206-1 | 181206-1 | 181206-1 | 181206-1 |
| 14 | Flue Baffle | 181211-1 | 181211-1 | 181211-1 | ---- |
| 20 | Label - Lighting & Operating | 161043 | 161043 | 161043 | 161043 |
| 23 | Manual, Instruction | 180586 | 180586 | 180586 | 180586 |
| | Tube, Relief Valve Runoff | 180667 | 180667 | 180667 | 180667 |
| | Valve, Relief | 76527 | 76527 | 76527 | 43151 |
| | SMR P83 | | | | |
| | Valve, Relief | 76527 | 76527 | 76527 | 43151 |

Note: Underlined parts are recommended stock items for emergency replacement. Consider gas used in your area only.

* Not illustrated.

T denotes heat trap models.