

*smartload*<sup>™</sup> Gas Dryer

DGGX1US  
**Installation instructions**

# **WARNING**

**For your safety the information in this manual must be followed to minimize the risk of death, personal injury, fire, explosion, or property damage.**

**Do not store or use gasoline or other flammable vapors and liquids near this or any other appliance.**

## **What to do if you smell gas**

- Do not try to light or start any appliance.
- Do not touch any electrical switch; do not use any telephone in your building.
- Clear the room, building or area of all occupants.
- Immediately call your gas supplier from a neighbor's telephone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

**A qualified installer, service agency or the gas supplier must perform installation and service.**

**The Governor of California is required to publish a list of substances known to the state of California to cause cancer or reproductive harm and requires business to warn customers of potential exposures to such substances.**

**Gas appliances contain or produce substances, which can cause death, or serious illness and which are known to the State of California to cause cancer, birth defects, or other reproductive harm. To reduce the risk from substances in fuel or from fuel combustion, make sure this appliance is installed, operated, and maintained according to the manufacturers instructions.**

# Important safety instructions



To reduce the risk of fire, electric shock, or injury to persons when using your appliance, follow basic precautions, including the following:

1. Read all instructions before using the appliance.
2. Installation and service must be performed by a qualified installer, service agency or the gas supplier.
3. Make sure the power cord is located so that it will not be stepped on, tripped over or otherwise subject to stress or damage.
4. Pressing the POWER button to turn the dryer off, does NOT disconnect the dryer from the power supply, even though the dryer lights are out.
5. Do not operate this dryer if it is damaged, malfunctioning, partially disassembled or has missing or broken parts, including a damaged cord or plug.
6. Do not dry articles that have been previously cleaned in, washed in, soaked in, or spotted with, gasoline, dry-cleaning solvents, other flammable or explosive substances as they give off vapors that could ignite or explode.
7. Close supervision is necessary if this dryer is used by or near children. Do not allow children to play inside, around or with this dryer or any other appliance.
8. Before the appliance is removed from service or discarded, remove the lid and drum door to the drying compartment.
9. Do not reach into the appliance if the drum is moving.
10. Do not install or store this appliance where it is exposed to water and or the weather.
11. Do not tamper with the controls or the lid lock.
12. Do not repair or replace any part of the appliance or attempt any servicing unless specifically recommended in the user-maintenance instructions or in published user-repair instructions that you understand and have the skills to carry out.
13. Unless specifically recommended by their manufacturer, do not use fabric softeners or similar products in a tumble dryer.
14. Do not use heat to dry articles containing foam rubber or similar textured rubber-like materials.
15. Check to see if the lint bucket needs emptying. Empty before the lint reaches the top of the transparent section (usually once a week).
16. Keep area around the exhaust opening and adjacent surrounding areas free from the accumulation of lint, dust, and dirt.
17. Have the interior of the appliance and exhaust duct cleaned periodically by qualified service personnel.
18. Do not place items exposed to cooking oils or other vegetable oils in your dryer. Items contaminated with cooking and other vegetable oils may contribute to a chemical reaction that could cause a load to catch fire.

**SAVE THESE INSTRUCTIONS**

# Read this before you start installing your dryer



This is the safety alert symbol. This symbol alerts you to hazards that can kill or hurt you and others. The safety alert symbol and the word DANGER or WARNING will precede all safety messages. These words mean:



**DANGER**

**You can be killed or seriously injured if you don't immediately follow instructions.**



**WARNING**

**You can be killed or seriously injured if you don't follow instructions.**

All safety messages will identify the hazard, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.

Check to make sure you have all the tools and parts necessary to correctly install this appliance.

## Tools required

- ¼" nut driver or socket wrench
- Phillips screwdriver
- Flat-blade screwdriver
- Adjustable wrench that opens to 1" or 1" hex-head socket wrench (for adjusting the feet)
- Adjustable wrench 8" or 10" (20cm or 25cm) for gas connections
- Level
- Pipe joint compound (pipe dope or tape) for gas pipe connections that is resistant to LP Propane, Butane and Natural Gas
- Caulking gun and compound (for installing new exhaust vent)
- Gloves
- Safety glasses
- Knife
- Duct tape

## Parts supplied

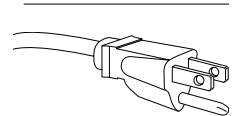
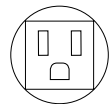
- 2 feet inserts
  - A power supply cord is supplied already connected to the gas dryer
- Check to make sure all parts have been supplied.

## Accessories

- Natural Gas to LP Conversion Kit Part No 395489
- LP to Natural Gas Conversion Kit Part No 395490
- Mobile Home Installation Kit Part No 395488
- Drying Rack Part No 395332P

## Parts needed

Check with local codes and read electrical, gas and venting requirements before purchasing parts.



# To the installer

The correct installation of the dryer is your responsibility.

Be sure you read the following instructions carefully before you start to install the dryer. These instructions should be left with the home owner for future reference.

## It is your responsibility to:

- Observe all governing codes and ordinances.
- Check code requirements. Some codes limit or do not permit installation of clothes dryers in garages, closets, mobile homes or sleeping quarters. Contact your local building inspector.
- Adhere to these installation instructions.
- Allow for spacing requirements with side by side installations (refer page 6).
- Make sure you have all items necessary for correct installation.
- Properly install the dryer.
- Contact a qualified installer to ensure that the electrical and gas installation meets all national and local codes and ordinances.

## Location requirements

 <b>WARNING</b>	
	<p><b>Explosion Hazard</b></p> <p>Keep flammable materials and vapours, such as gasoline, away from the dryer.</p> <p>Place dryer at least 18 inches (46 cm) above the floor for a garage installation.</p> <p>Failure to do so can result in death, explosion, fire, or burns.</p>

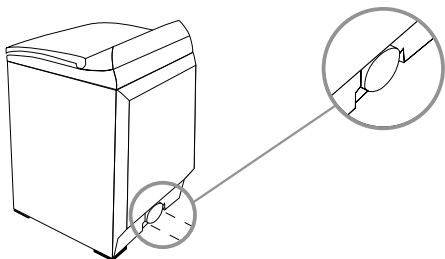
The dryer must be installed or stored in an area which is not exposed to water or weather.

It is extremely important that the dryer is installed in a well ventilated location. This dryer must exhaust air outdoors. Do not install the dryer in any room or closet which does not permit the free flow of replacement air.


Before installing the dryer ensure that there is sufficient height to fully open the lid. Allow sufficient room behind the dryer for the exhaust. The air intake is at the rear of the dryer. Ensure that there is a sufficient air passage on each side of the dryer for intake air.

The area in which the dryer is located must be kept clear and free from combustible materials, gasoline and other flammable vapours and liquids. A dryer produces combustible lint so the area around the dryer must be cleaned regularly to keep it free of lint.

This dryer can only be vented from the rear and must be exhausted to the outdoors.

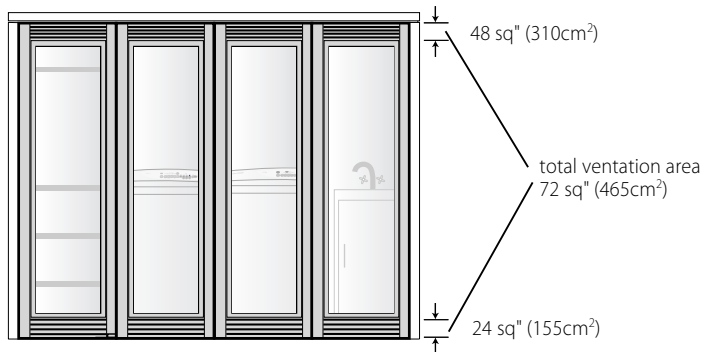
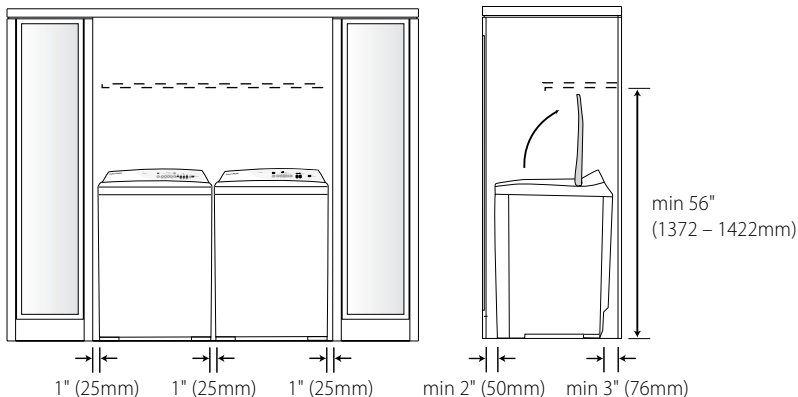


### Alcove or closet installation



**WARNING** When installing a dryer in a closet/alcove it must be exhausted to the outdoors. No other fuel burning appliance can be installed in the same closet or alcove.

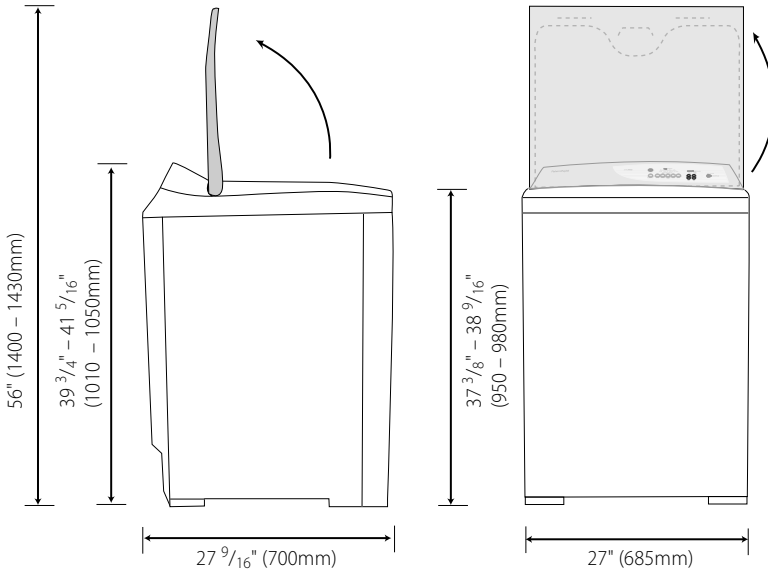
The top opening area in the door must be a minimum of 48 square inches (310cm<sup>2</sup>) and the bottom opening area must have a minimum of 24 square inches (155cm<sup>2</sup>). These openings must never be obstructed (a louvred door with the minimum air opening is acceptable). Minimum installation clearances are required but more clearance is recommended.



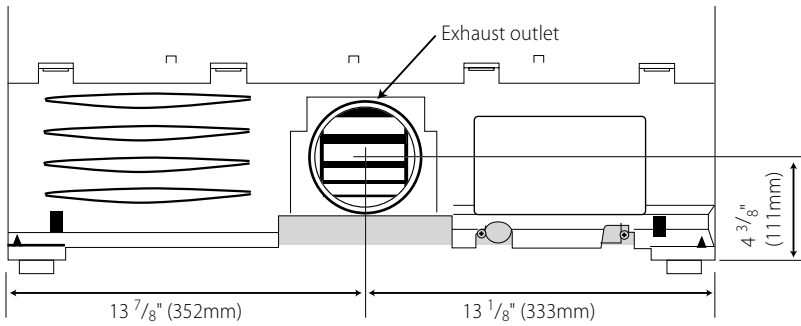
# Dimensions

## Lid clearance

Check that there is enough clearance for the lid to fully open.



## Exhaust outlet location



## Mobile home installation

The installation of the dryer in a mobile home must conform to the Manufactured Home Construction and Safety Standard Title 24 CFR, Part 32-80 {formerly the Federal Standard for Mobile Home Construction and Safety, Title 24 HUD (Part 280), 1975} for the United States.

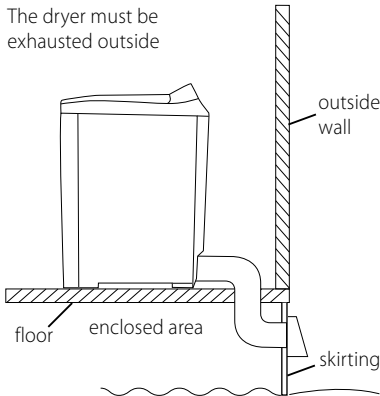
When installing a dryer in a mobile home, provisions for anchoring the dryer to the floor must be made.

A Mobile Home Installation kit is available with instructions (see Accessories page 4). Locate in an area that has adequate make up air (a minimum of 72 square inches of unobstructed opening is required).

Mobile home installations must be exhausted to the outdoors with the exhaust duct termination securely fastened to the mobile home structure, using materials that will not support combustion.

The exhaust duct must not terminate beneath the mobile home. See the section on exhausting for more information.

The dryer must be exhausted outside




The exhaust vent must be securely fastened to a non-combustible portion of the mobile home structure and must not terminate beneath the mobile home.



# Exhausting

The dryer must be exhausted to the outdoors. This will prevent the build up of lint and moisture in the room in which it is located and reduce the risk of fire.

<b>⚠ WARNING</b>	
	<b>Fire Hazard</b> <b>The dryer must be vented to the outdoors.</b> <b>Use rigid or thick wall flexible metal exhaust duct.</b> <b>Do not use a plastic exhaust duct.</b> <b>Do not use a metal foil exhaust duct.</b> <b>Failure to follow these instructions can result in death or fire.</b>

This appliance must always be vented to the outdoors.

Exhaust ducting products can be purchased from your local Appliance store or Hardware store.

Plastic or metal foil flexible duct can kink, sag, be punctured, reduce airflow, extend drying times and affect dryer operation.

A minimum of 4 inch (100mm) thick wall flexible metal or rigid galvanised metal duct must be used. Using ducts larger than 4 inches (100mm) diameter may result in more lint accumulating.

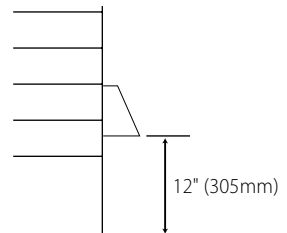
Using straight rigid metal ducting will minimise lint accumulation. Thick wall flexible metal ducting may be used but care must be exercised to avoid sharp bends which may squash the duct & cause blockages. Do not use plastic ducting or thin wall flexible metal ducting.

Use duct tape to secure joints. Do not use screws as they collect lint.

Keep ducting as short and straight as possible. Do not exceed the maximum exhaust duct lengths stated later in these installation instructions.

Do not exhaust the dryer into a chimney or gas vent, a wall, a ceiling or any concealed space in a building. Do not exhaust the dryer under a house or mobile home or a porch, or into a window well or other area that will accumulate lint.

The exhaust duct should end with an exhaust hood with a swing out damper to prevent back drafts and entry of wild life. Never use exhaust hoods with a magnetic damper. The hood should have at least 12 inches (305mm) clearance between the bottom of the hood and the ground or other obstruction. The hood opening should point down. Never install a screen over the exhaust outlet.



To reduce condensation, insulate any ducting which passes through unheated areas. Slope the duct gently downwards to the hood, to drain condensation and reduce lint build up. Avoid sag or loops in the duct as they may collect and store water and accumulate lint.

Before using an existing exhaust duct system for a dryer ensure that:

- No plastic or other potentially combustible duct or flexible metal foil ducting has been used.
- The duct is not pierced, kinked or crushed.
- The duct does not exceed the maximum recommended length for the new dryer.
- The exhaust hood damper opens and closes freely and with sufficient movement.
- Static pressure in the exhaust ducting does not exceed 1 inch (250Pa), or is not less than 0 inches of water column (ie. negative pressure), when measured with a manometer in the first 6 inches of the duct, with the dryer running on Air Dry (no heat) setting.
- The exhaust duct system meets all relevant local, state and national codes.

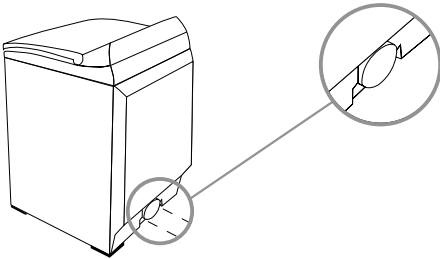
All ducting should be inspected and cleaned at least once a year to remove accumulated lint. Frequently check that the damper on the exhaust hood moves sufficiently and opens and shuts freely.

### Mobile home installations

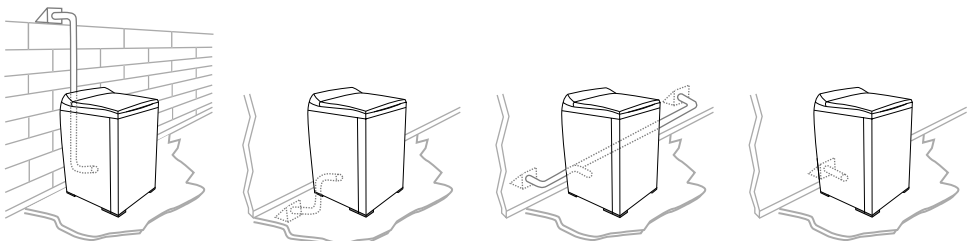
A Mobile Home Installation Kit is available (see Accessories page 4 and notes page 8).

### Determine vent duct length

This dryer can only be vented from the rear and must be exhausted to the outdoors.

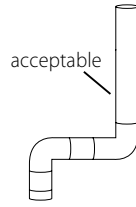
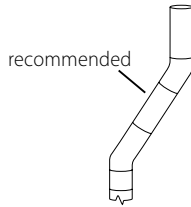


Different types of vent arrangements are shown below.



Choose a route that will provide the straightest and most direct path outdoors. Plan the installation to use the fewest number of elbows and turns.

When using elbows (rigid duct) or making turns (thick wall flexible metal duct), allow as much room as possible. With thick wall flexible metal duct bend duct gradually to avoid kinking and avoid 90° turns.



## Maximum length of exhaust duct

The maximum length of the exhaust duct system depends upon:

- The type of ducts (rigid or thick walled flexible metal).
- The number of elbows or bends used.

1. Refer to the exhaust duct length chart that matches your hood type for the maximum duct lengths you can use. Do not use duct runs longer than specified in the exhaust duct length charts (refer to next page).

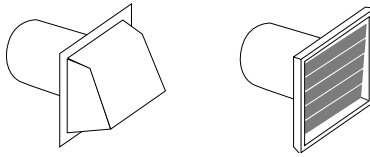
Exhaust duct systems longer than specified will:

- Accumulate lint creating a potential fire hazard.
- Shorten the life of the dryer.
- Reduce performance, resulting in longer drying times and an increased energy usage.

2. Determine the number of elbows/bends you will need.

3. In the column listing the type of metal duct you are using (rigid or thick wall flexible metal), find the maximum length of metal duct on the same line as the number of elbows/bends to be used (refer to next page).

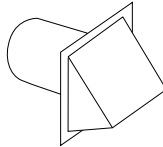
## Preferred 4" Hoods



### When you have a 4" (10cm) Hood

Number of 90° elbows/bends	Maximum length of 4" diameter metal duct.			
	Rigid		Thick Wall Flexible Metal (fully extended)	
0	64ft	19.5m	36ft	10.9m
1	54ft	16.5m	31ft	9.4m
2	44ft	13.4m	27ft	8.2m
3	35ft	10.6m	25ft	7.6m
4	27ft	8.2m	23ft	7.0m

### Acceptable 2 1/2" Hood



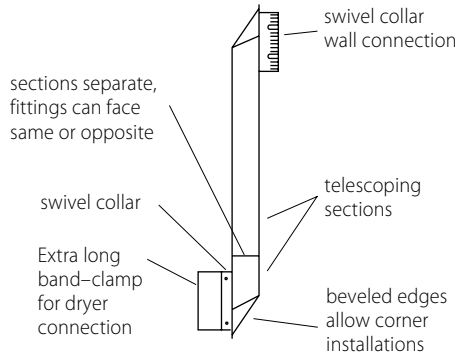
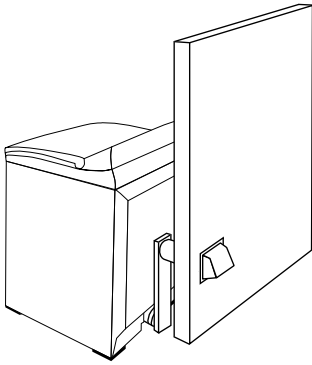
### When you have a 2 1/2" (6cm) Hood

Number of 90° elbows/bends	Maximum length of 4" diameter metal duct.			
	Rigid		Thick Wall Flexible Metal (fully extended)	
0	58ft	17.6m	28ft	8.5m
1	48ft	14.6m	23ft	7.0m
2	38ft	11.5m	19ft	5.7m
3	29ft	8.8m	17ft	5.1m
4	21ft	6.4m	15ft	4.5m

For exhaust systems not covered by the exhaust duct length charts (such as multiple unit hook-ups, plenums, and power-assist fans), call our Customer Care Center: TOLL FREE 888 9FNP USA (888 936 7872).

# Alternative installation for close clearances

Venting systems come in many varieties. Select the type best for your installation. A close-clearance installation is shown.



The maximum length using a 2" x 6" (5cm x 15cm) rectangular duct with two elbows and a 2 ½"(6.3cm) exhaust hood is 8ft (2.4m).

Refer to the venting system kit manufacturers instructions.

# Exhaust venting

## **!** WARNING



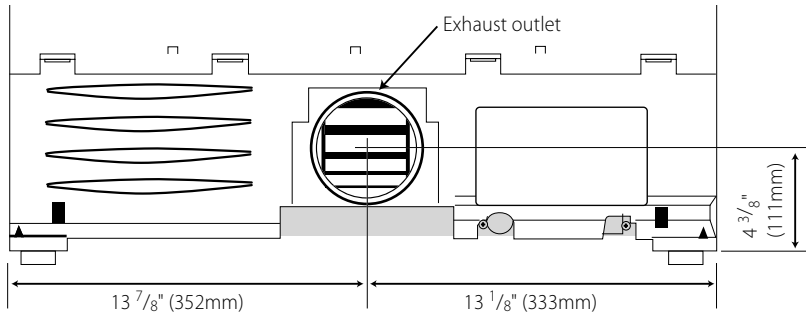
### **Fire Hazard**

- Use heavy metal exhaust duct.
- Do not use a plastic exhaust duct.
- Do not use thin metal foil exhaust duct.
- Failure to do so can result in death or fire.

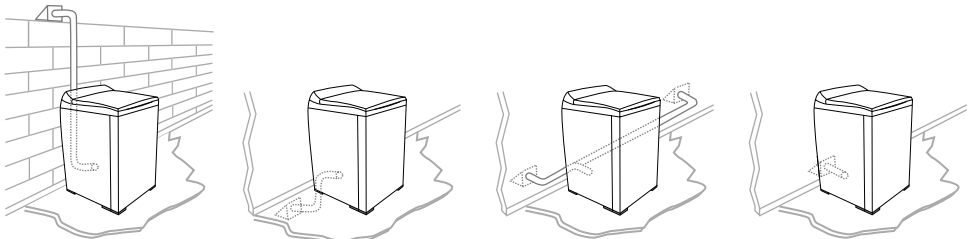
1. Read the exhaust section (page 9–13) before installing the exhaust system to determine the maximum allowable exhaust duct length.

Do not use sheet metal screws when assembling ducting. Always use suitable duct tape. Never use plastic or thin metal foil flexible exhaust material.

2. The exhaust outlet is located close to the center of the rear of the dryer. Make sure you join the exhaust duct to the dryer with duct tape only. This will prevent lint and dust from escaping from the dryer and exhaust system.



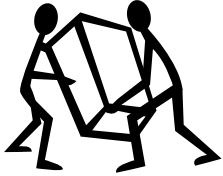
3. The exhaust vent can be routed up, down, left, right or straight out the back of the dryer. Refer to diagram.



# Installation

Parts and literature are packaged inside the dryer drum.

## **WARNING**



### **Excess Weight Hazard**

**Use two or more people to move and install the dryer.  
Failure to do so can result in back or other injury.**

Only remove the packaging at the customer's premises.

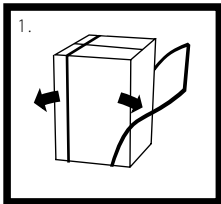
This will ensure the appliance arrives in pristine condition and reduces the risk of damage when transporting to the customer's home.

## Unpacking

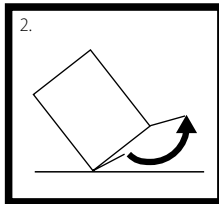
Make sure dryer is in a suitable location for installation.

Consider installing the dryer before the washing machine in a side by side installation, this will allow better access to electrical and exhaust connections.

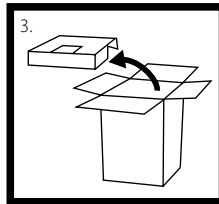
## Remove packaging



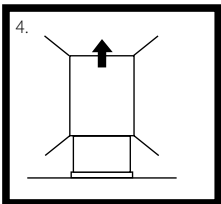
1. Remove straps.



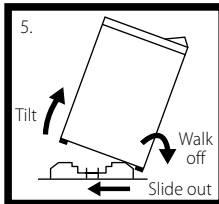
2. Unfold the bottom flaps on the carton.



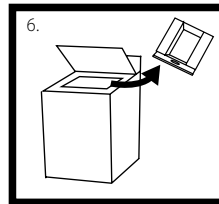
3. Unfold the top flaps on the carton, remove top packer.



4. Remove the carton by lifting it off the product (do not cut the carton off).



5. Remove the basepacker by tilting the product back and walking the product.

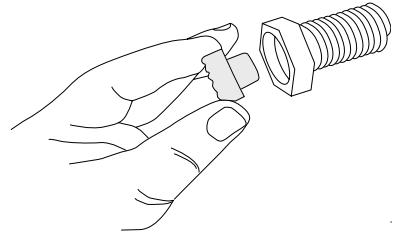
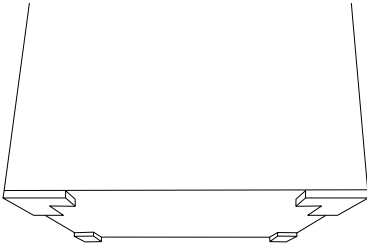


6. Remove the drum packer and the tape from the lint collector bucket in the drum.

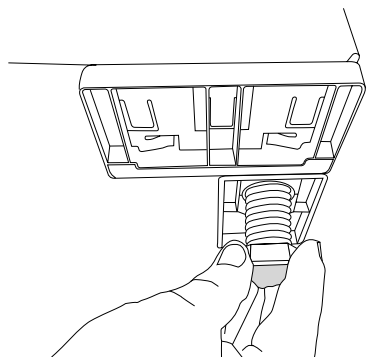
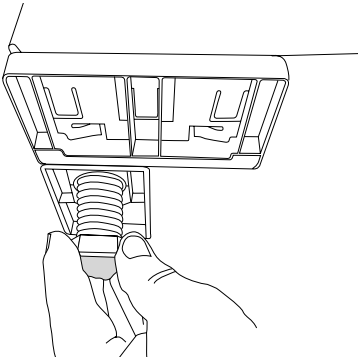
## Fitting the front feet

Note: Dryer is usually supplied with feet fitted and protruding the correct distance.

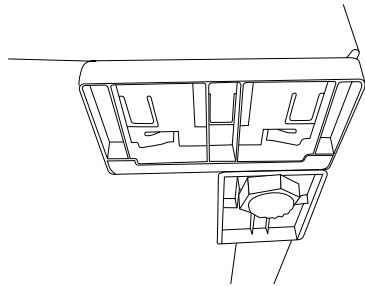
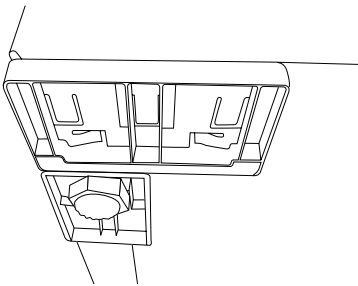
1. Tilt the dryer back using a hand trolley and making sure the trolley and dryer are secure.
2. Fit a rubber insert to each plastic foot as shown.



3. Screw the feet into the foot retainers on the left hand and right hand sides as shown.




4. Screw both feet in so they protrude  $\frac{1}{2}$ " (12mm) below the bottom of the wall on the foot retainers.



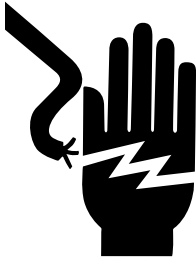


# Electrical requirements

<b>⚠ WARNING</b>	
	<p><b>Electrical Shock Hazard</b></p> <ul style="list-style-type: none"><li>Plug into a grounded 3-prong outlet.</li><li>Do not remove ground prong.</li><li>Do not use an adaptor.</li><li>Do not use an extension lead.</li></ul> <p>Failure to follow these instructions can result in death, fire, or electrical shock.</p>



## Grounding instructions

This appliance must be grounded. In the event of malfunction or breakdown, grounding will reduce the risk of electric shock by providing a path of least resistance for electric current. This dryer is manufactured with a cabinet grounding conductor and plug. The plug must be plugged into the correct type of outlet which has been properly installed and grounded in accordance with local codes and ordinances.

<b>⚠ WARNING</b>	
	<p><b>Electrical Shock Hazard</b></p> <ul style="list-style-type: none"><li>Check with a qualified electrician or serviceman if you are in doubt as to whether the appliance is properly grounded.</li><li>Do not modify the plug if it will not fit the outlet.</li><li>Have the proper outlet installed by a qualified electrician.</li></ul> <p>Failure to do so can result in death, fire, or electrical shock.</p>

# Gas requirements

The installation must conform with Local Codes, or in the absence of Local Codes, to the National Fuel Gas Code ANSI/Z223.1, Latest Revision (for the United States).

 <b>WARNING</b>	
	<p><b>Explosion Hazard</b></p> <p><b>Use a new AGA or CSA approved gas supply line.</b></p> <p><b>Install a shut-off valve.</b></p> <p><b>Securely tighten all gas connections.</b></p> <p><b>If connecting to LP Gas, have a qualified person make sure gas pressure does not exceed 13" (33 cm) water column.</b></p> <p><b>Examples of a qualified person include:</b> <b>Licensed heating personnel,</b> <b>Authorised gas company personnel and authorised service personnel.</b></p> <p><b>Failure to follow these instructions can result in death, explosion, or fire.</b></p>

## Gas type

Your dryer must have the correct burner for the type of gas in your home. Burner information is located on the rating plate located on the back splash. If this information does not agree with the type of gas available in your home, contact your local Fisher & Paykel supplier or service center.

## Natural Gas

This dryer is supplied ready for use with Natural Gas.

It is design certified by UL International for LP (Propane or Butane) Gases with the appropriate conversion.

## LP Gas conversion

If the dryer is to be operated on LP (Liquid Propane or Butane) Gas, the dryer must be converted. To do so, use only the approved Fisher & Paykel conversion kit listed in Accessories on page 4. Do not use with a different gas without consulting the serving gas supplier.

The dryer must be converted for safe and proper performance by qualified service or installation personnel.

Conversion kits for Natural and LP Gas are available from your local Fisher & Paykel Dealer (see Accessories page 4). If other conversions are required, check with your local gas utility for specific information concerning conversion requirements.

# Connecting gas to your dryer

Use compound or thread tape appropriate to the gas type that is to be used (Natural or LP Gas), on the male threads of all non-flared connections.

Never use an open flame to test for gas leaks.

This dryer will operate satisfactorily up to altitudes of 6500ft (2000m) above sea level at the BTU rating indicated on the model/serial plate. Burner input adjustments may be required if operating above this elevation.

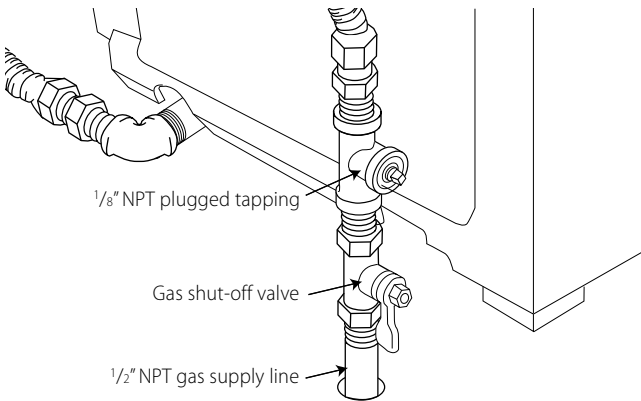
The dryer must be isolated from the gas supply piping system by closing the supply shut-off valve during any pressure testing of the gas supply piping system.

## Gas ignition

This dryer has an automatic ignition system to ignite the burner. There is no pilot flame burning in this dryer.

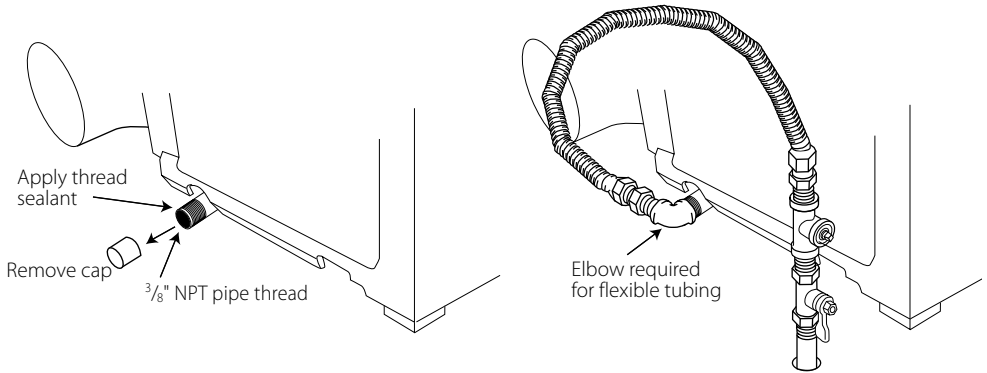
## Connecting to the gas supply

1. The gas supply line should be  $\frac{1}{2}$  inch.
2. A shut-off valve must be installed on the gas supply line within 6ft (1.8m) of the dryer.
3. An  $\frac{1}{8}$  inch NPT plugged tapping must be installed to allow the gas inlet pressure to be checked.



# Connecting to the dryer

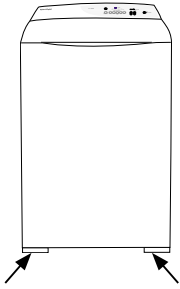
4. To connect the dryer to the gas supply, a number of options and types of connections can be used, such as rigid piping or tubing, or if local codes permit, new flexible tubing.
5. If flexible tubing is used, an elbow should be installed on the pipe at the back of the dryer for the flexible tube to be connected to. This will minimise damage to the tube when the dryer is moved back. Use a flexible tubing connection kit that has designed for use on a clothes dryer. This kit should have the unions necessary to join to the ends of the tubing. Be sure to follow all instructions supplied with the kit.
6. Copper tubing should not be used for Natural Gas and if used for LP Gas, it must be LP Gas compatible.
7. Disconnect and discard old flexible tubing.
8. The gas pipe that comes out of the rear of your dryer has on it a  $\frac{3}{8}$ " NPT male thread. Remove the protective cap and apply sealing compound or tape to the thread. Thread sealant should be appropriate for the type of gas to be used.



## Completing the connection

9. Use wrenches to tighten all joints but do not over tighten.
10. Open the gas supply valve and check all joints by brushing on a non-corrosive leak-detecting solution. Bubbling will indicate a leak. If any leaks are found, close the valve immediately and correct the leaks. Retest and repeat until no leaks are found.

# Level machine



Check the dryer is level, and make necessary adjustments to the front levelling feet. The rear levelling feet are self adjusting.

## Final installation check list

Check that:

- No plastic or flexible metal foil is used in the exhaust ducting.
- Exhaust is rigid ducting or thick wall flexible metal ducting.
- All joints in the ducting are made with duct tape – no screws are used.
- Ducting is clean and is connected to the dryer.
- Inserts are fitted to the two front feet.
- Dryer is level across the front.
- Dryer is plugged into an approved fitting and is properly grounded.
- Gas is turned on before attempting to start the dryer.
- All fittings in the gas line are tested for leaks.
- Dryer starts, heats, cools and shuts off.
- Exhaust temperature increases, to confirm ignition has occurred.
  - If ignition does not occur initially, it may be due to air in the gas line or low voltage power supply.
  - The gas regulator valve may fail to open if the power supply falls below 105 Volts.
  - If the gas fails to flow or does not ignite, the dryer will automatically switch off.
- Customer has been shown how to use the dryer.

NB: This dryer has a drum reversal feature to reduce clothes tangle. Throughout the drying cycle the motor will run for four minutes, then stop & run in the opposite direction for forty seconds before reversing again.





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Installation Instructions

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