



AUTOMATIC CHANGEOVER DEVICE MODEL : 700K (With / Without OPSO)

FITTING AND OPERATING INSTRUCTIONS TO BE RETAINED BY THE USER

Please read these instructions carefully before use.

TECHNICAL DATA

Type of Gas	Propane
Outlet Connection	1/2" BSP female thread
Inlet Connection	M20 x 1.5 on inlet to device for connection of pigtail's
	Propane 'POL' connection on inlet to pigtail's for connection to the Propane Cylinder.
	16-bar
Maximum Inlet Pressure	Between 1 bar and 16 bar
Inlet Pressure Range	37 mbar
Outlet Pressure	4.3 kg/h (2.32 m ³ /h) Propane
Capacity	Between -20°C to +50°C
Temperature Limitations	BSEN 13786 : 2004
Specification	

The pigtail's are not supplied with the unit, but a purchased one must be fitted with Excess Flow Valves (EFV) and Non-Return Valves (NRV). These act as a safeguard in the event of failure of the pigtail in service.

Only pigtail's with hose applying to BS 3212:1991 should be used with these device.

INSTALLATION INSTRUCTIONS

The DHP 700K must be fitted and installed by a competent gas engineer. (CORGI Registered gas engineer). The gas pipe system, connection to the device and appliances must also be installed by a competent engineer. (CORGI Registered gas engineer). The pipe system connected to the outlet of the device should always be supported along its length to avoid displacement or movement during normal use. The outlet pipework must always be made up of suitable metallic pipes and fittings (Iron, steel or copper).

The device must be sited and installed in line with the Codes of Practice for installations taking account of clearance, distances from windows, doors, vents, drains and areas below ground level.

The cylinders should never be sited in an area that is below ground level as propane is heavier than air and will pool in such areas.

The device must be screwed securely to a wall or rigid post or support column. The post or column must be buried and fixed securely in the ground to avoid any chance of leaning or becoming displaced in service.

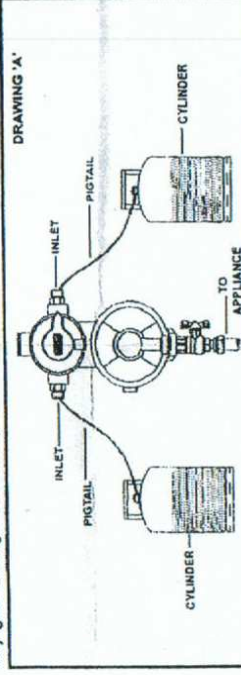
The device must be mounted above the height of the cylinders with the pigtail's running in a downward direction towards the cylinder valves. (See drawing A).

The outlet of the regulator must always be pointing downwards. This will prevent the ingress of rain into the device through the vent. (See drawing A). Rubber tubing must not be used on the outlet side of the appliance.

A full soundness check of the changeover device and gas system must be made before the appliances are used. This must be carried out in a flame free, spark free atmosphere using either leak detection fluid (detergent and water mix) or by using the pressure drop method. Never use a naked flame to search for leaks. If gas is smelt, turn off the system at both cylinders and call your gas supplier.

Always place the cylinders on a firm level surface. (A concreted hard standing or paving slabs). Never place the cylinders on soft ground as this could result in the cylinders falling over.

If the cylinders are placed in a purpose built housing, adequate ventilation must be provided both at high and low level. This ventilation will ensure that any gas leakage can escape.



OPERATING INSTRUCTIONS

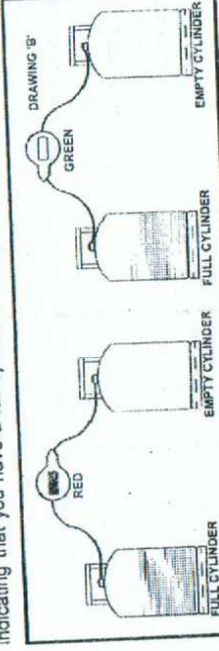
When your gas installer has finished the installation, the two cylinders should be connected to the changeover device and the system soundness tested. The installer must inform the user on the operation of the device and the system. Your changeover device is now ready for use.

The DHP 700K complies with the requirements of BSEN 13786: 2004 and is a two stage automatic changeover device designed to supply propane at a pressure of 37 mbar.

The following points should be noted when your automatic changeover device is in use:-

The indicator window on the device shows RED if the SUPPLY gas cylinder is empty and shows GREEN if FULL (See drawing B).

if the indicator window on the black changeover lever is showing red, the cylinder it is pointing to is empty and the device will automatically changeover to the full cylinder. The changeover lever should then be switched over to the other cylinder (Full cylinder) and the indicator window should show snow GREEN indicating that you have a full cylinder in this position.



CHANGING CYLINDERS

Your gas dealer should be informed that you require a new cylinder to be delivered. When the new cylinder has been delivered the empty cylinder should be turned OFF by turning the hand wheel on the cylinder valve clockwise to the OFF position. Then using the correct size spanner, undo the nut that secures the pigtail hose to the cylinder. The empty cylinder can then be removed and the full cylinder replaced in position for reconnection to the device.

The new cylinder can then be reconnected using the correct sized spanner to tighten the cylinder connection and turning the hand wheel anticlockwise to the ON position.

The connection joint should be brushed with soapy water or leak detection fluid to check for leaks. If the joint has a leak, bubbles will appear around the connection joint. If bubbles appear, turn off the hand wheel clockwise to the OFF position and retighten the nut. The connection joint should then be rechecked for leakage. If the joint is still leaking, turn the cylinder hand wheel valve clockwise to the OFF position and call your gas supplier. DO NOT USE THE SYSTEM UNTIL THE LEAK HAS BEEN RECTIFIED.

THE CHANGING OF CYLINDERS MUST BE CARRIED OUT IN A FLAME FREE ATMOSPHERE. DO NOT SMOKE WHEN CARRYING OUT THIS OPERATION.

When the cylinder is connected turn the lever to the cylinder you require to use as the supply cylinder, only changing the lever position when the cylinder is empty.

If the changeover lever is in the central position, gas will be drawn from both cylinders simultaneously and when the gas in the cylinders is used, you will not have a reserve cylinder and will have to replace both empty cylinders. So in order to fully utilise your automatic changeover device the lever should be pointing either at the left hand or right hand cylinder.

If the pigtail is removed from the device the condition of the rubber washer should be checked for wear or damage. If the washer is damaged, a new component should be fitted. The washers are available from your gas supplier or from the manufacturer.

SAFETY

The DHP 700K has no user re-settable devices. Do not attempt to adjust or tamper with the device.

Only the correct size spanner should be used to undo and tighten the connection to the cylinder.

The pigtail hoses must be replaced if damaged or worn. The rubber washer between the inlet of the device and the pigtail must be replaced if damaged or worn.

A leakage check on the pigtail ends must be carried out every time the cylinders are changed. This should be carried out with a soapy water solution, brushing the solution onto the joints. If a leak is evident it will show as bubbles around the leakage area. NEVER CHECK FOR LEAKS WITH A NAKED FLAME. IF A LEAK IS FOUND RE-TIGHTEN THE JOINT OR CONSULT YOUR GAS SUPPLIER.

The pigtail's should never be twisted or kinked when connected to the cylinders

Always protect your automatic changeover device from the ingress of rain or snow. If rain enters the device and freezes, this could cause the device to malfunction.

Always change cylinders in a flame free environment. Never in the presence of naked flames, whilst smoking or near electrical switches or appliances.

SAFETY FEATURES

The DHP 700K (with OPSO) is fitted with an Over Pressure Shut-Off (OPSO) device which operates when a pressure between 80 and 90 mbar are reached. If the device trips your gas supplier should be called and the over pressure fault investigated. Never reset the device yourself as this could result in a hazardous condition in your gas supply and even result in a serious fire. Your dealer will reset the device when he is satisfied that the gas system is safe to use. The other safety feature is a limited relief valve which will open before the OPSO trips and vents gas to relieve some of the excess pressure. The vent, if the device is in an enclosed area, must be vented to the outside of the enclosure with a copper pipe.

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