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HP

LPG MANUAL

APRIL 2021

VERSION 2.0

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CHAPTER I -TECHNICAL SECTION

1. INTRODUCTION:

This section contains technical information on LPG cylinder installations and has details of LPG (Liquefied Petroleum Gas), LPG Cylinder, Pressure Regulator, Safety Cap, Hose, and Hotplate.

All the information and procedures outlined in this section must be followed, even if they appear unnecessary under certain circumstances. Strict observance of these guidelines will result in trouble free and safe usage of LPG for its intended purpose under safe and controlled conditions.

All persons responsible for setting up and maintaining LPG installations must understand and follow these practices for the safe operation and maintenance of LPG installations. They must also be familiar with the characteristics of LPG.

Distributors are required to train their staff and anyone else who deals with the operation and maintenance of LPG installations. LPG Distributors must ensure that these directions are read and correctly understood by themselves, all members of their staff who handle the product. This includes project Distributors who undertake the delivery of cylinders using their own staff in their respective areas of operation.

In case of any doubts, or if any information/ procedure is not understood, please contact the Regional/Territory/Area office of the concerned Corporation.

The emphasis on safety throughout this section does not imply that LPG is a dangerous product. Although LPG is flammable, because it is a fuel, when handled with the SOPs (Standard Operating Procedures), it is perfectly safe.

2. CHARACTERISTICS OF LPG

2.1 General

Liquefied Petroleum Gases (LP Gases or LPG) are obtained by refining crude oil & also from natural gas by oil absorption or refrigerated absorption process. Liquefied Petroleum Gases are light hydrocarbons, which are in the gaseous state at normal atmospheric pressure but can be liquefied by application of moderate pressure at normal ambient temperature. This range include Propane Propylene, iso-Butane, N-Butane and Butylene. The Oil Industry in India markets and sells commercial Butane/Propane mixture, commercial Butane, commercial Propane which conforms to BIS specification (IS:4576: 2018), the specifications of which are reproduced hereunder. LPG is stored and transported in containers as a liquid but are generally drawn out and used as a gas.

Table 1 Specifications of LPG

Sr No.	Characteristic	Requirement for Commercial			Method of Test, Ref. to [P] of IS 1448 / ISO / ASTM
		Butane	Butane-Propane mixture	Propane	
1	Vapour pressure at 40^{0}C, kPa, gauge, *Max.*(Note 1)	520	1050	1550	[P : 71] / D1267 / D6897
2	Volatility: Evaporation Temp. in 0C for 95 % by vol.at 760mm Hg pressure, Max.	2.2	2.2	-38	[P : 72 / D1837 – 2011
3	Total volatile Sulphur mg/kg (ppmw), *Max.*	140.0	140.0	150.0	D 6667/ D 3246
4	Copper Strip Corrosion at 38 ^{o}C for 1 hour	Not worse than No. 1			[P : 152] / ISO 6251 / D 1838
5	Hydrogen sulphide	Pass*	Pass*	Pass*	[P : 73] / D2420
6	Moisture Content	----	----	Pass	ISO 13758 / D2713
7	Free Water Content	None	None	----	[P : 76] / ISO 3993 / D1657 (Visual inspection using these equipment) / Visual
8	Caustic Test	Pass	Pass	Pass	

** Pass indicates Hydrogen Sulphide not more than 5 ppm*

Notes:

Vapour pressure may be determined at any other temperature and converted to 40°C / 65°C by means of suitable vapour pressure-temperature graph. The same can also be determined by analyzing the gas by gas Chromatograph and using composition and vapour pressure data as per ISO 8973 / ASTM D 2598 / IP 432.

The dryness test is applicable to only propane & not butane/butane-propane mixture. Dryness is important in relation to freezing in pressure reducing regulators Free water test only applies to butane/butane-propane mixture. Water promotes rust on internal surface of steel storage tanks and iron piping systems. Water can also cause odourant fade and can block small openings. LPG can not contain any free water at 0°C

2.2 Important properties & characteristics:

The chemical identity of LPG is as given below:

i.	Chemical Name	:	Liquefied Petroleum Gas (LPG)
ii.	Chemical Formula	:	Mixture of C_3H_8 and C_4H_{10}
iii.	Hazchem Code	:	2 WE
iv.	U N No.	:	1075
v.	C A S No.	:	68476 – 85 – 7

A. Specific gravity:

Specific Gravity of LPG at 15 C (water =1) 0.51 – 0.58

LPG in gaseous state is nearly twice as heavier than air. Any leakage of LPG, therefore, tends to settle down at floor level, particularly in depressions, pits, drains, etc. Therefore, from the safety point, ground level ventilation at LPG storage place is most important to disperse leaking gas.

LPG is almost half as heavy as water and on expansion, one volume of liquid LPG will expand to approximately 250 volumes of vapour in air, therefore, the leakage of liquid LPG is very dangerous.

Since LPG has very low solubility in water, the safest and easiest way to identify minor leakage is by using water/soap solution.

Liquid LPG has a low viscosity and can leak in situations in which water /gasoline may not leak. It is also poor lubricant and leaks are likely to occur through seals/ glands.

B. Specific Volume:

Specific Volume is the reciprocal of liquid density.

Specific Volume of Gas at 15 C	760 mm Hg
• litre/gm of gas	0.44
• Cu ft./ lb of gas	7.1
• gm/lit of gas	2.26

Typical Composition* (by volume) of LPG–Ex

Ex	BPC Mumbai	Uran	Barauni	Koyali
Ethane & Ethylene	1.01	0.9	1.76	0.65
Propane & Propylene	44.82	49.50	32.74	35.08
Normal Butane, ISO-Butane & Butylene	54.17	48.00	64.74	63.62
Pentane & Higher	Traces	1.60	0.76	0.65

* LPG conforms to IS-4576 but composition varies from batch to batch & crude to crude. Therefore, the above should be taken only as a general guide.

C. Vapour Pressure:

The pressure at which LPG becomes liquid is called its vapour pressure. It varies depending on its composition and temperature. It is generally expressed in kg/cm^2.

All Liquified Petroleum Gases confined in a closed vessel above their boiling point readily forms vapour in the space above the liquid level. When liquid is present in the container, the Vapour Pressure is called the Saturated Vapour Pressure. The Saturated Vapour Pressure equals to the atmospheric pressure at the boiling point of the liquid, and increases gradually as the temperature approaches the critical temperature (the temperature at and above which vapor of the substance cannot be liquefied, no matter how much pressure is applied).

Vapour Pressure plays an important factor in the design of LPG containers as they are designed to withstand the maximum vapour pressure which is likely to arise in actual use. In India, LPG Cylinders are designed for vapour pressure of 16.87 kg/cm^2 at the assessed temperature of 65^{o}C whereas uninsulated storage vessels (spheres/bullets) and transport vessels (tank trucks and tank wagons) are designed for maximum temperature and vapour pressure of 55^{o}C and 15.85 kg/cm^2 respectively.

The Vapour Pressure is dependent on temperature, as well as on ratio of mixture of hydrocarbons. When a container is full, any further expansion of the liquid would cause a rise in pressure by approximately 14 to 15 kg/cm^2 for each degree centigrade increase in

temperature. This explains the hazardous situation that could arise due to overfilling of cylinders. Sufficient ullage space (the amount by which a container falls short of being full) for expansion of the liquid must, therefore, be left in all storage/transport containers. Safe storage level of LPG vessels is up to 85% of the volume of the container, as per the accepted norm in the oil industry.

Vapour Pressure is a characteristic of LPG and is function of temperature. Vapour Pressure has no relation to the quantity of liquid present. If the temperature of liquid LPG inside a container remains constant, the pressure inside the container when filled and when nearly empty will be practically the same.

LPG Vapour can also be liquefied by refrigeration. The lower the temperature, the lower the pressure and vice-versa. Refrigeration helps in storage of liquid LPG at near atmospheric pressure.

An LPG cylinder is never empty, in the actual sense. There is always a dynamic equilibrium between the liquid and vapor phases of LPG, and the LPG will flow from the cylinder as long as there is a positive pressure differential between LPG inside and the atmosphere outside. When the cylinder has become 'Empty', the cylinder is actually filled with LPG vapor at atmospheric pressure at that moment, when the temperature in the cylinder is actually lower than the outside temperature due to adiabatic expansion of LPG. So once the cylinder is removed and capped, the temperature will raise in the cylinder and hence the pressure. The empty cylinder, therefore, will have a pressure of about 1-1.5 kg/sq cm.

D. Boiling Point:

The temperature at which the Vapour Pressure of liquid equals the external pressure is its Boiling Point, and is the temperature at which liquid changes into vapour.

LP Gases have low boiling points. They exist in the gaseous state at normal atmospheric temperature unless they are contained under pressure or refrigerated**.**

	Propane	**Butane**
Boiling point at pressure of 1 atm .	43.6^{o}F (-42^{o}C) approx.	30.2^{o}F (-1^{o}C) approx

The boiling point of LPG presently marketed is very nearly 0°C. At temperatures near 0°C or at sub-zero temperatures, the pressure inside a container will be almost the same as the atmospheric pressure. Therefore, this product cannot be used at places where the ambient temperature is near or sub-zero. However, since normally kitchens / cooking spaces in cold areas are well enclosed / warmed to keep them habitable, the inside temperature is normally above sub-zero and LPG is therefore widely used in places like Leh, Kargil and Srinagar etc. which have sub-zero ambient temperature during winter.

E. Flammability Limit:

Fuel gases will only burn when mixed with air in certain proportions. The minimum and maximum concentrations of a fuel gas in a gas/air mixture that allow the fuel to be

ignited are called as the Lower and Upper Limit of Flammability. These limits are narrower in LPG than other fuel gases, making LPG relatively safer to use.

Flammability range gas/air Vol%	LPG	Butane	Propane
Lower limit	1.8%	1.5%	2.0%
Upper limit	9.0%	9.0%	10%

Increase in pressure does not affect the lower limit appreciably but extends the upper limit.

A combustible mixture is formed only if the LPG/air ratio is between 1.8% to 9% concentration.

F. Gross Calorific Value and Other Details:

Calorific value is defined as the amount of heat produced by complete combustion of unit mass of fuel. The gross calorific value is obtained when the contribution from the latent heat of condensation of water vapour formed is recovered. It is expressed in kcal/kg. The net calorific value is obtained from the gross value by subtracting the heat of condensation of water vapour.

Table 2 Gross Calorific Values

Gross Calorific value 25 Deg C	LPG	Gross Calorific value 25 Deg C	LPG
BTU/lb	21,300	kcal/lb	5,368
BTU/kg	46,800	kcal/Kg	11,800
BTU/Sqft	3,200	kcal/Sqft	806
BTU/litre	122	kcal/litre	308
		kcal/Nm3	30600
Dry cft air required per cft gas for combustion			31
Theoretical max flame temp. in air °C			2000
Theoretical max flame temp. in oxygen °C			2800
Auto Ignition temp. min. °C in air			410-580

G. Toxicity:

LPG contains no toxic components such as carbon monoxide and is, therefore, non-poisonous. If leakage of a large amount of LPG occurs in a closed space, difficulty in breathing and asphyxiation due to lack of oxygen can be caused, but it is improbable that this would happen in practice. LPG is slightly anesthetic when high concentrations are breathed in sufficient quantities over a period of time, the result would be an upset stomach and headache which can be warning symptoms.

H. Odour:

LPG is odoruless and colorless but a mild odorant Ethyl mercaptan is added to produce odor for detection in case of leakage and the smell is detectable in air at concentrations down to 1/5 of the lower explosive limit. In other words, leaks can be smelled long before it becomes dangerous enough to catch fire.

I. Compression/Expansion Ratio:

LPG can be compressed at a ratio of 1:250 (approximate) of its original volume. This enables LPG to be transported and marketed in portable container for use, as an ideal fuel.

J. Auto Refrigeration:

Auto-refrigeration refers to a phenomenon which occurs when pressure is rapidly released from vessels containing LPG liquid. Any evidence of frosting outside the vessel is an indication of auto-refrigeration.

3. LPG EQUIPMENTS (General Description of LPG Installation):

The Diagram No. 13 shows a typical LPG domestic installation. The main components of LPG installations are briefly described below.

3.1 Cylinder:

Currently LPG is marketed in 2kg, 5 kg,14.2 kg ,19 kg, 35 kg, 47.5 kg and 425 Kg capacity cylinders. Presently, the LPG cylinders viz. 2kg, 5kg, 14.2kg, 19kg, 35kg and 47.5 kg are manufactured as per IS:3196 through manufacturers having valid PESO and BIS Licence. 425 kg cylinder is manufactured as per EN:13445 standard. LPG is also marketed by OMCs in composite cylinders of capacity 2kg, 5 kg, 7 kg, 10 kg and 15 kg in select markets. The BIS code for manufacturing composite cylinders is IS:16646.

All domestic LPG cylinders (5 kg and 14.2 kg) are painted in signal red colour with the 'shroud' of the cylinder painted in French blue (HPC) or golden yellow (BPC) and No separate shroud colour (IOC).

Commercial LPG cylinders (2kg, 5 kg, 19kg, 35 kg, 47.5 kg) are painted in oxford blue colour with a 100 mm band of signal red colour painted below the circumferential weld of the cylinder. 425 kg cylinders are painted in polyurethane white. The cylinders are hydraulically tested to 25.35 kg/cm2 (2.45 MPa) and certified by BIS (Bureau of Indian Standards) or any other TPIA recognized by PESO.

All cylinders are designed for a maximum working pressure of 16.9 kg/cm2 (1.66 MPa is the maximum vapour pressure of the LPG as per BIS Standard IS:4576 to be marketed by the Oil Industry at the assessed temperature of 65°C).

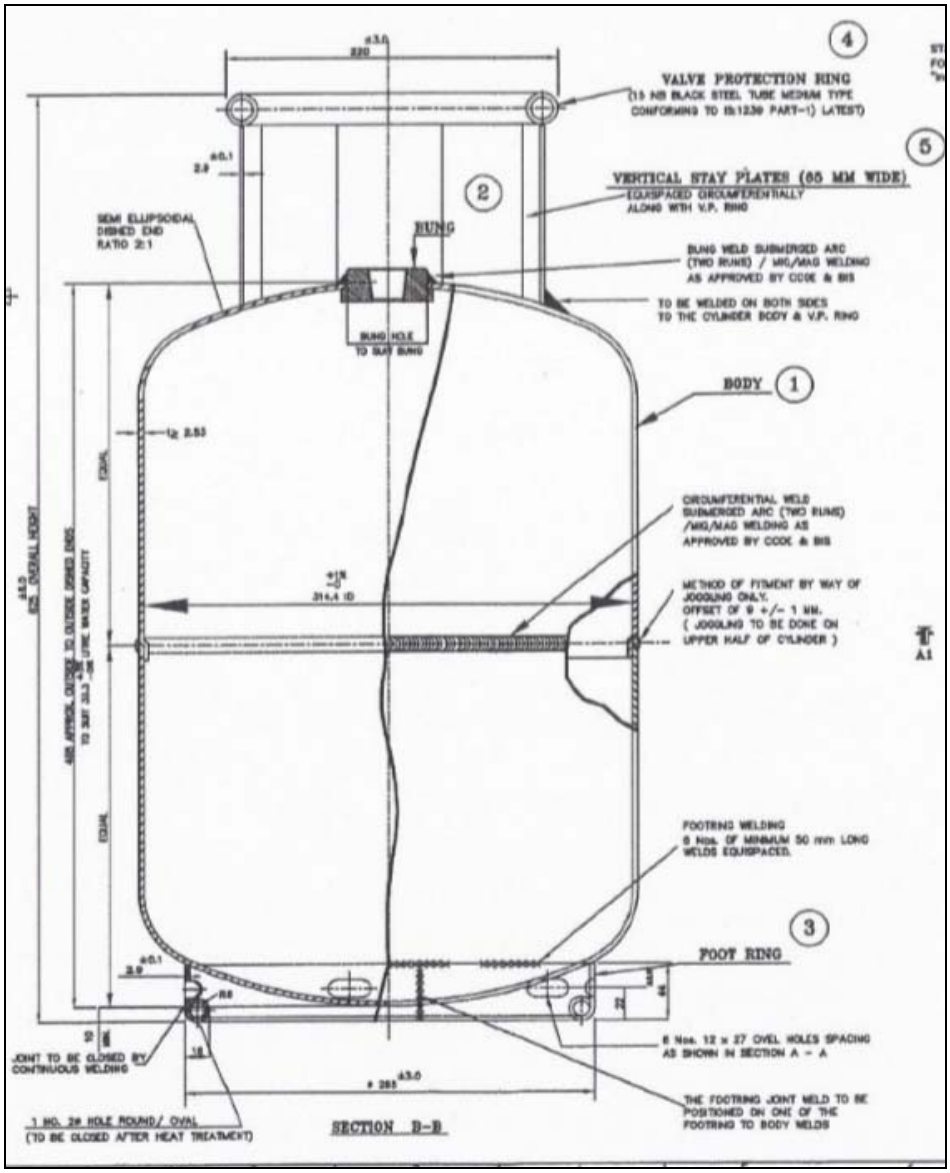
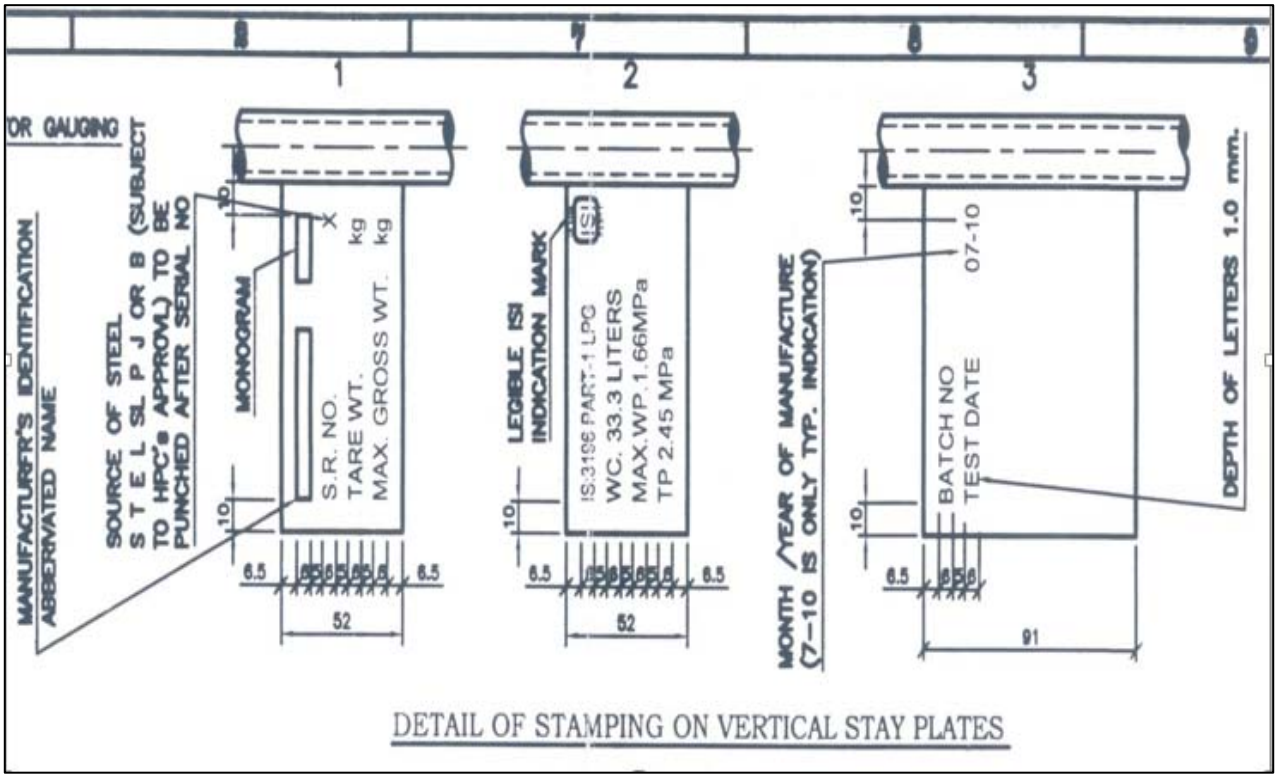


DIAGRAM NO.1: LPG CYLINDER (WATER CAPACITY 33.3 LITRES)

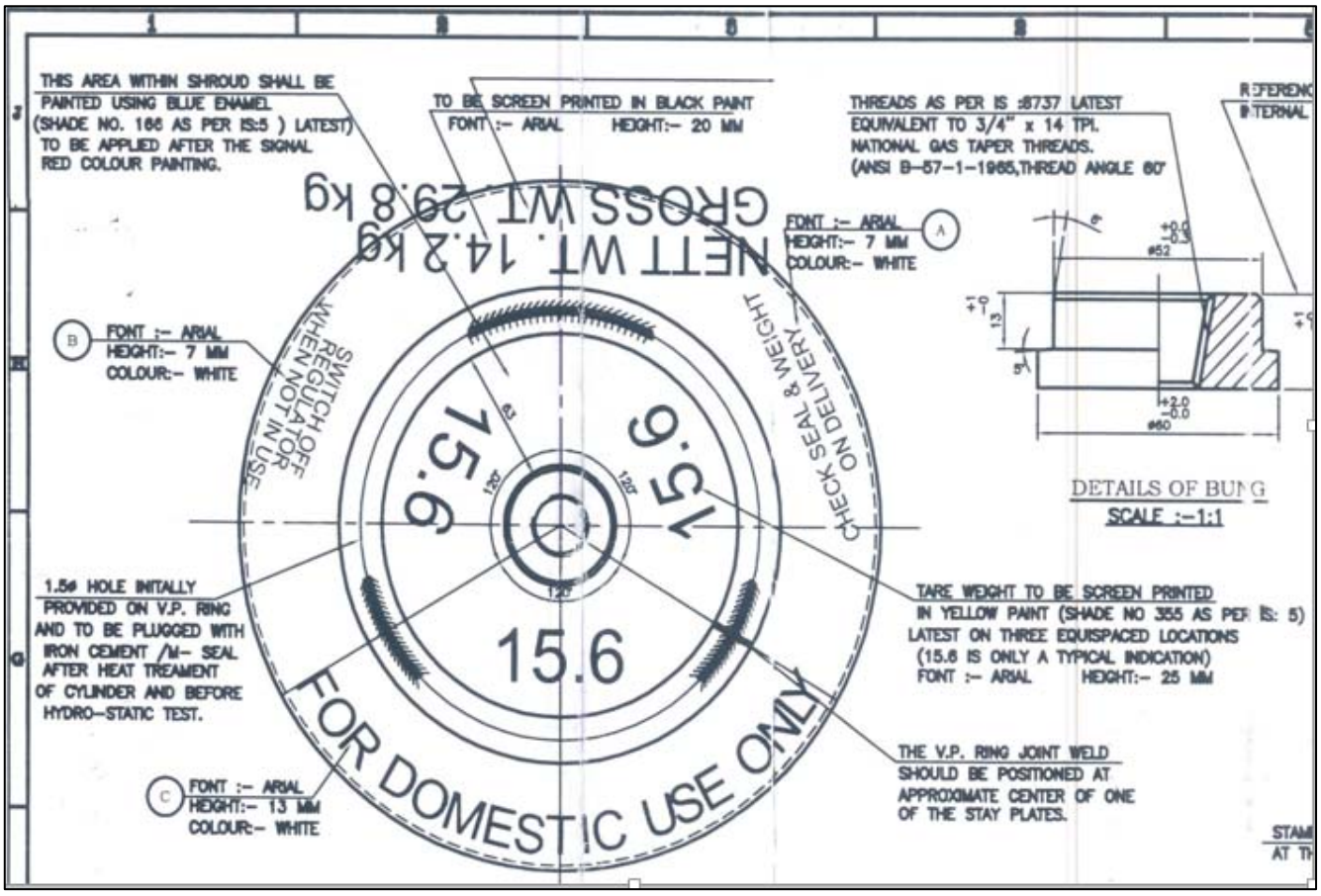
3.1.1 Marking of cylinders:

The vertical stay plates of the cylinder contain the following markings

- Serial Number & Source of steel
- Manufacturer's abbreviated name and monogram.
- BIS Std ref IS 3196 Part I LPG
- Tare Weight.
- Max. Gross Weight.
- BIS Monogram, test pressure, method of heat treatment. (SR or N)
- Water Capacity (e.g. 33.3 Litres for 14.2 Kg. cylinder)
- Max. Working Pressure 16.9 kg/cm2
- AFT (agreed finished thickness), Batch No. & Test date



DETAIL OF STAMPING ON VERTICAL STAY PLATES



DETAILS OF BUNG
SCALE :-1:1

DIAGRAM NO 2: CYLINDER MARKING

The bung of each cylinder is stamped with the details of

- Tare Weight
- Serial Number
- Year of Manufacture
- Manufacturer's Identity.

Tare weight is also stenciled on the Inside of two of the vertical stay plates as well as at three equidistant locations around the bung.

Net weight/Gross weight is stenciled on the 'shoulder' of the cylinder.

Safety messages / instructions in English and Hindi are stenciled on the shoulder of the cylinder. These messages are 'check seal and weight on delivery' and 'switch off regulator when not in use,' and 'for Domestic use only' in case of Domestic cylinders.

The foot-ring is provided with holes for ventilation. These are of horizontal oval shape for IOC cylinders, round for BPC, and vertical oval shape for HPCL.

The foot ring has details of the Company owning the Cylinder and the trade name of the Gas filled in it, C weld machine no., manufacturers BIS license No.

For example, for IOC cylinders, the stamping on the footing will be 'IOC' and Indane". For BPC cylinder 'BPC' and 'Bharat Gas'. For HPC cylinder 'HPC' and "HP Gas".

The foot rings are curled inwards in O/J formation for safe handling.

3.1.2 Colour Coding of Cylinders:

All new LPG cylinders are tested every ten years after injection and in cycles of five year thereafter. To enable easy segregation of cylinders for retesting, colour coding is used on their 'stay plates' and an alphanumeric code is stenciled on the inside of the 'stay plate' of the cylinder.

COLOUR CODING OF INSIDE OF STAY PLATE NO.3 FOR RETESTING IS AS FOLLOWS				
BACKGROUND COLOUR	**IS SPEC FOR SHADE**	**LETTERING COLOUR**	**YEAR OF MFR**	**YEAR OF RETESTING**
SATIN BLUE	117	BLACK	2018	2028
BUS GREEN	299	WHITE	2019	2029
BLACK	521	WHITE	2020	2030
YELLOW	355	BLACK	2021	2031
WHITE	127	BLACK	2022	2032

SEA GREEN	217	BLACK	2023	2033
DOVE GREY	694	BLACK	2024	2034
AIRCRAFT BLUE	108	WHITE	2025	2035
SALMON PINK	443	BLACK	2026	2036
INDIA BROWN	415	WHITE	2027	2037

JAN-MAR-A	JUL-SEPT –C
APR-JUN-B	OCT-DEC-D

Inside portion of one of the vertical stay plates is painted as given above. Also, the quarter and the year of next testing is screen printed on the painted surface, e.g., for the cylinder manufactured in July 18, it would be stenciled as C28. However, the subsequent retesting will be done in a period of every 5 years.

Each quarter of the year is represented by the letters A, B, C, D. For e.g. if the retesting for a particular cylinder is due in August 2028, then the inside of a particular stay plate will be painted in Satin Blue and letter C-28 will be painted in black.

3.2 Cylinder valve & Safety Cap:

Domestic LPG cylinders are fitted with a self-closing (SC) type valve of 25.6 mm outlet valve head diameter. The design of these valves conforms to IS 8737. The term self-closing is derived from its design as it remains closed unless a Pressure Regulator or an adaptor is used for opening it. The Valve closes by itself as soon as the Pressure Regulator or adaptor is shut off. The outlet of the Valves has a provision for locking the Pressure Regulator.

All cylinder valves are fitted with safety cap which is tied to one of the stay plates of the cylinder. When the valve is not connected to the regulator, the outlet is protected by the Safety Cap made of Delrin and is locked in position with the help of a locking Clip. A nylon cord is provided to pull the clip and thereby unlock the safety cap at the time of use.

The function of the Safety Cap is to:

- Prevent dust and other matter getting inside the Valve.
- Prevent gas leakage when leak develops at the Valve seat.
- Prevent damage to Valve outlet.
- Assist in sealing to prevent tampering/pilferage.

The valves and safety cap are tested for gas-tightness at 17 kg/cm^2. The following types of valves are used in our LPG cylinders:

3.2.1 Self-Closing Valve:

The term Self Closing is derived from its design as it remains closed unless a Pressure Regulator or an adaptor is used for opening it. The Valve closes automatically as soon as the regulator is shut off. The Valve has a spring-loaded valve spindle which opens the valve when the Valve Spindle is pressed by turning on DPR (Domestic Pressure Regulator) and springs back to shut off the supply when the DPR is switched off. To prevent leakage between the Valve outlet and Regulator inlet an 'O' ring seal (Joint packing) is provided. The outlet of the Valve has a provision for locking the pressure regulator.

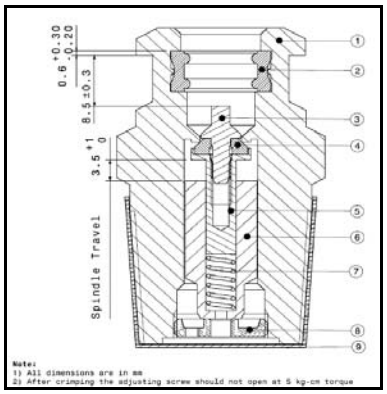
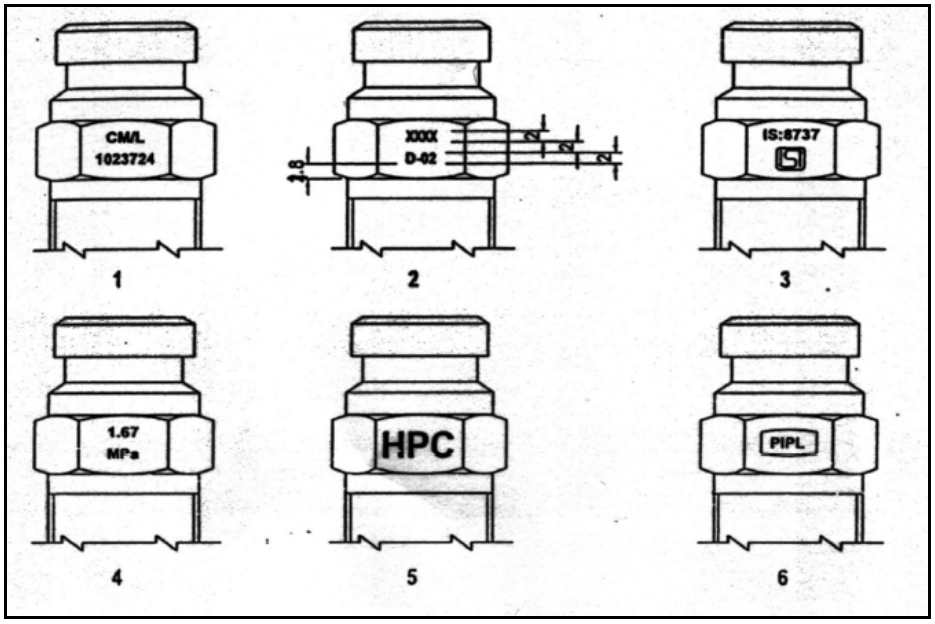


DIAGRAM NO 3: LPG SC VALVE CROSS SECTION

Sample Markings on SC Valve:

The company name marking in face no. 5 of hexagon will change as per the ownership of cylinders of the respective OMCs (i.e. IOC /BPC/HPC)



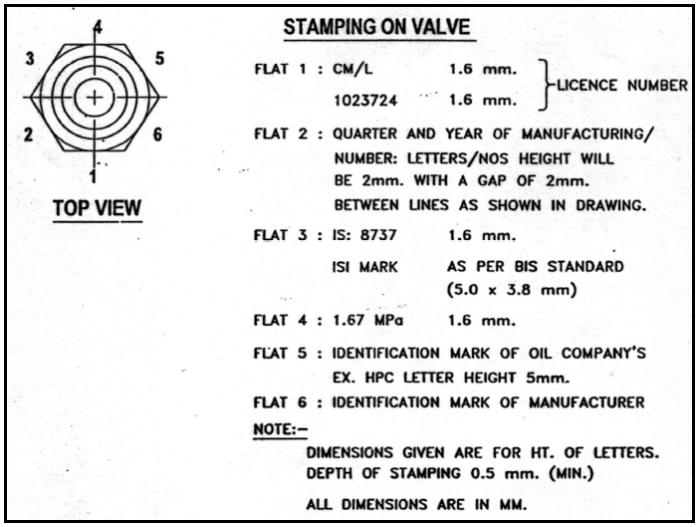


DIAGRAM NO 4: MARKINGS ON THE SC VALVE

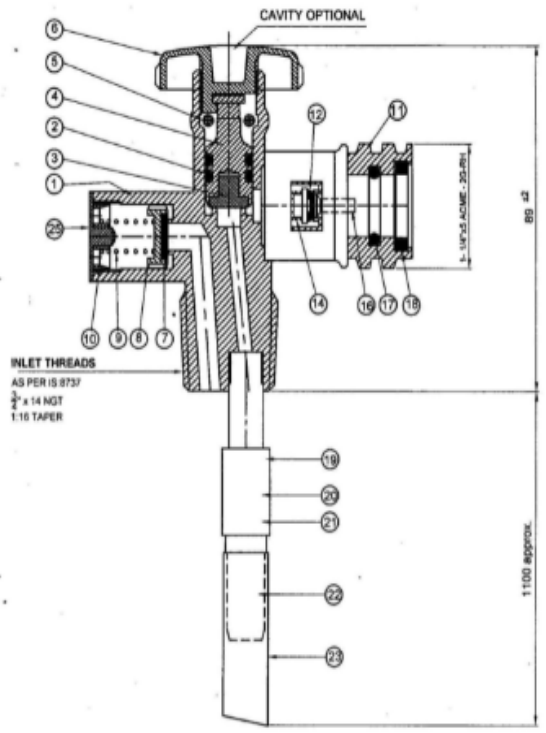
The markings mentioned above to be used to identify spurious valves in the market.

3.2.2 VOT: Vapour off-take Valve:

As the name suggests, LPG withdrawal from the cylinder using a VOT valve happens in its vapor state. This valve is used in 5kg, 14.2 kg and 19.0 kg cylinders. The output rate of LPG from the cylinder is limited when using this valve. For continuous withdrawal of LPG from the cylinder the evaporative capacities of 14.2 kg, 19 kg and 47.5 kg cylinders are estimated at 0.50 kg/hr, 0.59 kg/hr and 0.77kg/hr respectively.

3.2.3 LOT: Liquid off-take Valve:

As the name suggests, LPG withdrawal from the cylinder using a LOT valve happens in its liquid state. LPG taken out in the liquid Phase from the cylinders is then vaporized using an evaporator called 'Vaporizer'. The LOT valve has a higher withdrawal rate (max of 7.5 LPM) of LPG from the cylinder. A typical LOT valve consists of body, hand wheel, pressure relief valve (with Set Pressure 20 kg/cm^2 and 6 m^3/min), excess flow check valve (Closing at 7.5 LPM) and HDPE tube for liquid withdrawal. These valves are occasionally used in 35kg and 47.5kg cylinders for supply of LPG to industrial application burners and the installation for the same shall be as per Code of practice for LOT installation (IS 6044 Part 1).



SR.NO.	DESCRIPTION	QTY
25	SAFETY GUARD	1
24	O - RING	1
23	TUBE FOR LIQUID	1
22	SCREW FOR EFD	1
21	SPRING FOR EFD	1
20	EFD BLOCK	1
19	EFD BODY	1
18	WASHER	1
17	O - RING	1
16	SPINDLE FOR ADAPTOR	1
15	O - RING	1
14	SPRING FOR ADAPTOR	1
13	SCREW FOR ADAPTOR	1
12	VALVE SEAT	1
11	ADAPTOR	1
10	SAFETY ADJUSTMENT SCREW	1
9	SAFETY SPRING	1
8	SAFETY PACKING HOLDER	1
7	SAFETY PACKING	1
6	HANDWHEEL	1
5	LOCK PIN	2
4	LOWER SPINDLE	1
3	SPINDLE SEAT	1
2	O - RING	2
1	VALVE HOUSING	1

DIAGRAM NO 5: CROSS SECTION TYPICAL LOT VALVE

3.2.4 Combo Valve for 425 Kg (990 Litres Water Capacity)

This valve is used in 425kg cylinder. The combo valve conforms to the requirement of EN13175. This valve can be used as both VOT & LOT. This valve also acts as a high-level indicator (liquid will start coming out if liquid level comes to a pre-set level while filling). The valve also consists of a fixed level gauge pipe (5 mm diameter) to sense the liquid at full level. The off take rate and filling rate using a bullfinch combo valve are:

- # LPG liquid fill - 130 LPM (approx. 66kg/min)
- # LPG liquid off take – 62.5 LPM (approx. 32kg/min)
- # LPG vapour off take – 21m^3/hr (approx. 9kg/hr)

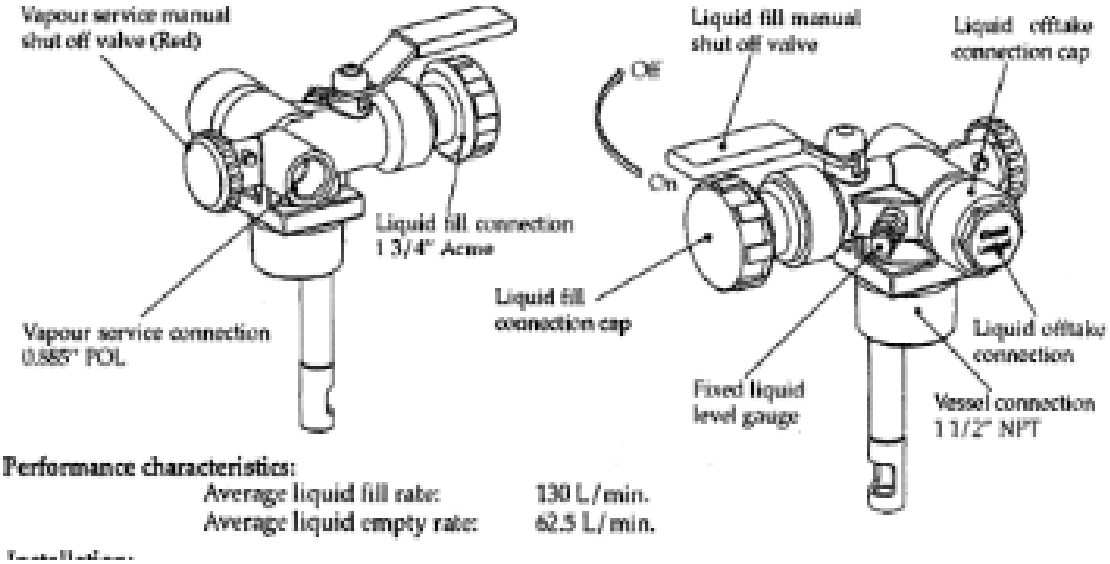


DIAGRAM NO 6: COMBO VALVE

3.3 Domestic pressure regulator:

The Domestic Pressure Regulator regulates the pressure of LPG drawn out of the cylinder. The outlet pressure of LPG from DPR is maintained at max. 300 mm water column irrespective of the pressure inside the cylinder and LPG is delivered to the gas stove at a low pressure of 0.03 kg/cm^2. The pressure regulator used in Domestic installations is manufactured as per IS:9798 and Sierra Milano (Italy) Design. The regulator is fitted to the valve and locked in position using multi point locking/clamping. The locking of the regulator on the valve is firmly held by multipoint balls. In the event of fire, the Delrin bush melts and cuts off the supply from the valves. In addition, there is an inlet seal ('O' ring) which closes the supply of gas through the regulator in its 'OFF' position. This additional measure prevents the supply of gas to the stove in case of leakage through the valve pin.

Each regulator has the following markings on the cover, body and Nozzle:

- Manufacturer's name or Identification mark.
- Batch/Month/Year of manufacture - 6-character Batch No. First two characters are Alphabets in capital followed by 4 numeric character. The first two digits indicate the month of manufacture and the other two the year.
- Seven-character Serial No - First digit is an Alphabet in capital followed by six numeric characters (use of O,U,I,V are avoided)
- Output rate of LPG
- BIS Logo & License No. of manufacturer
- Property of HINDUSTAN PETROLEUM CORPN. Ltd. or BHARAT PETROLEUM CORPORATION LTD or INDIAN OIL CORPORATION LTD in Hindi & English.

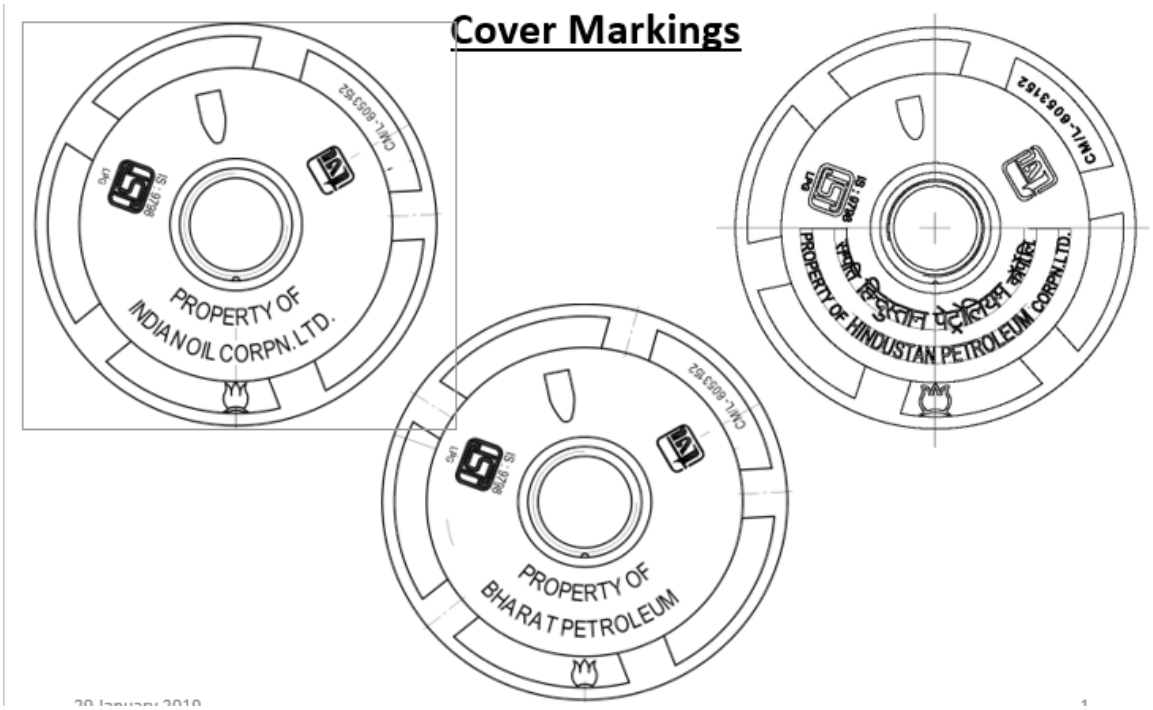


DIAGRAM NO 7: DPR COVER DRAWING

DIAGRAM NO 8 DPR MARKING PLATE

3.3.1 Working of the Pressure Regulator & Principle of Operation of the Regulator:

The regulator has three chambers: High-pressure chamber, low pressure chamber and atmospheric pressure chamber. The gas enters from the high-pressure chamber at the bottom and goes out of the nozzle in the low-pressure chamber.

When the DPR is switched 'ON' and the hot plate is turned 'ON', LPG enters the DPR thru the high pressure chamber, which is exposed to full pressure of the cylinder. The high pressure LPG then enters the low pressure chamber thru an orifice which is kept in closed position by the lever and diaphragm mechanism. The diaphragm in turn is controlled by a spring that regulates the flow of LPG into the Low pressure chamber. The regulated LPG in the low pressure chamber moves to the hot plate. The movement of the diaphragm is balanced by the breather letting air flow in and out of the atmospheric chamber. The breather hole should always be kept open.

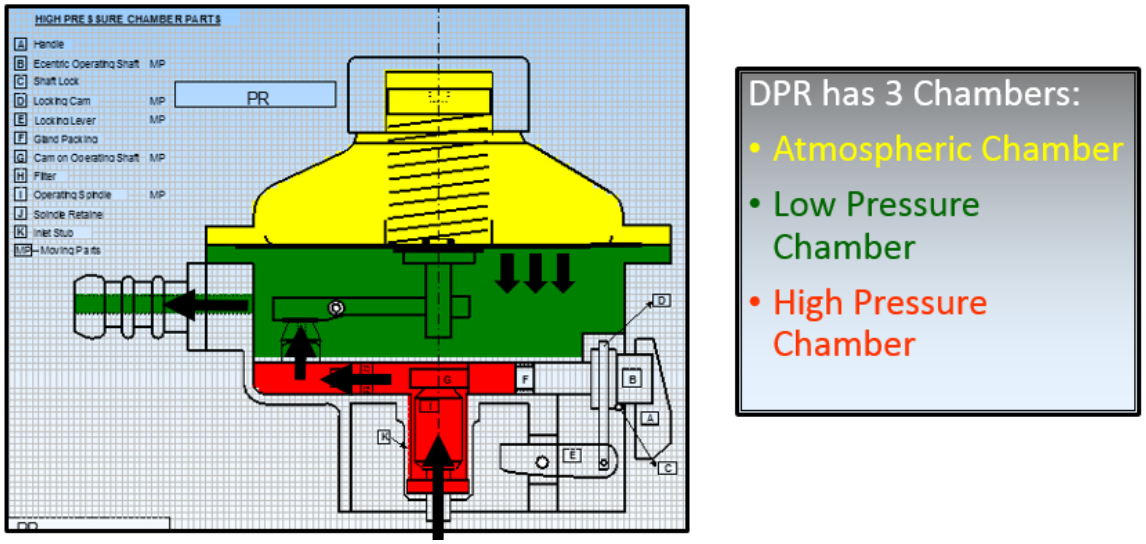


DIAGRAM NO 9: DPR CROSS SECTION SHOWING THE CHAMBERS

3.3.2 Connecting the DPR to SC valve:

a. Remove safety cap from the filled cylinder by pulling the cord attached to it in a horizontal as well as upward motion. The horizontal pull unlocks the safety cap and upwards pull separates it from the valve.
b. Ensure that regulator is in 'OFF' position.
c. Pull up the Delrin bush at the bottom of the DPR and hold and place it on the SC valve of the cylinder. Slowly release the Delrin bush so that it latches on the SC Valve.
d. Turn on the regulator knob to the 'ON' position.
e. Check the connection for leakages
f. Care should be taken to ensure that the safety cap is always tied to stay plate of the cylinder so that it is readily available in case of any leakage

3.3.3 Checking of DPR for Performance and Leak:

All domestic pressure regulators must be tested at the Distributor's Showroom/Go-down before installation. The test rig (i.e. manometer) must be assembled as shown in the diagram No. 10 below.

The following points must be checked:

- The delivery pressure when supplying a double burner hotplate with both the burners lit must be between Water Column (WC) 225 mm and 400 mm. (as per clause 8.9.1 of IS 9798 (latest))
- The lock-up pressure recorded on the manometer when both the taps are closed after the test in (a) is completed, should not be above 450 mm WC. Also, there should be no increase of pressure during one minute of observation.
- There is no gas leakage from the body, breather hole, or screws.

Domestic regulators failing to meet the requirement of above test MUST be treated as defective and returned, properly packed.

A 'DEFECTIVE' label should be attached to every regulator with the details of defects noted on the label and the date of manufacture of each defective pressure regulator. These should be returned to the concerned location as per the advice of the Corporation.

A list of defective pressure regulators mentioning the nature of the defect in each case should be attached to the covering documents and inserted in the box along with date of manufacture of the regulator, which is stamped on the regulator.

DIAGRAM NO 10: TESTING OF DOMESTIC PRESSURE REGULATOR

3.3.4 Spurious regulators:

Spurious Regulators, like Spurious Cylinders, may be injected into the system and could jeopardize the safety of the customer. The general observations in respect of spurious DPRs are:

- Orientation of clamping ball is not in the center of the eccentric spindle of the operating knob.
- Air vent hole in the regulator cover is drilled vertically.
- Outlet nozzle is threaded to the regulator body.
- The regulator working rod is pointed and sharp.
- There is riveting at more than 6 places. The marking plate logo flame should be aligned and in the same direction of the nozzle.
- Non-standard embossing of batch number and serial number. The Batch No is punched on the body on the crimped underside of the DPR. It is alphanumeric, for eg. AB1020. Here 1020 denotes month and year of manufacturing. Serial no. is found on the nozzle and is also alphanumeric. For e.g. A943350. The Serial Number starts with an alphabet A, B to Z and the next six digits are numeric. To prevent ambiguity letters I, O, U are not permitted.
- Batch no. is not positioned on the second slot from the nozzle.

4. CONSUMABLES:

4.1 Tamper evident seal: (TES)

As the name suggests, these seals provide evidence of tampering. Once pre-formed on the safety cap, these seals will tear along its perforations whenever there is any attempt to tamper with a sealed cylinder, in other words, they are self-destructive seals.

These seals are made from rigid PVC and are manufactured through “Double Bubble Extrusion Process” without the use of Plasticizers and mineral fillers. They are also equipped with a 3D security hologram that prevents the possibility of spurious seals in the market.

In comparison to the conventional PVC seals, the Tamper Evident Seals (TES) are longer by 8%, are 60% less in thickness and a Chevron cut is provided along the perforations. Each TES has 6 horizontal perforations and 4 vertical perforations. The seals are pre-formed on safety caps at temperatures of around 120^{o}C.

DIAGRAM NO 11: OMCs TAMPER EVIDENT SEAL SAMPLES

4.2 Suraksha Hose:

The pressure regulator outlet is connected to the gas inlet of the hot plate by a Suraksha hose. Suraksha LPG Hose technology is patented by LERC (LPG Equipment Research Centre, Bengaluru) and manufactured by BIS approved manufacturers as per IS 9573 Type II specifications. There are stringent quality control checks on raw materials, during its processing stage and on finished products.

Markings of Suraksha Hose:

Suraksha Hose has following markings on every meter length of the hose as per IS specifications:

i. Supplier name and trade mark, if any
ii. Maximum Working Pressure
iii. Nominal bore
iv. Month & year of manufacture
v. Replace before "MM-YYYY"
vi. ISI mark
vii. Length of the hose

Salient Features of Suraksha Hose:

a) The inner and outer layers are made of special quality rubber, and is made of a braided Copper or Brass coated high carbon steel wire mesh, which eliminates various deficiencies of the rubber tube.
b) Long life of up to 5 years.
c) It is crack proof; even rodent cannot cut through steel braided wire mesh.
d) Fire retardant, Weather & abrasion resistant outer layer.
e) Each tube carries the details of batch no., month/year of manufacture & replace before Month/year.
f) Each tube is packed and sold in specially designed pouches. Details such as manufacturer, MRP, Length of piece, instruction card and safety tips for usage of LPG & Suraksha LPG hose are printed on each pouch.

It is mandatory that customers use only Suraksha Hose in the LPG installation. The same must be replaced every five years or earlier, in case of any damage.

5. APPLIANCES (LPG Stoves) :

Appliances designed and manufactured for use on LPG should be approved by Indian Standards Institute/Oil Company as a measure of safety and efficiency of operation.

All hot plates must conform to IS 4246 BIS specification. The BIS specification IS 4246 defines the thermal efficiency in relation to the appliance (the gas stove including the burners). Thermal efficiency of a stove is the ratio of useful heat obtained from the burner to the net calorific value of the gas consumed and presently, the thermal efficiency should be at least 68% for each burner.

Advantages of the hot plates approved/recommended by Oil Marketing Companies are as follows.

a) Manufactured in dedicated production line with stringent quality control checks.
b) Each piece has a serial number and is properly documented
c) Each thermal efficient LPG stove carries a copy of BIS certificate and is sold in a special packaging as per laid down specifications.
d) The warranty on thermal efficient LPG stove is for 3 years as compared to 1 year warranty generally available on other LPG stoves
e) The BEE STAR label hot plates marketed through LPG distributors are not available in open market.

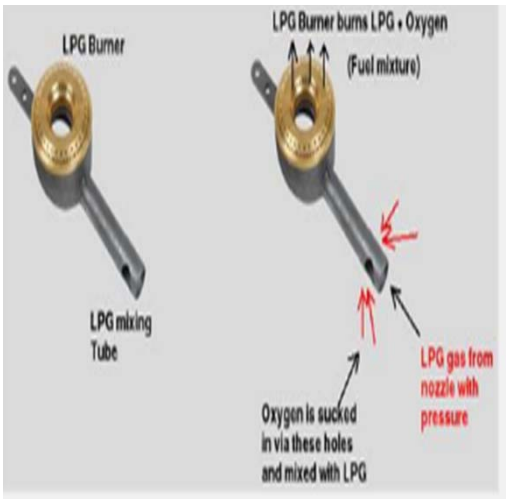


DIAGRAM NO 12: DOMESTIC STOVE PARTS

The appliances used at Commercial/Industrial establishments are not necessarily approved by BIS. Before the release of a connection to such an establishment, the worthiness of the appliances, in terms of their safe and effective use on LPG may be ascertained. Since the installation at such locations has to conform to IS 6044 (Part 1) specification, the competent party undertaking this job should normally be requested to certify the appliances as suitable for LPG use.

6. MULTI CYLINDER INSTALLATION:

All multi-cylinder installations must conform to IS 6044 Part I & OISD 162. This standard (Part 1) lays down the requirements for the installations of liquefied petroleum gas (LPG) cylinders for vapour and/or liquid withdrawal from cylinders, the associated piping and equipment in residential, commercial and industrial premises, where cylinder manifold is provided for installation capacity up to 8 000 kg.

7. HANDLING OF LPG CYLINDERS:

a. Cylinders contain LPG under pressure, and must be handled carefully. Careless handling could result in unsafe conditions. Cylinders' life depends almost entirely on the care with which they are handled.
b. In addition, they are installed in customers' houses, where safety including appearance of the cylinders is of utmost importance. Cylinders MUST therefore be handled with care at all times.
c. Cylinders MUST be handled in such a way that tamper evident seal (TES) does not break.
d. Cylinders MUST NOT be dropped or thrown from truck / lorry tail boards etc.
e. Cylinders MUST NOT be rolled on their sides. They MUST always be carried or rolled on their foot-rings.
f. The safety cap should be properly fixed before cylinders are handled or transported.
g. Even empty cylinders MUST be subject to the same considerations as for filled cylinders since they may contain residual LPG vapour.

8. CHECKING OF LPG CYLINDERS:

Distributors must ensure that every cylinder, filled or empty, when it is received by them is in satisfactory condition. They must ensure that:

a. The cylinder has not been damaged (in transit or by customer).
b. There is no evidence of leakage.
c. The foot-ring/VP ring is secure.
d. The tamper evident seal is intact (in the case of filled cylinders).
e. The Safety cap is in position.
f. The filled cylinder is checked for correct weight of gas. Weighment should be done using digital weighing scales (least count of 10 gms) and duly stamped by the Weights & Measures Department.
g. Cylinders which do not contain correct weight of LPG should be segregated and returned to bottling plant.
h. OMC Cylinders i.e. cylinders of other marketing companies and spurious cylinders should not be delivered to customers and should be segregated. For identification of OMC genuine cylinders kindly refer the heading "Marking of Cylinders (**3.1.1)".**

The following characteristics will help to identify spurious cylinders.

8.1. Spurious cylinders:

Spurious cylinders are those which do not conform to OMCs / relevant specifications. Such cylinders are inducted into the system in an unauthorized manner.

The spurious cylinders fall mainly under the following two categories

- Easily identifiable Spurious Cylinders
- Technically Spurious Cylinders.

a) Easily Identifiable Spurious Cylinders:

These are the cylinders which are odd in shape/size and have abnormalities which are easily identified on visual inspection. Some of the common abnormalities observed are;

- Cylinders having unequal halves.
- Cylinders with unusual bulges in one or both the halves.
- Cylinders having stay plates which appear unusually large or small on visual inspection.
- Cylinders with more or less than three stay plates.
- Cylinders having an easily visible vertical or any other weld on the body
- Cylinders with an abnormal height, shape or size beyond range. e.g. Height of 14.2 kg cylinder is 625+/-5 mm.
- Cylinders with a non-standard foot ring.
- Cylinders returned from the market which do not smell LPG (unpurged) or new cylinder fitted with old valve.
- Cylinders having valve out of center. (Eccentric), Foot ring or VP ring offset from central axis.
- Cylinders having abnormal uneven welding at around the circumference/foot ring/stay plate /Bung weld.
- Cylinders having more than one 'C' welds in case of 14.2 and 19 kg cylinders.
- Cylinders having angular stay plates.
- Cylinders having erased/illegible markings on stay plates.
- Cylinders having vertical markings on stay plates.
- Cylinders having vertical welds on body. (except 35kg /47.5 kg / 425 kg cylinders)
- Cylinders having Non-standard VP' ring/foot-rings.
- Cylinders having Non-standard colour code.

The Easily Identifiable Spurious Cylinders are segregated and crushed in the plant.

b) Technically Spurious Cylinders:

The cylinders which could not be easily identified on visual inspection but still could be suspected as spurious, fall in this category. For example,

- Cylinders without one or more mandatory stampings/permanent markings on the vertical stay plates/ bungs.
- Cylinders with a doubtful / without manufacturer's identification mark/monogram.
- Cylinders having no mandatory marking on 'Bung' / non sequential marking /wrong marking
- Multiple cylinders with the same Sr. No. from same manufacturer
- 'ISI' mark/ BIS license No. missing on Cylinders
- Cylinders not as per OMC drawing

The genuineness of the cylinders is verified with the records and those that do not match are crushed in the plant. The cylinders that match with the records are taken for filling after a thorough physical inspection.

Filled cylinders failing to meet the requirements of 8.0 (checking of cylinders) MUST be dealt with as follows:

TABLE NO 1 DEFECTWISE ACTION

Nature of Defect	Action required
(a)Damaged in transit or by customer. (b) Evidence of leakage	Must not be delivered to customers and must be handled in accordance with procedure covered under heading "Defective cylinders".
(c) Damaged / insecure foot-ring/VP ring	Must not be delivered to customers but returned to filling plants in line with Market Return Policy of OMCs.
(d) Unsealed cylinder (in case of filled cylinder)	Must not be delivered to customers but returned to filling plants in line with Market Return Policy of OMCs. To be returned to the plant in the same truck.
e) Underweight/Overweight cylinder (in case of filled cylinders of 14.2 kg only) beyond the respective prescribed tolerance limit (e.g. +/- 150 g). However, it must be ensured that the entire lot taken for refill delivery should have zero deviation in weight of the LPG cylinder	Should be segregated and not be delivered to customers. To be returned to the plant, preferably in the same truck.

8.2. Defective Cylinders:

Damaged and/or leaking cylinders from which leakage cannot be stopped. Few examples are

a. Leaking through a dent in the body.
b. Leaking through pinhole in the welds.
c. Leaking at the bung connection (Neck leak)
d. Leaking from valve pin. (Pin leak)

Such cylinders must be handled as follows:

a. Fit safety cap on the valve.
b. In case of body leak /bung leak, if the leakage is heavy and cannot be controlled, remove cylinder IMMEIDATELY to an open space for venting.
c. Mark the cylinder as defective. Body leak cylinders must be marked "BL" with paint and, return to the filling plant.

For venting: Place the cylinder in the vertical position in an open space:

- Cordon-off the area around the cylinder.
- Remove the safety cap.
- Fix regulator or adaptor to open valve and then vent the gas.

The operation must be carried out in an open space away from any buildings or drains with a minimum 10 meters clear distance around the cylinder, and where the escaping gases will disperse into air. Ensure there is no hazard, and this action does not constitute a public nuisance.

Only a responsible and trained person must carry out the venting operation, and another person must cordon-off the area around cylinder. The persons must also ensure that no sources of ignition, of any nature, are in the area, or in downwind direction.

Care must be taken to ensure that the vented gas does not ignite. Apart from excluding entry of all sources of ignition, it must also be ensured that no sparks are created by tools, shoe nails etc., striking metallic or concreted surfaces during the venting operation.

8.3. Damaged cylinders:

Damaged cylinders which are not leaking heavily and/or leaking cylinders where leakage can be stopped temporarily are:

a. Cylinders with damaged foot-rings and/or with deep dents but not leaking
b. Leaking from the valve outlet but the leakage stops on fitting the safety cap
c. Leaking from bung threads or any other minor leak

Such cylinders must be handled as follows:

- Fix the safety cap properly.
- Attach a 'Defective' label.
- Return this cylinder to the filling plant in the next available transport with appropriate documentation.

9. INSTALLATION OF APPLIANCES:

9.1 Domestic appliance:

All domestic appliances owned by the customers or sold by the distributors must conform to BIS specification.

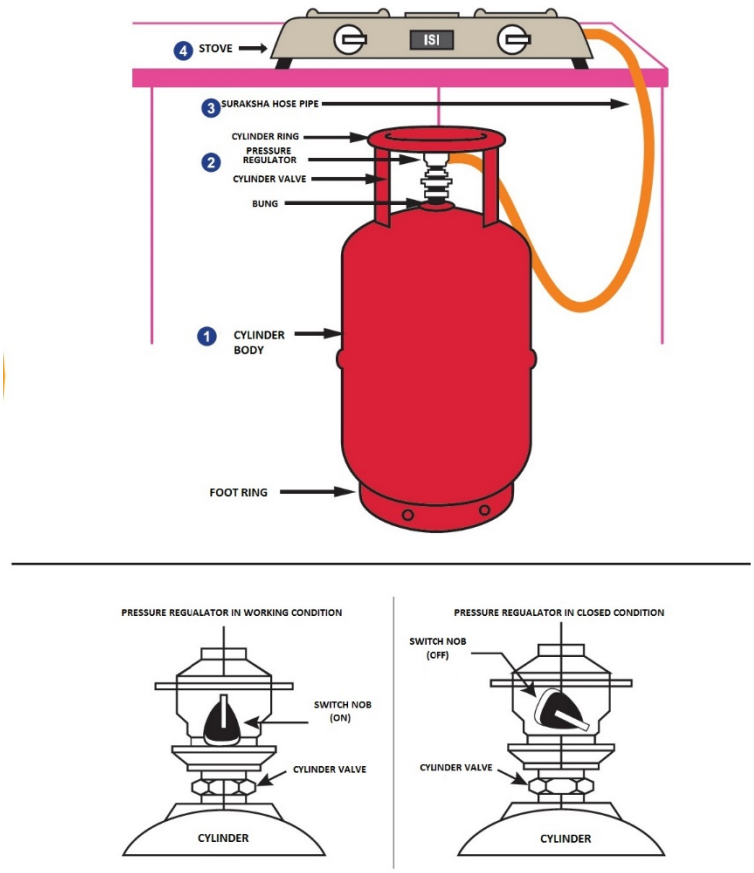


DIAGRAM NO 13: TYPICAL LPG DOMESTIC INSTALLATION

9.2 Commercial and industrial appliances:

In general, the commercial appliances, industrial burners, torches and similar appliances are not 'approved' but are 'recommended' by the Corporation.

Only BIS approved appliances should be used with LPG. If other appliances are used on Commercial and/or Industrial installations, their suitability for use with LPG must be established by a trial in consultation with the Corporation.

Any modification to a standard ”approved" or "recommended" appliance may render the approval or recommendation null and void. LPG must not be supplied to installations incorporating such appliances, unless permission has been obtained, in writing, from the Corporation.

9.3 Checking of stove:

Distributor MUST check the stoves for the following to ensure that each stove is in safe working condition at the time of installation:

a. Whether the Appliance is conforming to BIS (IS 4246)
b. All threaded connections and gas tap for leakage.
c. Appearance and stability of flame at "full on", and 'simmer' positions of the gas tap.
d. Check for leakage at the connection of gas inlet nozzle and Suraksha hose.

An Appliance failing to meet the requirements as stated above, must be repaired as per procedure mentioned in this manual. If the appliance cannot be repaired due to a basic defect, it should be brought to the knowledge of the manufacturer concerned, for taking corrective action.

9.4 Location of Appliance:

It is mandatory that all hotplates are placed at the level above the height of cylinder from ground level. It must also be placed on a platform (made of non-combustible material), against a wall for the following reasons:

a. LPG is twice as heavy as air. In case of leakage, it will accumulate on the floor. If the hot plate is at ground level and the consumer tries to light the hotplate, it will be immediate source of ignition for the unburned accumulated leaked vapour, which will easily catch fire.
b. If a hotplate is used on the floor, there is risk of 'sari' or other clothing coming over the burners and catching fire.
c. It is also possible that the LPG Hose might get overheated by the hot gases rising around the cooking pans or by getting into the flame on the burner. If this happens, the tubing may either slowly deteriorate or gas can leak through its walls and rapidly catch fire.
d. The hotplate should be placed close to the wall to prevent the person cooking from reaching over the burners for things placed on the far side and in the process potentially setting the clothing on fire.
e. The appliances must be installed such that adequate air is available for combustion and allow the discharging the products of combustion. Appliances therefore must not be installed in small confined places.
f. The burner should not be placed in front of a window, because breeze coming through the window can extinguish the flame. When this happens, the vapour coming to the burner will remain unburnt, and start leaking and can result in an accident.
g. Floors, walls, ceilings etc. used to support appliances must be of adequate strength.

If it is not possible to prevent combustible materials (on walls, floors, ceiling etc.) from reaching Temperatures above 65^{o}C by the positioning of appliances, then provision must be made to protect such materials. Such provision may be afforded by mounting a sheet of metal or other non-combustible material between the appliances and combustible material so as to provide, where possible, a ventilated air space of not less than 1/2 " (12 mm) between the sheet and the combustible material. Examples of non-combustible materials are concrete, slate, marble, tile, metal sheets.

When positioning appliances, attention must be given to their function, convenience for use and protection from draughts and inadvertent damage.

No appliance working on electricity or any other fuel is installed within a distance of 1 meter from the LPG installation (appliance, LPG Hose, pressure regulator and cylinder).

Cotton apron should be used while cooking to safeguard against loose/synthetic garments catching fire.

9.5 Instructions to delivery staff and customers:

The customer must be instructed on the operation of the entire system with the aid of demonstrations. This should be done by the Distributor or their trained staff. Such instructions must include;

A) How to use a Hotplate

i. Check that appliance knobs are in closed position
ii. Open the cylinder valve by turning the knob of pressure regulator to 'ON' position.
iii. In order to prevent escape of a large quantity unburnt gas, and eliminate the risk of fire, the following should be followed when lighting the stove.
   - First, light a matchstick/flame lighter and place it near the burner-head and open the gas knob to light the burner. This sequence must be rigidly adhered to.
iv. Demonstrate how the gas knob controls the size of the flame between 'full' and 'simmer' positions. It is advisable to place a pan on the burner when demonstrating low position to protect the flame against draught and explain the utility of simmering flame and the part it can play in optimizing Gas consumption.
v. Turn off the burner by rotating the appliance gas knob to “off” position.
vi. Turn the regulator knob to ‘OFF’ position. This action must be carried out after finishing work at night, or when leaving the installation unattended for any length of time, especially before going for outstation trip.
vii. Customers should never try to tamper with or repair any part of the installation.

B) How to clean a Hotplate

i. Close gas supply before starting any work.
ii. Clean the burner with hot water. Add a little soap or washing soda if necessary to remove grease. Clean the burner ports with a soft wire or a toothpick. Dry the burner thoroughly to prevent rusting.
iii. Similarly, clean the head if it is fitted loose to the burner.
iv. Clean the mixing tube with a stiff bottle brush.
v. Wipe down the frame and pan supports with a wet cloth. Never soak the hotplate body in water as the grease in the gas tap may wash away.

C) In case of smell of gas or leakage, the customer should:

i. Shut off the burner by closing appliance knobs.
ii. Shut off gas supply by turning pressure regulator knob to "Off” position.
iii. Open doors and windows to dissipate leaked gas.
iv. Do not switch “ON “or “OFF” any electrical appliances like light, Fans etc.
v. Do not light a matchstick or use any other burner or flame, such as kerosene stove or coal sigree or diya in the same room.
vi. Remove or extinguish all fire or flames.
vii. Call LPG Distributor / Emergency cell (No.1906) immediately in case of leakage.
viii. In case of heavy leakage:
   a. detach Pressure Regulator from the cylinder
   b. Fit the safety cap on the cylinder valve.
   c. Remove cylinder to a safe place.
ix. Call Fire Brigade (101)

D) General Instructions:

- Abide by the terms & conditions mentioned in the Subscription Voucher
- Read the Safety Instruction card carefully and display it at a place where it is easily visible and readable.
- Keep the cylinder always upright and not horizontal.
- Keep the cylinder always away from any source of heat or fire.
- Do not fiddle with the LPG equipment
- Customer should never change the colour of the cylinder.
- Customer should never change the location of the Installation unless approved by the Distributor.
- Customer shall never attempt to fill or vent the cylinder in any manner.
- Always use Suraksha LPG Hose confirming to BIS specification IS 9573 Type II.
- The hose should be placed away from any source of heat, not enclosed in any kind of casing, easily accessible for inspection.
- The hose must be checked regularly for cracks, holes, softness of porosity
- Replace the hose every 5 years or earlier in case of damage

Action to be taken in case of a Fire in the Building

a. Shut off gas supply by turning pressure regulator knob to "OFF position.
b. Disconnect pressure regulator and fit the safety cap on the cylinder valve,
c. Call Fire Brigade (101).

Contact the Distributor

Address & telephone number of the Distributor, Emergency Service Cell No. is to be mentioned on the DGCC / Cash Memo to enable the customer to contact for service required and in case of emergency.

An Instruction Card MUST be left with the Customer and it MUST be ensured that the card is prominently displayed near the LPG installation.

The distributor MUST ensure that the Instruction Card is correctly understood by all LPG users in the Customer's establishment.

9.6 Training of Showroom Staff, delivery person and mechanics:

It is of utmost importance that the showroom staff, delivery person and mechanics working under the Distributors are adequately trained by the Distributor to do their jobs in a competent and safe manner. Mistakes on their part can lead to a serious accident.

It is the sole responsibility of the Distributor to train his staff properly to the standards laid down by the Company. Company staff will be responsible to regularly test their delivery personnel for competence and provide guidance wherever necessary. Incompetent delivery person should not be employed.

Distributors can take advantage of the Refresher Training Courses conducted by the Corporation from time to time. This training is for Distributors and their staff, especially mechanics, who can in turn impart necessary training to their delivery person. No delivery

person should be allowed to work independently unless they are found competent after testing by the senior delivery person / mechanic and the Distributor himself. To summarize, the responsibility of training is shown below:

Training To	Training By	Frequency
A) Prior to commissioning:		
Proprietor/partner(s) and Showroom Staff	With some other operating Distributor – 2 Weeks	As and when required
Delivery Personnel and Mechanics		
B) Refresher Course:		
Proprietor/partner(s)	OMCs	As & when required
Delivery personnel	Field Officer / Sales Officer	At the time of Showroom Visits / Inspection / As per OMCs Training module & frequency
Showroom Staff		
Mechanic		

Register of Training Details:

The Distributor shall maintain a separate register in which the following details of the various personnel employed with the distributor shall be maintained. The Corporation's authorized officer can ask for this register for inspection.

a) Name of the employee
b) Date of employment
c) Category of employment
d) Training period
e) Training by
f) Independent charge undertaken with effect from

Identity Card :

The Distributor shall give all their employees an identity card (with photograph of the employee), after ensuring that the Showroom staff, delivery person and mechanics are competent enough to undertake work independently. The Identity Card will be carried by the employee at all times during their normal work. The Distributor should take care to ensure that this identity card is withdrawn from employees when they are not on work to avoid its misuse. Distributor should ensure that all the employees are provided with uniform as per design approved by the respective Oil Company. While on duty, the employee should be in a proper and clean uniform always.

9.7 Training to customers:

The need for training of the distributor and his staff has already been emphasized. The training is not complete without adequately training the customers. Mechanics / delivery person while installing new connections in the premises of customers shall impart proper training to the customers so that they can operate the LPG installation safely. **Refer 9.5 above.**

In addition, "Instruction Card for Customer" should be handed over for future reference of customers. Also, distributors should ensure that Customers' education is refreshed / kept updated by regular customer safety training clinics. As a guide, each distributor should conduct 2 safety clinics / seminars in their area every year. Necessary help to conduct this clinic shall be given from the Corporation whose officers will attend and address the audience.

It is important that the Distributor's staff are fully conversant with the subject and they educate the customers at regular intervals about the use of LPG installation and the steps to be taken in case of emergency by educating them about all aspects including the emergency helpline number (1906).

How to conduct Safety Clinic:

The purpose of Safety Clinics is to educate the new and existing LPG consumers on safe practices of LPG usage do's and don'ts, emergency preparedness in case of LPG leak at customer premises. Conservative Tips on LPG usage also can be part of safety clinic. For this,

a) Select the target audience for conducting Safety clinic and communicate them well in advance with details like, place of meeting, time and date.
b) Make necessary arrangements to conduct safety clinic like – seating, tents, AV equipment, HOT Plate demonstration setup, demo cut cylinder, SC Valve, transparent jar connected with DPR and Suraksha hose.
c) Start meeting on time and stick to the exact topic in local language /language easily understood.
d) Conduct a small quiz to assess the learning by the audience. Reward them with small gifts.
e) Handover safety instruction cards to all the participants.
f) Collect consumer details of those who have attended the safety clinic along with few photographs.
g) Arrange for wide publicity in local print and electronic media to spread the message into public.
h) Distributor should also conduct structured programmes for school / college students in his area of operation once in a year.

9.8 Construction & working of LPG burner:

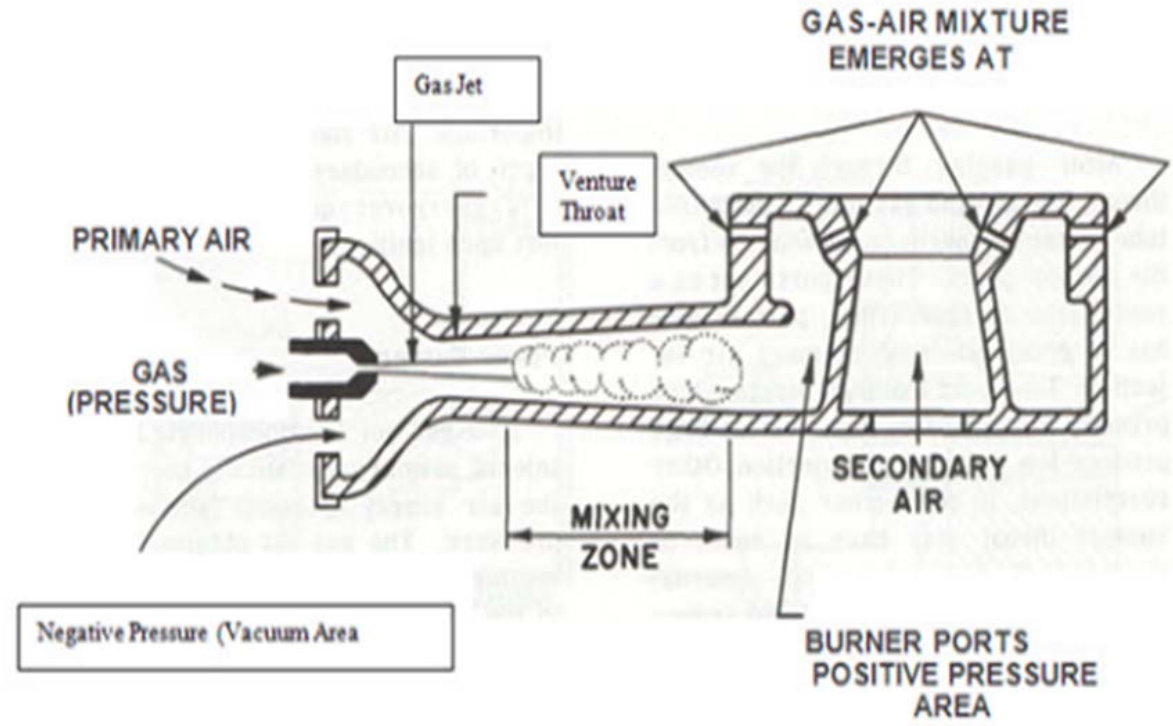


DIAGRAM NO 14 SIMPLE LPG BURNER

L.P. Gas flows through Jet A at a fairly high velocity. The stream of gas draws 60% of air through the primary air openings . Gas and primary air mix in a mixing tube . The gas/air mixture passes through the burner ports on the burner head further mixes with air (40 % secondary air) where it will burn if ignited.

9.8.1 Common faults in burners

Sr No.	Fault	Possible causes	Remedy
1	**Yellow Flames or Yellow tipped Flames or formation of soot**	1 Too much gas: a) Jet too large because Wrong size fitted Enlarged in cleaning.	Replace the jet
		b. Leakage between jet and its housing	Remove jet and replace after applying suitable jointing compound on the threads of the jet

		2.Not enough air	Check the Internal Diameter of mixing tube and take up with manufacturer
		a. Burner ports partly blocked and /or obstruction inside burner head /mixing tube	Clean burner ports, burner head mixing tube as per 9.5 B
		b. Eccentric gas injection in the mixing tube due to either defective drilling of orifice or incorrect mounting of gas cock.	Replace the jet orifice and mount the gas cock properly
2	**Orange flames**	Particles of dust entering the flame either from outside atmosphere or from the mixing tube	Refer heading " how to clean a hotplate"
3	**Flame flashes back**		
	a. On one burner tap fully open	a. Burner ports enlarged, distorted or burnt out Mixing Tube gas valve alignment bend	Replace burner port concerned Check alignment [it should in exact angle]
		b. Jet partially blocked	Clean jet
	b. Tap on simmer	Simmer passage in tap blocked	Dismantle tap, clean , lightly grease and replace
	c. On all burners	Inlet pressure too low because	Change pressure regulator
		Faulty pressure regulator.	
		Tubing kinked/too narrow	Remove kink /use correct BIS approved tubing
		Obstruction in the distribution system	Remove obstruction
4	**Flame lifting**		
	When new cylinder is connected	Air in the tubing or top of the cylinder	Operate burner under supervision for a few minutes when lifting will stop.
	On the burner	a. Dust in burner port	Clean burner

		b. Distortion of burner ports	Replace burner head
		c. Jet too large	Replace jet
		Incorrect mounting of burner.	Adjust burner position in relation to jet or replace burner.
		Incorrect hole size of burner	Replace burner
	On all burners	Inlet pressure is more because	
		a)Breather hole of PR is blocked	Clean breather hole by inserting blunt tooth pick a little
		b)defective PR	Replace PR.
	No flame	a) empty cylinder	Replace cylinder
		b)over cooling of cylinder due to excessive draw off	Use burners alternately
		c)jammed valve seat	Replace cylinder
		d) jammed/ faulty PR	Replace PR
		e) blocked gas pipe in the appliance	Open nut and clean gas pipe with a long wire .
		f).water filled cylinder.	Replace cylinder.
5	**Odour**		
	a. Gas odour	Leakage of gas from burner, gas cock, flexible tubing, pressure regulator or cylinder.	As referred in heading 10.0 “leakage of Gas “
	b. Combustion odour	Lack of secondary air or flame impingement Lack of proper combustion of gas	Check that burner flames are satisfactory. Make sure that vent passages if any are clear, see that burner gets ample supply of secondary air. If flames are impinging on a cool surface, placed very near the root of the flames, increase distance between the surface and the burner head. Check

			burner grates, pan support etc. to see that they do not obstruct the flow of gas and products of combustion.

9.8.2 Fault repairing:

Greasing of Tap

a. Dismantle one gas tap at a time
b. Check if tap is in order. Replace if damaged or worn out.
c. Clean passages by using a wooden stick. Simmering orifice can be cleaned by using fine copper wire.
d. Grease plug lightly by using the approved grease.
e. Rotate plug in housing.
f. Remove plug from housing.
g. Check grease distribution.
h. Clean passage again.
i. Assemble entire tap
j. Check functioning of pressure spring. Ensure that spring is pressing plug into housing.
k. Check for leakages after assembly

9.8.3 Cleaning the jets:

a. Clean jet by using a fine copper wire thinner than the jet orifice. Use of a reamer is not permitted as it would enlarge the orifice.
b. Screw the jet into the tap housing by applying the approved jointing compound to the male threads.
c. Check for leakages after assembly

9.8.4 Cleaning the burners:

a. Clean mixing tube by using a stiff bottle brush
b. Check the burner head for damage or distortion. Replace if necessary.
c. Clean burner head by using a brush
d. Clean burner holes by using a hair pin or a soft wire
e. Replace the mixing tube and burner head making sure that
   - The mixing tube is well fitted on the supports
   - The mixing tube is fixed in such a way that the jet is centrally located
   - Burner head is seated properly on the burner
   - Burner head is at the proper distance from the pan support.
f. Check for leakages after cleaning and assembly

10.LEAKAGE OF GAS:

10.1 Detection of Gas leakages and Remedial action:

Gas leakage can be easily detected by its characteristic smell. The location of the leak can be identified by applying soap solution. In case of leakage from the valve pin, a leak detector to be used.

A naked light **must never** be used due to risk of causing fire. Installation should not be used until the leakage is rectified.

Typically, leakage occurs in the following places of the cylinder Installation:

10.1.1 Leakage from Cylinder

- The weld seams or on the cylinder body
- The cylinder/valve connection (bung joint)
- From inside the valve (only at the customer's premises)

Cylinder should be removed, safety cap be fixed and the cylinder should be kept in open ventilated space, or to be taken back to godown immediately with due care. Sound cylinder to be given to customer (Replacement free, charge only if found to be misused/fiddled by customer). Prepare a tag and affix it to the defective cylinder.

10.1.2 Leakage from the Pressure Regulator (PR)

- Between valve and regulator joint ('O' ring Leak)
- Breather hole
- Rivets
- Outlet nozzle/main body joints if any
- Regulator Knob

Regulator to be removed from the cylinder. Safety cap to be fixed on the cylinder. Pressure regulator to be replaced with a working PR and documentation to be completed and tagging be done. (Replacement Free. Charge, only if found to be misused/ fiddled by customer)

10.1.3 Leakage from LPG Hose:

Check leakage from the LPG Hose:

- Along its length
- At ends which are fitted to regulator outlet and appliance inlet nozzle

Ask Customer to get it replaced.

10.1.4 Leakage from Hotplate:

Check leakage from Hotplate at:

- All threaded connections
- The tap/knob either between plug and housing to outside along the spindle or out through the jet

  Ask Customer to get it replaced.

10.2 Handling of Gas leakages:

Immediate action must be taken by the customers when gas leakage is detected otherwise there is danger of fire. Also refer heading **9.5 C** ("In Case of Smell of Gas or Leakage")

10.3 Leakage immediately after a filled cylinder is connected:

Disconnect the cylinder, check for leakage. If cylinder is defective, put safety cap on and arrange for replacement.

If the cylinder is not leaking but it is suspected that leakage is due to the connection not being properly made:

- Detach Pressure Regulator (PR) and check condition of "O" ring of the valve.
- Connect the PR again.
- If leakage at PR base continues - Replace cylinder with another filled cylinder and check again. Repeat till no leakage is observed.
- If the customer made the original connection, demonstrate to them the correct way to make a gas tight connection, and impress on them that the procedure given in the instruction card must be observed.

11. OTHER APPLICABLE RULES:

Procedures for below mentioned topics are to be dealt as per Gas Cylinder Rules (latest) published by Petroleum and Explosives Safety Organization (PESO) from time to time. (link for present rules = http://peso.gov.in/PDF/GCR_2016.pdf.

SR NO	DESCRIPTION	SCHEDULE /CHAPTER
1	Transport of cylinders G.C. Rules	Schedule VI
2	Storage Rules (distributor go-down)	Conditions : Construction details of LPG Storage Shed (Page no 100 to 102)
3	Conditions of Licensing of Godown	Conditions : Construction details of LPG Storage Shed (Page no 100 to 102)
4	Power of exemption	Chapter VII
5	Powers	Chapter IX
6	General conditions governing gas cylinders Rules (latest)	Clause no 10 page 68
7	Handling and Use	Clause no 18 page 70
8	Storage of cylinders	Clause no 21 page 70
9	Electrical installation	Clause no 22 page 71
10	Cylinder subjected to action of Fire	Clause no 24 page 71
11	Conversion of cylinders	Clause no 28 page 71
12	Form C	Page no 94
13	Form F	Page no 99

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Chapter II – Marketing Section

1:0 INTRODUCTION:

This Section of the Manual provides LPG Distributors with information / instructions on marketing LPG and associated products.

Additions or alterations to these instructions will be issued when necessary in the form of guidelines / circular / communications.

Instructions of a transient nature will be issued by means of written communication by the respective OMCs.

1.1. General

LPG marketing started on a small scale in India in the 1950s by M/s Burmah Shell & Stanvac in towns around the Refineries. The marketing of LPG was entrusted to private concessionaires of Esso & Caltex, such as erstwhile Kosan Gas, DGPL & JK Gas. Over the last six decades, the LPG market in India has grown in leaps and bounds. As on 1st April, 2021, the registered customer strength of LPG was 33.06 crore for industry. With introduction of Pradhan Mantri Ujjawala Yojana (PMUY) and other Government schemes for LPG enrollment, the household penetration across the country based on active customer strength has reached around 99.8%. India currently has a network of 25083 LPG Distributors (as on 01.04.2021) to meet the requirement of LPG consumers.

LPG is used for cooking purpose in household and also in commercial establishment for cooking, heating, baking etc. In industry, LPG is widely used in Boilers, ovens, furnaces, metal cutting, brazing, sintering, heat treatment processes, textile industry, glass industry, chic brooding, de-weeding in agriculture, forklift etc. and also for numerous other industrial applications.

LPG was also introduced as an automotive fuel in 2001, after the issue of the LPG (Regulation of Use in Motor Vehicles) Order by Ministry of Petroleum & Natural Gas.

PSU Oil Companies, as well as parallel marketers', have setup Auto LPG Dispensing Stations (ALDS) in various parts of the country. These ALDS dispense Auto LPG in the registered vehicles fitted with permanent Auto LPG tanks and approved LPG conversion kits as notified by Ministry of Surface Transport, Govt. of India.

With such a high acceptance of LPG, the focus in the future of LPG marketing will be to improve quality of service and consumption by PMUY customers.

1.2. Marketing of LPG:

Domestic LPG is marketed by three Public Sector Undertakings (PSUs) Viz. IOC, BPC and HPC (hereafter referred to as the Corporation/Company/OMC) under the Public Distribution System.

Packed non-domestic LPG is also marketed in cylinders of various capacity by the OMCs at import parity price. OMCs also market bulk LPG & Auto LPG to various segments of customers.

Following the liberalization program of the Government of India, Parallel Marketers have been allowed to import, bottle and market LPG at market determined rates. However, the equipment (Cylinders/PR) to be used by them are of different size.

For domestic use, in addition to the 14.2kg cylinder, OMCs also market a 5kg cylinder as a more affordable option, especially for PMUY customers.

For Non-domestic use, OMCs have 5 kg, 19 kg, 35 kg, 47.5 kg and 425 kg cylinders.

OMCs have also introduced 5 kg FTL (Free Trade LPG) cylinder to cater to a particular section of customers, to meet urgent requirements, on submission of Identify proof only.

OMCs have been working hard to improve last mile penetration of LPG, and to ensure the availability of clean fuel by expanding the distribution network in rural areas, even in remote parts of the country. LPG Distributors appointed by OMCs are governed by the terms & conditions of Distributorship agreement entered with OMCs. The Distributorship agreement details the responsibilities of both the Distributorships and the OMCs. Besides the responsibilities stated in the Distributorship agreement, the Distributor is also required to follow the Policies, Standard Operating Procedures and practices conveyed by OMCs from time to time, including those given in this manual, to serve the LPG consumers in a better way.

1.3. LPG Specifications:

The type of Liquefied Petroleum Gas (LPG) marketed in India is a mixture of Butane and Propane Gases, conforming to BIS Specification, No: 4576-2018. For details, refer 2.1 in Technical Section

1.4. Source of LPG:

LPG is produced in the crude distillation process at various refineries and fractionators in India. Since indigenous availability of LPG is limited Propane and Butane is also imported and blended in Refineries / Import locations to meet the demand for LPG in the country.

1.5. Advantages of LPG:

- LPG is a clean fuel which reduces health hazards caused by conventional fuels like Wood, Coal, Cow dung, Superior Kerosene Oil (SKO).
- Environment-friendly fuel, with minimum Sulphur contents in emissions
- The size of the flame can be easily controlled to maintain the heat required at a constant temperature.
- It gives instant heat.
- Cooking is quick, and the kitchen does not get heated, unlike other fuels like Kerosene, charcoal etc.
- No soot is formed. The bottoms of the pans as well as kitchen remains clean.
- LPG adds to comfort.
- LPG cylinder occupies little space, as compared to conventional fuels for same amount of cooking, in the kitchen, and it is easy to handle.
- LPG installation is easy to clean and requires less maintenance as compared to other cooking forms
- Adequate availability, free home delivery, easy to order through various modes – IVRS, online though Internet, web App, SMS etc., make it a hassle-free fuel.

1.6. Comparison with Other Fuels:

Table 1 – Comparison with Other Fuels

Sr. No	Item	LPG	Charcoal, Coke and Firewood	Kerosene	Electricity
I	Availability at the house	Free home delivery	To be transported by the customer	To be transported by the customer	Conveniently available
II	Storage	Occupies little space	Bulky and dirty	May smell	Cannot be stored. Work may suffer if supply is irregular
III	Transfer from Storage to Appliance	Effortless & controlled. Always connected	Inconvenient & dirty	Time consuming & danger of spillage	Not applicable
IV	Lighting the appliance	Easy and instantaneo us	Time consuming laborious and dirty	Time consuming	Easy & instant (requires specific type of utensils)
V	Maintenance of heat	No attention required.	Continuous attention required.	Pressure stoves must be pumped up from time to time.	No attention required
VI	Control of heat	Blue flame is visible & its size is easily controlled.	Heat output cannot be varied much.	Heat output can be varied but not at a large extent.	Easily controllable
VII	Product of combustion	Non-toxic. No soot	Sooty, Smoky and toxic can be dangerous if flue arrangement and ventilation of room inadequate	May be sooty when lighting up. May smell of kerosene	Not applicable
VIII	Efficiency of utilization of fuel	On BIS approved Hot Plate (Min 68%)	15%	55% to 60%	65% -70% (Induction – 90%)
IX	Cleanliness of Fuel	No blackening of pan bottoms or kitchen ceilings	Pan bottoms & kitchen blackened by soot	Pan bottoms & kitchen ceilings are sometimes blackened.	Clean

X	Extinguishing Flame	Instantaneous	Fire cannot be readily extinguished and fuel is always wasted	Instantaneous	Instantaneous. But heat wasted as appliance cools off (Not applicable for induction)
XI	Safety	Very safe due to limited flammability range	Unsafe	Unsafe in spillages	

*Probable questions on usage of LPG are given in Point No. 11.0 under question Answer Segment.

1.7. Classification of Customers:

The customers are normally classified as under:

a) **Domestic Customers -** Those who use LPG for household cooking purposes only. LPG Connections are issued to domestic customer in 14.2 kg & 5 Kg cylinders. Composite cylinders are also available in varied sizes in a few markets. Presently, for a 'Household' ['Household' as defined in the Liquefied Petroleum Gas (Regulation of Supply and Distribution) Order, 2000, as amended on 10 September' 2009, or as notified from time to time] domestic consumers would be provided at subsidized rate up to 12 cylinders of 14.2 Kg in a Financial Year, or the number of cylinders as notified from time to time. Any cylinders beyond 12, or the number as notified from time to time, will be given at non-subsidized domestic rate.

b) **Non-Domestic Exempted customers (NDEC) –** The following customers are allowed to use domestic LPG for Non-Domestic purpose (at subsidized rate upto the cap approved by Govt. of India, and at non-subsidized rates thereafter),
   1. Government/ Municipal Hospitals.
   2. Supplies to all school and colleges, hostels or mid-day meal schemes.
   3. Canteens attached to Government Offices (Govt. includes State Govt. and local bodies) and their installation and Guest Houses etc.
   4. Messes of Police, BSF, CISF in addition to kitchens and messes of the defence establishments.
   5. Canteens run on cooperative basis under Cooperative Societies Act.
   6. Laboratories attached to schools, colleges & research institutions.
   7. Charitable institutions registered under the Societies Act.

c) **Reticulated customers-** Housing complex / societies with multiple flats using a cylinder bank with 3 stage pressure reduction for use in household cooking purpose. Installation to be adhering to IS 6044 part 1.

d) **Commercial and Industrial Customers –** The customers using LPG for commercial establishments such as hotels, restaurants etc. are commercial customers. The customers using LPG for manufacturing process are Industrial customers. Normally, LPG

Connections are issued to these customers in various capacity of cylinders such as 5 kg, 19 kg, 35 kg, 47.5 kg and 425 kg depending upon the requirement.

e) **Free Trade LPG Customers –**

PSU Oil Marketing Companies (OMCs) also sell 5 kg LPG cylinders with/without Domestic Pressure Regulator (DPR) to customers for meeting urgent requirements on production of a valid Identity proof.

OMCs are marketing FTL in 5 kg cylinders through their LPG Distributors, Retail Outlets and some points of sale viz. Kirana Stores etc. Provision of buy back of the equipment (FTL cylinders and regulators) is also available. Rate of the buyback is decided by the respective OMC.

1.8. LPG Installation:

The standard household installation normally consists of LPG cylinder connected to Hot Plate through a pressure regulator and a Suraksha Hose. Customers are given additional cylinder (DBC) to ensure uninterrupted LPG availability to the customer.

2. ROLES & RESPONSIBILITIES OF LPG DISTRIBUTOR:

It is the responsibility of the Distributor to sell product of correct Quality & Quantity and provide excellent customer services. Customer satisfaction can be achieved by ensuring timely refill, courteous behavior, and hassle-free service.

The customer delight can be achieved by following steps:

a) Meet and greet the customer
b) Empathize with the customer
c) Guide the customer towards a resolution.
d) Ensure that grievances are addressed and closed to the satisfaction of the customer.

The Distributor must attend meetings organized by OMCs / local administration from time to time to keep updated on various changes in policies / procedures, and ensure their staff is appraised on the new developments.

Distributor must themselves undertake training and ensure participation of their Showroom Staff / Godown Staff/ Delivery Personnel & Mechanics, in the periodical training organized by OMCs.

The Distributor is required to maintain the following infrastructure to ensure refill delivery and other allied services to the customers in line with the policy Guidelines / procedures.

3. DISTRIBUTORSHIP INFRASTRUCTURE:

3.1. Showroom:

Showroom should be in the locality / location approved by the Corporation with easy access and visibility to customers, as well as provision for following is mandatory:

- Interior: Layout, design and furnishing as per respective OMC approved guidelines including proper sitting arrangement for the customers with basic facilities such as clean drinking water.

- Computers, power back-up, Telephones / High-speed broadband internet connections (Refer 4.3 of Marketing Section) as per norms.

- Display of LPG ideal Installation - Advantages of LPG should be demonstrated to the prospective customer by actually using one of the appliances

- The showroom must have on display, the OMC recommended appliances, including Bureau of Energy Efficiency (BEE) star labeled hotplate.

- Suggestions/Complaint Book/Box to enable customer to register his/her feedback / grievance.

- Proper and adequate storage for the safe keeping of records and documents

- First Aid Box with necessary medicinal aids.

3.1.1. Glow Sign Board:

Each Distributor must prominently display the approved name board, conforming to the Corporation's standard so as to enable easy identification

3.1.2. Mandatory Displays:

The showroom should have the following mandatory displays:

a) OMC approved backdrop with the following mandatory information;

i. Working hours and weekly holidays.
ii. Stock Board of Full/Empty/Defective Cylinders for each type of Package & Pressure Regulators
iii. Refill Selling Price of all packages
iv. Waiting List Board for New Installations (for NC and DBC) to indicate:
    - Waiting List Registration No. as at close of the previous day (If no waiting list, display NC/DBCs available across the counter)
    - Waiting List No. and date of last installation done.

- Address and telephone No. of customer service cell and Emergency Service Cell i.e. 1906

v. Display of five models of Appliances with Selling Price.

vi. Service Charges, Mechanic service available free of cost for attending leakage complaint.

vii. CCI notification Board

viii. No. of pending refill orders & date of oldest refill order pending

b) Prevailing Security deposit of equipment / Tariff and Penal rates.

c) Message on "Public Liability Insurance Policy "

d) Name & contact number of Proprietor/Partners and Category of the distributorship

e) Name & contact details of LPG Field officer (as advised by the concerned OMC)

f) Modes of digital payment available

g) Toll Free helpline number – 1-800-2333-555

h) SMS/IVRS phone number for refill booking.

i) Safety Slogans and Conservation tips.

3.1.3. Mandatory Registers in the Showroom:

Distributor to maintain following registers and update it on daily basis as per format shared by respective OMCs.

a) **Stock Register** to be maintained for filled, empty & defective cylinders for all types / categories of cylinders and also for Pressure Regulators. The register has to be updated on daily basis for the equipment transactions done during a day. Opening & closing stock mentioned in the register must match with the physical stock in the Godown as well as the same displayed in OMCs software.

b) **Complaint / Suggestion Book** – Each Distributor must maintain a complaint / suggestion book that must be readily available to the customers on their demand. This note book should be shown to Corporations officials whenever they visit the Distributorship. As already mentioned in marketing section 3.1, availability of this register should be prominently proclaimed by means of a board / placard at the Showroom

3.2. Godown:

Distributor should provide the LPG storage Godown in line with the prevailing distributorship selection guidelines. The LPG Godown should have valid PESO license all the times. The Go-down should always have mastic flooring in good condition. It should also be well painted and maintained in good condition as per guidelines of PESO and issued by the individual OMCs.

3.2.1. Godown-Infrastructure:

The following infrastructure should also be available in the Go-down:

a) 50 kg capacity Digital Weighing Scale with least count of +/- 10 gms.
b) 2 Nos BIS approved DCP type fire extinguishers of 10 kg each duly tested and valid.
c) 4 Nos sand Buckets duly filled with dry sand covered above by rain hood.
d) Leak detectors to check defective cylinder
e) Calibrated Standard dead weights for calibration of weighing scale.

3.2.2. Display / Painting in Godown:

a) Copy of valid PESO license and Approved layout plan.
b) Copies of Valid Weights & Measures certificate, insurance & RSL (if applicable).

The following should be painted in red paint in letters of size not less than 75 mm (3"):

a) Storage License Number, validity and capacity
b) 'No-Smoking' in English, Hindi and local language.
c) Do's and Don'ts on safe handling of LPG cylinders.
d) Ex -Godown / Cash N Carry Rebate message with current rebate amount.
e) Emergency contact numbers
f) Usage of Mobile is prohibited

3.2.3. Documentation:

a) Updated daily stock-register for filled, empty and defective cylinders for all categories of cylinders.
b) Up to date Records of SQC and PDC as specified by OMCs.
c) Equipment movement register – No equipment shall move in / out of Godown without prior entry in the register

3.2.4. Safety at Godown:

a) Cross ventilation of approved size at floor and roof level, fitted with 2 layers of brass mesh (size 11 mesh per cm). Vents to be maintained clean and clear to allow free air circulation
b) Rubber mats in sufficient numbers, for safe unloading of cylinders from the packed truck, and also for de-stacking activities inside the godown.
c) The storage shed and area surrounding should be kept clean and free from all flammable materials, waste vegetation and rubbish.
d) No person should smoke, use mobile phones, carry match box, or fuses within the licensed premises of LPG Godown.
e) Filled cylinders shall be stored vertically and not to be stacked more than 2 high. Empty cylinders shall not be stacked more than 3 high.
f) At least 60-centimetre gangway shall be allowed between stacks of single or double rows and between stacks and walls to permit access and manoeuvring of cylinders.

g) Any accident, explosion or untoward incident occurred within the licensed premises shall be immediately reported to PESO, OMC officials, District Magistrate and the nearest police station.
h) Handling of LPG Cylinders at LPG Godown shall not be permitted between sunset to sunrise.
i) Defective, leaky cylinders to be segregated and stored separately with clear labelling. All such cylinders should be sent back to LPG plant immediately as per Corporation guidelines.
j) No alterations / unauthorized construction to be carried out in storage shed or surroundings without written permission from PESO.
k) At any given time, stock of empty or full cylinders should not be stored outside the licensed premises.
l) Storage of filled cylinder should be limited to licensed capacity.
m) Electrical or Telephone connections should not be provided inside the licensed area of the godown.

3.3 Delivery Infrastructure:

The Distributor should have adequate number of delivery infrastructure to ensure delivery of refills to the customers within 24 hours from the time of booking. Distributor must ensure that:

a) Bicycle or any other two-wheeled mechanically propelled vehicle is not allowed for making delivery of refills.
b) The painting and color coding of the vehicles should be as per respective OMC standardized scheme.
c) All delivery vehicles are fitted with portable fire extinguisher.
d) All delivery vehicles are provided with proper fittings to transport cylinders safely.
e) Mechanized Vehicles carrying cylinders are as per RTO norms and carry valid FC, RC, Insurance documents.
f) The driver of mechanized vehicle should carry a valid driving license
g) Emergency contact details are painted on body of all delivery vehicles.

3.4 Manpower Requirement:

The distributor should have following trained / skilled manpower to run the distributorship operations with standardized uniforms:

a) Cashier / Accountant, if required
b) One deliveryman for every 30 refills delivered per day
c) Adequate number of showroom staff. The person/staff engaged should be well conversant with computer operations to carryout operations on the computer, website, extract reports, view data on internet, Transparency Portal, etc.
d) One trained Mechanic for every 4000 customers.
e) One godown keeper, if required

It is the responsibility of the Distributor to comply with “all Labour legislations” in respect of their staff.

3.5 Statutory Licenses and Other Mandatory Documents:

It is mandatory for a distributor to have valid licenses at all times available in the Showroom, as applicable to the concerned State.

Some of mandatory licenses and records to be maintained by the distributorship:–

- Distributorship agreement and renewal documents
- LOI/LOA and Reconstitution letter, if any
- PESO Valid license for storage godown along with approved drawing
- PAN No. of distributorship
- Valid Insurance policy Certificates (**as per 3.6 below)**
- Weights and Measure Certificate for all available equipment
- Shops and Establishments certificate
- GST Registration/Return
- ITR
- Retail Selling License (if applicable)
- Bank certificate for the operating account
- Registered Partnership deed (if applicable)
- Fire extinguisher service/Test certificate
- Delivery vehicle registration documents
- Other mandatory records as per corporation instructions & retention schedule
- PF/ESI registration wherever necessary

3.6 Insurance:

The Distributor, at his own cost, should take out the following insurance covers:

a) **Third Party insurance –** This policy covers third party claims resulting from bodily injury or property damaged due to accidents caused from the sale of LPG and appliances. This policy is mandatory. Minimum coverage for third party claim should be Rs 10 Lac.

b) **Workmen's Compensation Insurance -** This policy covers payments under the Workmen's Compensation Act to the employees of the Distributors. This policy is not mandatory but it will be in the interest of Distributors.

c) **Showrooms/Storage Godown /Fire Explosion Insurance -** This Policy is to be taken in line with the Distributorship Agreement. It is in the interest of the Distributors to insure themselves specifying the maximum number of cylinders, which will be stored as per PESO license, any time in the godown.

d) **Motor Transport Vehicles Insurance -** This policy is mandatory by law.

It is advisable that the distributor takes out a comprehensive policy thereby covering all related risks.

4. DISTRIBUTORSHIP OPERATIONS:

LPG Distributor is required to operate the Distributorship as per the terms of LPG Distributorship Agreement entered with the OMCs. They are also required to fulfill provision of statutory regulations such as LPG Control Order, Gas Cylinder Rules, Legal Metrology Act, PESO Rules, Statutory obligations of State Government like Form B/RSL, applicable labor laws and any other instructions given by the OMCs/ any other authorities from time to time.

All the OMCs individually have their own software systems, and the entire LPG Distributorship operations are to be carried out through the software only. The LPG Distributor and the staff deployed are required to be well conversant with the software of the concerned OMCs. The Distributor is solely responsible for all operations carried out through the software by himself or by their staff. Various records in physical form are also to be maintained, as prescribed.

4.1. LPG Supplies:

The Corporation arranges to replenish the Distributor's stock of filled cylinders upon placement of indent by the distributor. The Distributor therefore should ensure that sufficient funds and valid indents are available in the plant for dispatch of loads.

If the Distributor anticipates unusually heavy deliveries, or if it appears that the scheduled dispatch dates will result in either over-stocking or under-stocking, he should immediately communicate with the concerned Field /Sales Officer and Supply Point.

Supplies are delivered at the Distributor's godown and hence loading/unloading of cylinders should take place only at the Distributor's godown. Presently, the loading / unloading operations are arranged by the OMC's packed LPG transporters to ensure safe handling.

4.1.1. Short / Defective Cylinders Receipt from Plant:

If the number of cylinders received does not tally with the quantity mentioned in the invoice, or any bung / body leak cylinder is received, the Distributor should endorse a suitable remark on a copy of invoice while signing in token of receipt and get it countersigned by the truck driver. The Supply Point may also be advised immediately about receipt of short quantity.

4.1.2. Returning Empty Cylinders to the Corporation:

The Distributor should return equal quantity of empties in the same truck against the filled Cylinders received, as per the invoice. All cylinders should be fitted with safety cap.

Distributor should prepare ERV (Equipment Return Voucher) / CRD (Cylinder Return Documents) immediately upon unloading of the cylinder and hand over the same to the truck driver.

The ERV/CRD must be signed by both the driver as well as distributor's representative.

Distributor to ensure that truck does not leave his premises without proper documentation of Inventory movement.

4.1.3. Supply of Pressure Regulators:

'Domestic' pressure regulators are supplied by the Corporation on loan to customers and cannot be procured from anywhere else.

Replenishment is arranged by Area/ Territory/Regional Offices usually on the basis of distributor's written request giving details of actual stock in the weekly report vis-à-vis authorized floor stock. PRs will be normally supplied by supplying plants to distributors through corporation's contracted transporters/trucks. However, same can also be collected by distributors directly from plant. If the number of PRs received from plant does not tally with the quantity mentioned in the invoice, the same should be immediately reported & suitable noting to be done on the acknowledgment copy.

Defective Pressure Regulators received from customers shall be returned to supply point after certification of field officer & by making ERV/CRD. At any point of time, stock of defective PRs should not exceed 50 numbers.

BIS certified Industrial pressure regulators and adaptors for sale to Non-Domestic Customers can be procured from market.

4.2. Procedure for Handling of LPG Cylinders by Distributors:

Procedures for handling of LPG Cylinders, Quality & Quantity (Q&Q) Measures and other statutory regulations required to be followed in distributorship operations are as under:

It is the responsibility of the Distributors to deliver product of correct Quality & Quantity.

4.2.1. Receipt of Product:

At the time of receipt of filled LPG cylinders, the Distributor should match the details of the Invoice with the receipt of consignment in the following manner:

a) Truck No.
b) Type of cylinders
c) Number of cylinders
d) The time when truck left Supply Point. This will help to cross check its reporting time at godown

4.2.2. Unloading of Filled LPG Cylinders at LPG Storage Godown:

The Distributor to carry out the following:

a) While unloading filled LPG cylinders, weight of 10% cylinders taken randomly should be checked on the platform type Digital Weighing Scale of least count +/- 10 gram and records should be maintained in the prescribed format given by OMCs.
b) 100% cylinders should be visually inspected for dents and cuts on the body of cylinders and such damaged cylinders should be segregated and returned to Bottling Plant. Similarly, the cylinders which are due for Statutory Testing should also be segregated and returned to the Bottling Plant.
c) Separate area should be marked in the LPG storage godown for keeping filled, empty and defective cylinders, for each type of cylinders, and unloaded cylinders should be stacked accordingly.
d) Cylinders that have net weight beyond permissible limit should be returned in the same truck with written acknowledgement of truck driver. Record of the same should be maintained.
e) Loading and unloading of cylinders to be done in the prescribed manner to avoid damage to equipment. Belly rolling, dropping and throwing of cylinders is prohibited. Anti-static rubber mats are to be used at unloading points.
f) Distributor may use trolley / conveyor system duly approved by OMCs for loading/unloading.

4.2.3. Quality / Quantity Checks at Godown Prior To Refill Delivery:

a) 100% cylinders taken out for delivery should be checked for correctness of net weight on the platform type digital weighing scale of least count +/- 10 gms. Cylinders that have net weight beyond permissible limit prescribed in the Legal Metrology (Packaged Commodities) Rules, 2011, as amended from time to time, should be segregated and returned to concerned Bottling Plant in the next truck.
b) Cylinders with correct net weight only should be taken out for delivery to the customers.
c) The record of all cylinders taken out for delivery and empties received in the godown to be maintained on real time basis.
d) Distributor to maintain record of defective cylinders returned from customer. Distributors should return these cylinders to concerned LPG Bottling Plants as per procedure, advised by concerned OMC.

4.2.4. Observance of Statutory and Other Regulations:

a) All statutory rules and regulations of PESO in connection with storage and sale of petroleum products must be followed and implemented.
b) Distributor will not buy, sell or exchange domestic Pressure Regulators / LPG Cylinders / petroleum products with any other Distributor or anybody other than the principal Oil Company unless authorized by the concerned Oil Company in writing.
c) Distributor to maintain files wherein all Inspection Reports, correspondence received from Oil Company from time to time, copies of invoices etc., are available at the distributorship for ready reference.

4.3. General Amenities for Customer Services:

a) Distributor to place timely sufficient funds and indents at Bottling Plant to ensure adequate inventory and should maintain filled cylinders' stock equivalent to two days of average daily Sales.
b) The LPG distributor should own adequate delivery infrastructure for making home delivery of LPG cylinders. In case of backlog situation, additional delivery infrastructure as per requirement is to be provided
c) Multiple approved modes for accepting digital payments viz., mPOS device, eWallet, UPI, BHIM etc. should be available with the delivery personnel & notice in this regard prominently displayed at the showroom.
d) OMCs have developed cylinder delivery confirmation mechanism capturing the customer coordinates. Distributor should maximise utilisation of this mechanism.
e) The Distributor with refill sales of up to 4000 cylinders in a month shall provide one telephone connection (landline), and those with monthly refill sales of more than 4000 cylinders should have a minimum of 2 telephone connections.
f) IVRS booking facility is mandatory at all Distributorships and Distributorships should endeavour to make 100% refill bookings through SMS/IVRS. Further as the OMC software is centralized, the Distributor should have at least one high speed broadband connection and one standby connection from 2 service providers, along with computers for each staff member in the showroom.
g) LPG Distributor should ensure prompt service and courteous behavior at all times.
h) Distributor should ensure that their Showroom is kept in clean condition

4.4. Area of Operation of the Distributor:

The distributor to enroll customers within the authorized area only as per the Distributorship Agreement or as approved by the Corporation in writing from time to time.

To ensure viability of the new commissioned Distributorship, refill sale ceiling limits, better customer services etc., the OMCs may increase or decrease the Area of Operation of the distributorships from time to time and the distributor is bound to surrender / transfer / accept the customers.

The distributor is not allowed to appoint/operate sub-distributors.

4.5. Refill Ceiling Limit:

The refill ceiling limit means maximum refill sale per month of domestic LPG cylinders defined for the market in which the distributor is located.

The current applicable refill ceiling limits are as below:

Table 2 - Market Ceiling Limit

Type of Distributorship Area	Population as per Census 2011	Refill Ceiling Limit per month
Sheheri Vitrak	Cities with population > 40 Lakh	20,000
	Cities with 20 to 40 Lakh population	15,000
	Cities with 10 to 20 Lakh population	12,000
Rurban Vitrak	Town with population < 10 Lakh	10,000
Gramin Vitrak	Village/ Cluster of villages	5,000
Durgam Khetriya Vitrak	Village/ Cluster of villages	1,500

4.6. Customer Transfer:

As per OMCs direction, the distributor is required to transfer the customers on intra /inter Company basis, in line with the prevailing policy guidelines.

4.7. The Relationships Between Customer, Distributor & OMCs:

Distributor is appointed by OMCs on "Principal to Principal basis". Distributor is responsible for all business and dealings with the OMCs customer. The customer is enrolled by the Distributor on behalf of OMC. The Subscription Voucher is signed by the customer and is also required to be signed by the distributor on behalf of Corporation. The terms and conditions of the contract are printed on the Subscription Voucher. OMCs are at a liberty to service its customer through any Distributor.

The cylinder and regulator are provided against deposit and hence they are given on loan to customer (Other than FTL equipment) by the Oil Company through the distributor.

5. CUSTOMER SERVICES - Responsibilities of the Distributor:

The distributor is required to render following services to the customers in line with the policy Guidelines / procedures.

5.1. Enrolling New Domestic Customers:

It is obligatory on the part of the Distributor to issue new connection as per waiting list. The distributor should register the prospective customer in the OMC software and release connection by seniority on the waitlist.

The customer should be informed in writing / through e-mail on the date of maturity of connection. Release of connections, if not carried out according to the Waiting List Register and any Distributor suspected of indulging in malpractices, in all such established cases, action will be initiated in line with the prevailing Marketing Discipline Guidelines. It has to be ensured that after registering the customer, mandatory safety inspection of customer's kitchen is to be carried out to ensure safe use of LPG. The Distributor has to ensure the safety of the Installation before release of connection. This will include proper platform, ventilation, no thatched roof, and no alternate fuel nearby, no loose electrical connection nearby, no diya / lamps etc. in the kitchen.

The KYC registration process for release of new connection is as below:

a) KYCs must be collected in the prescribed formats from the prospective new customers. These should contain basic details such as Name, age, Address, Identity, Aadhar & Bank details etc. The copy of the documents self-attested by the customer and duly verified with original by the distributor, should be kept in the records along with the KYC form. The documents are also to be uploaded in the OMCs software in a digitized form.
b) Filled KYC is subjected to De-duplication process, and on clearance, the distributor to release a new connection in line with the OMC software requirement / policy guidelines. It is to be ensured that all records are entered completely and correctly in the system.

5.1.1. Subscription Vouchers:

SV is prepared by distributor for release of new connections, for Single Bottle Connection (SBC) to Double Bottle Connection (DBC) and for Reconnection (Incoming Termination Voucher). Such customers are named as registered customers.

Distributor should ensure full name and address is captured, along with PIN code and Landmark, in the KYC form, and the same is recorded on SV.

I. Services available to Registered LPG customer:
    a. Corporation equipment on loan basis such as cylinder/s, Regulator.
    b. Free Home Delivery of refill cylinders at Retail Selling Price.
    c. Attending to LPG leakage complaints free of cost.
    d. Technical service for appliances.
    e. Services related to re-KYC, Double Bottle Connection, transfer / regularization of connection, reactivation of inactive connection /Subsidy transfer etc.

The customer is considered to be a "subscriber" to these services and the contract which he/she signs is called the Subscription Voucher (SV).

Each SV must be personally signed by the Customer. The Distributor should sign the SV on behalf of the Corporation at the time of enrolment. Wherever applicable, the Distributor should affix a Revenue/Special Adhesive stamp of appropriate value on the SV with the relevant stamp duty, which is to be collected from the customer. The Distributor is to ensure correctness of the identity of the customer from the filled KYC comprising of Proof of Identity and Proof of Address. Connections are to be released only to eligible prospective customers located in the area of operation authorized by OMCs. Release of LPG connections to unauthorized / ineligible persons shall lead to action under Marketing Discipline Guidelines (MDG)/Distributorship agreement.

II. On-line request for New Connection:

The Distributor has to honor all the online requests of the customers for enrolment, in line with the policy guidelines, without any delay.

The Distributor is required to update all the necessary information pertaining to LPG connection / customer in the OMCs software, and also update any changes in customer details from time to time.

III. Important Terms and Conditions of the SV are as under:

a. Contract between the Customer and the Corporation based on the Terms and conditions printed on the SV.
b. Receipt from the Customer for the equipment loaned to him.
c. Acknowledgement from the Distributor on behalf of the Corporation for the deposit paid by the Customer.
d. Record of the Customer's name, full address along with landmark, PIN code and customer number, and the same is used for Insurance claim, if any.

Original copy of SV to be handed over to customer and Office copy of SV to be kept in safe custody (record) along with Proof of Identity, Proof of Address and Installation Bill/photograph of installation

Also issue Gas consumer card (DGCC) and handover Insurance card and safety literature.

Documents to Be Prepared For Serving LPG Customers:

The following documentation to be carried out for 'Serving of LPG Consumer'.

S.No.	Nature of services	Documents
1	Enrollment of customer / Release of LPG connection against incoming TV	Preparation of Subscription Voucher (SV), Transfer Subscription Voucher (TSV)/ City Transfer Advise-In (CTA-In)
2	Termination / Transfer of LPG Connection	1) Preparation of Termination Voucher (TV) for outstation customers Including TV prepared for Surrender of Connection. 2) Preparation of Transfer Termination Voucher (TTV)/ City Transfer Advise-Out (CTA-OUT) within City/Town.
3	Regularization of connection / change of name (Legal heir / others)	Preparation of TV together with SV
4	Replacement of LPG equipment	Preparation of Recovery Voucher/ Document with Tariff / Penalty / Free for replacement of Pressure Regulator (PR)

5.1.2. Installation and Repair of Appliances:

The trained mechanic of the distributor must install approved appliances and Corporation equipment in line with the applicable rules and regulations at the time of release of new connection, and demonstrate their safe use at the customer's premises. The Distributor should never handover the LPG equipment to customer. At the time of release of new connection, the customer must have BIS approved hotplate and Suraksha hose.

Distributor is to recover installation charges from the customer as applicable. In case the customer has not purchased the hotplate from the Distributor, the Distributor can collect hot plate inspection charges from the customer, as applicable at the time of releasing new connection.

A cash memo is to be issued for all the charges recovered.

The repair of appliances must also be carried out by a trained mechanic of the Distributor at customer's premises.

5.1.3. Sales of Appliances, Fittings and Other Materials:

The term 'appliances' refers to the hotplate, Oven, Cooking Range etc. in which LPG is consumed. 'Fittings' are all items used to connect appliance to cylinder valve, including piping/ tubing, pressure regulating safety devices etc.

The distributor must ensure that the appliances and fittings used in LPG installation are BIS approved, prior to release of connection.

The distributor should purchase OMC approved appliances only through the respective OMCs portal for selling it to the customers. The appliances & multiple vendors approved are listed in the OMCs portal. This also applies to fittings and other materials used in LP Gas installations.

Customers are free to purchase LPG appliances of their choice from any source, as long as these conform to BIS specification.

The Distributor should display the following text in their showroom as stipulated by the Competition Commission of India (CCI) earlier known as MRTPC.

"While you are welcome to purchase a stove / cooking ranges from the range available with us, we would like to make it clear that it is not obligatory for you to purchase the same from us. You are at liberty to buy the stove / cooking range from any source so long as it bears the BIS Mark or is of an approved quality / make".

5.1.4. Instructions / Training to the New Customer:

Refer guidelines mentioned at point no. 9.5 under Technical Section for instructions / training to the new customer on usage / safety of LPG Installation.

5.1.5. Delivery of Refill Cylinders - Roles & Responsibilities of Delivery person:

Distributor should endeavor to deliver the refill within 24 hours from the time of booking. Efforts to be made to deliver all the bookings received in first half on the same day. Refill booking received in second half should be delivered next day by first half. If backlog develops, then Distributor is to deliver cylinders on first-come-first serve basis.

All refills must be home delivered at the registered address of the customer unless specifically approved in writing by the OMC.

The refill delivery must be only on return of an empty cylinder. The Distributor must ensure refill delivery and disconnection / connection of cylinders by trained staff.

The pre-requisites of refill delivery and Roles & Responsibilities of delivery person are as below:

a) Delivery person on duty should always be in Uniform and carry their ID card. They should also maintain good personal hygiene and be presentable.
b) They should be carrying Leak Tester, Weighing Scale and mPOS/ Wallet/app for accepting Digital payment. They should also carry enough change.
c) To take cylinders for delivery only after 100% Q&Q checks for all the cylinders at Godown (i.e. weighment, leakage check for body, bung leak, test date etc.).
d) While delivering the filled LPG cylinder to the customer, they must verify address of the customer mentioned on the cash memo, if there is any difference in the address, to advice to customer to get the same corrected, and also report the variation at Showroom.
e) Greet the customer & behave in a courteous and polite manner
f) Ensure 100% pre-delivery checks at the customer's premises as per following:
    - Show to the customer that the seal on the cylinder is intact.
    - Demonstrate weight of the cylinder to the customer or his representative.
    - Open the seal of the cylinder and use the Leak Detector to check for possible valve leakage and 'O' ring leakage.
    - Visual inspection of customer's installation for safety.
    - Ensure cylinder not in use is fitted with cap
    - Demonstrate the soundness of cylinder, by connecting it with the Gas stove.

g) Update all the relevant information in the Domestic Gas Consumer Card (DGCC) for the refill supplies made to the respective customer. In case of app-based delivery system, the delivery confirmation will have to be made in the app using an OTP at the customer premises.
h) Promote digital payment. Delivery person to offer /promote various modes of digital payment while accepting payment against refill delivery. However, if customer prefers cash, accept cash payment. Delivery person to carry change for tendering back to ensure exact price as mentioned on the cash memo is charged.
i) Ensure signature of customer on cash memo. Cash Memos should carry the message "Get cylinder checked for weight and leakage at the time of delivery".
j) Delivery person should convey and deliver any message / instruction to the customer relating to LPG marketing as intimated from time to time to him.
k) Defective cylinder should be brought back to the go-down. Only sound cylinders should be delivered to the customers.
l) In case of a locked house, he should leave a slip at the customer's door confirming attempt made to deliver the LPG refill.

Tool Kit of Delivery Person:

Delivery person has to carry a tool-kit (preferably in a bag) comprising of the following tools:

Tool kit items	Quantity
Safety Caps along with Nylon thread	5 Nos
Portable Fire Extinguisher	1 No
Suraksha Hose confirming to IS 9573 type II (of 1.5 / 1.2 m)	1 No
Portable leak detectors & O-ring tester	1 No
Digital Portable weighing scale (e=10 gms)	1 No
O ring inserter with spare 'O' rings / joint packing for valves	1 no.
QR code /eWallet / mPOS for accepting digital payment	
Sticker for Emergency Service Cell contact No	
House lock slips	

5.1.6. Cash Memo

Cash memo should be as per approved specimen of respective OMC.

5.2. Refill Pendency:

The distributor must have adequate owned delivery infrastructure and trained manpower for effecting 100% home delivery within 24 hrs. Distributor should adjust the working Hours to maintain 'Nil' backlog.

Distributor should also ensure that the refills are supplied on first in first out (FIFO) basis. Distributorship falling in 1 or 2 Star rating of the Targeted Delivery Time (TDT) will attract action under relevant provisions of Marketing Disciple Guidelines.

5.2.1. TDT rating of the Distributors based on delivery performance:

Each distributor is rated from 5 stars (Excellent*****) to 1 star (Poor*) based on the time taken from booking to refill delivery of a cylinder in a quarter. The aim is to measure and improve the delivery performance of the distributor.

Rating of distributor helps a consumer in deciding the choice of the distributor. It also motivates distributors to improve delivery times so as to retain his market share.

Targeted Delivery Time Norms:

i. The distributor will have to deliver the cylinder within the "Targeted Delivery Time" (TDT).

ii. Delivery time would be the time between the booking date and the delivery date.

iii. The TDT performance envisages rating of distributors based on its quarterly performance (Q1 : Jan-Mar, Q2 : Apr-Jun, Q3: Jul-Sep, Q4: Oct-Dec) with respect to delivery time as per the following categories :

5 Star = 85% delivery in < =2 day 'Excellent'
4 Star = 85% delivery in < =4 days 'Good'
3 Star = 85% delivery in <= 6 days 'Average'
2 Star = 85% delivery in <= 8 days 'Below Average'
1 Star = 15% delivery in > 8 days 'Poor'

iv. The distributor should ensure that the distributorship operation is not rated with '1' Star, i.e. 'Poor' rating and '2' Star, i.e. 'Below Average' rating in a quarter, failing which action shall be taken as defined in prevailing MDG.

5.3. Technical Service - Roles & Responsibilities of Mechanic:

Technical Service must be provided by the Distributor to all customers according to the instructions laid down in the Technical Section. The Distributor must recommend a suitable location for LPG installation.

The Distributor must provide free service for equipment's loaned to the customer by OMCs namely, the cylinder and pressure regulator. If found defective or leaking, the equipment needs to be replaced free of cost, if required. The Distributor must maintain a daily record of service complaints attended by them in their respective OMCs software.

The Roles & Responsibilities of the Mechanic while attending to the service / leakage complaints.

a) Attend leakage complaint immediately (within 2 Hrs max.) received through any mode (1906, walk-in customer, telephone etc.)
b) Educate customer on precautions required, in case of leakage, to be followed until they reach the customer premises. Ensure they attend and close the leakage complaint within 2 Hours.
c) Change 'O' ring, if required.
d) Valve leakage / Bung leak cylinders to be replaced with new sound filled cylinder. Inform distributor for the same.
e) Faulty PR needs to be changed with new PR. Instruct customer on the proper procedure for replacement of PR
f) No money to be collected from the customer for attending leakage complaint
g) Hand over cash memo to customer.
h) Enter mandatory inspection record in DGCC book.

The roles & Responsibilities of Mechanic for Mandatory Inspection:

The mandatory inspection of customer's installation is required to be carried out once in every five years as per SOPs detailed below. This is apart from the regular checks done by the delivery person at the time of refills delivery.

a) The mechanic shall reach customer's premise as per customer's convenience. Prior intimation of the same is advisable.
b) Always be in Uniform while on duty and carry ID card. Should be presentable.
c) Carry slips for attending service complaints / New connection Installation / Mandatory Inspections
d) Ensure to carry tool kit (Suraksha Hose, Sound PR, 'O' rings, Adaptor to remove & fix 'O' ring, Leak detector, Other tools for repair of Hot Plate)
e) Knock the door & greet the customer. They must then show their Identity Card/Letter from Distributor and behave in a courteous and polite manner.
f) Carry out mandatory inspection of the installation including cleaning of hotplate.
g) On customer's permission, carry out any necessary repairs. Ensure that any shortcoming is addressed before leaving customer's premises.
h) Replace Suraksha hose if validity is expired / damaged. If Suraksha hose is procured by the customer before less than five years & if found damaged, the same to be replaced free of cost. Credit for the same to be claimed from the hose manufacturer.
i) Replace green rubber tube or other non-standard tube, if any, with Suraksha hose.
j) Carry out Safety Training & provide Safety/Conservation/Emergency Response literature to customer.
k) Fill up the format/checklist & obtain the signatures of the customer.
l) Place Safety Sticker
m) Take a photograph of the Domestic Installation along with mechanic, customer /family member and safety card.
n) Prepare bill for mandatory inspection & other charges, if any & obtain the signature of the consumer / family member.
o) Collect payment & return change (if applicable). However, digital payment to be promoted.
p) Handover copy of inspection report & bill to the consumer / family member.
q) Enter mandatory inspection record in DGCC book.
r) Submit the reports to showroom. The reports are to be uploaded by the Distributor in mandatory inspection App, if made available by the OMC.

5.4. Emergency Service Cell

a) Each OMC distributor is required to provide mechanic service for attending to emergency leakage complaints during 365 days on 24/7 basis.
b) OMCs have provided Emergency Service Cell (ESC) helpline number (1906) designed to attend leakage complaints from LPG customers. The ESC (1906) will direct the complaint to Distributor's ESC number and will maintain continuous follow up, including escalating the complaints to higher levels, till the leakage complaint is attended and addressed.

c) The ESC number (1906) is to be displayed prominently in LPG Showroom, printed on refill cash memos, painted on delivery vehicle and also recorded in customer's DGCC.
d) Distributors to ensure mapping of correct contact details of himself / herself and the mechanics with ESC helpline number.
e) Distributor to ensure that leakage complaints are not escalated beyond distributor level.

5.5. Termination of Domestic Customer's Subscription:

Termination vouchers (TV) are prepared by the distributor in following situations on customer's request:

a) Normal TV for transfer
b) For surrender of Multiple connection
c) Due to switchover to Piped Natural Gas Connection / Reticulated LPG Connection
d) For Safe Custody
e) For DBC connection
f) For Cancellation of SV – transfer due to death / regularization as per policy
g) For Connection Surrender

The Distributor must first recover all equipment loaned to the customer (*) as detailed in the Subscription Voucher(s). They must then refund the customer's deposit if any according to the amount shown in the Subscription Voucher(s), less deductions for loss/damage attributable to the customer and adjusting permanent advance, if any.

In case of CTC (DBTL/ PAHAL) customers there will be adjustment of one-time permanent advance which will also be deducted from the original SD amount.

(*) In case of collection of equipment from customer's premises on customer's request, the distributor can charge them the applicable amount.

If the customer has lost or damaged any of the equipment, the appropriate amount, in accordance with the LPG Tariff / Penal rate, may be set off against the security deposit.

The Termination Voucher ('TV') must be signed by the customer to indicate receipt of the refund deposit. The distributor should sign the TV on behalf of the Corporation to indicate receipt to the customer for the returned equipment.

In case of customer not being able to produce their copy of the SV, they must submit a self-declaration for the loss of SV in standard format. The Distributor must then check their copy of the SV before issuing a refund to the customer by cheque or bank transfer only.

Distributor to ensure that the Termination Voucher is prepared and handed over to the customer immediately on receipt of all requisite documents / equipment's.

5.5.1. SV Against Termination (Intra / Intercompany):

Customers holding TVs from other OMCs should be treated at par with TVs issued by Distributors of same Corporation.

The Distributor located in the city/area must enroll the transferred customers on priority upon submission of TV. In Cases where TV is more than 12 months old, the Distributor has been empowered to revalidate the same after due verification.

The customer should be enrolled in the system by seeding KYC in OMC software. The connection is released only after internal de-duplication in the OMC portal.

The SV is released against Termination Voucher at the same security deposit rate as indicated in Termination Voucher (including the amount set off against DBTL/Pahal advance in case of CTC customers).

For the consumers in the North Eastern States and Sikkim, the security deposit collected is less than that of the other States. When a TV from one of the North Eastern States or Sikkim is presented in another state, the consumer will be charged the security deposit that was applicable in the new location as on the date that the connection was initially released to the consumer.

5.6. Shifting of Domestic Installation:

According to the terms of the Subscription Voucher a customer should not remove the equipment from the registered address as mentioned in SV, neither should they handover nor sell the equipment, namely cylinder and pressure regulator, to another person.

If the customer is moving to another city/town, he should return the equipment to the Distributor with whom he is currently enrolled, and collect Termination Voucher as mentioned in 5.5 above. If transferred from one distributor to another in the same city/town, he/she should follow the necessary procedure for local transfer. In case of change of name, the process is detailed in the attached FAQ's.

5.7. Security Deposit for the LPG Equipment:

A refundable deposit is taken from the customer (whether Domestic, Commercial or industrial) against the Corporation's cylinder(s) and pressure regulator (s) loaned to them.

Details of deposit applicable (All India except North Eastern States) from time to time is as below:

Table 3 – Security Deposit Against Domestic Equipment

From	To	14.2 kg	PR	5 kg
Prior to 1.04.63 (combined security deposit of Cylinder & PR)		25.00		-
01.04.63	09.01.70	40.00	10.00	-
09.01.70	15.02.70	60.00	10.00	-
16.02.70	15.07.74	90.00	10.00	-
16.07.74	01.04.78	175.00	20.00	-
02.04.78	30.04.82	250.00	30.00	-
01.05.82	15.07.83	300.00	50.00	-
16.07.83	11.08.95	450.00	50.00	-
12.08.95	31.01.02	900.00	100.00	-
01.02.02	28.02.03	700.00	100.00	350.00
03.03.03	18.01.05	650.00	100.00	350.00
19.01.05	25.05.08	850.00	100.00	350.00
26.05.08	08.10.12	1250.00	150.00	350.00
09.10.12		1450.00	150.00	No change
01.04.17		No change		800.00

Table 4 – Security Deposit Against Non-Domestic Equipment

From	To	19 kg cyl with SC valve	LOT Valve	19 kg with Lot Valve	35.0 kg with SC Valve	35.0 kg with LOT Valve	47.5 kg with SC Valve	47.5 kg with Lot Valve
01.02.02	28.02.03	1000.00		-				-
03.03.03	18.01.05	1000.00		-				-
19.01.05	25.05.08	1000.00		-				-
26.05.08	08.10.12	1000.00		-				-
01.06.08	28.02.11	1500.00	1200.00	2700.00	3000.00	4200.00	4000.00	5200.00
01.03.11		1700.00	1500.00	3200.00	3400.00	4900.00	4300.00	5800.00

Security Deposit for Cylinder / Pressure Regulator – North Eastern Sector (Assam, Meghalaya, Tripura, Nagaland, Mizoram, Manipur & Arunachal Pradesh) + Sikkim (wef 16/05/1975)

From	To	14.2 kg	PR
Upto 09.01.70		40.00	10.00
09.01.70	15.02.70	60.00	10.00
16.02.70	15.07.74	90.00	10.00
16.07.74	01.04.78	175.00	20.00
02.04.78	30.04.82	250.00	30.00
01.05.82	15.07.83	250.00	30.00
16.07.83	11.08.95	250.00	30.00
12.08.95	31.01.02	500.00	50.00
01.02.02	28.02.03	500.00	50.00
01.03.03	18.01.05	500.00	50.00
19.01.05	25.05.08	500.00	50.00
26.05.08	08.10.12	900.00	100.00
09.10.12		1150.00	150.00

The security deposit may be waived for specific cases authorized by the respective OMC.

Further, in case of specific schemes like PMUY/ connections released to BPL families under CSR scheme of OMC/ State Specific schemes like Deepam etc., the security deposit is not paid by customer but borne by the Central /State Govt./OMC, as applicable.

In all other cases the full deposit prevailing on the date of enrolment to be collected.

5.8. Rates to be charged on Loss/Damage of Equipment

The LPG equipment Tariff rates as applicable should be displayed in the Showroom.

In case of loss or damage to the loaned equipment attributable to the customer, the cost of replacement/repair must be recovered from the customer by the Distributor in accordance with the applicable Tariff / Penal charges.

The distributor should handover to the customer the OMC system generated document towards the cost of replacement of equipment. Tariff rates are applicable in case the

customer is able to provide copy of FIR and non-traceability certificate. In case of equipment is defective and the defect is not attributable to customer (accident case) then the equipment will be replaced free of cost. In other cases, the equipment is to be replaced at Penal rates.

If the customer is terminating the connection, the cost towards damaged/loss of equipment to be set off / adjusted against the original security deposit. In case recovery is more than the deposited amount to be refunded, balance amount to be recovered from customer.

Prevailing Tariff and Penal Rates

Cylinder Capacity	Tariff (Rs).	Penal (Rs).	Effective
5kg	1000	1250	01.04.2017
14.2kg	1750	2300	09.10.2012
19kg	1700	2550	01.03.2011
19kg with LOT Valve	3200	4800	01.03.2011
35 kg	3400	5100	01.03.2011
35 kg with LOT Valve	4900	7350	01.03.2011
47.5 kg	4300	6450	01.03.2011
47.5kg with LOT Valve	5800	8700	01.03.2011
Pressure Regulator	150	250	09.10.2012

5.9. Non-Fuel Revenue (NFR)/ Beyond LPG/ Allied Retail Business (ARB):

The distributor must sell BIS & Corporation approved/ recommended items. All items have to be procured through OMC portal. Price charged to the customer cannot be more than MRP/rates finalized by the OMC and proper invoice with applicable GST to be given to the customer.

Customers are free to purchase LPG appliances of their choice from any source as long as these conform to BIS specification. The Distributor should not make any force sale of NFR / beyond LPG /ARB products and adhere to MRTP Act (replaced by Competition Act with effect from 01/09/2009).

Distributor should educate the customer on benefits of using OMC recommended / Approved products (Green labeled Hot plate / BEE Star labeled Hot Plates etc.)

5.10. Installation/Service Charges for the Standard Domestic Installation:

The service charge to be collected by the distributors from the consumers for services provided is revised from time to time. Charges approved by OMCs, applicable on date of service, will have to be charged. Effective 1st September, 2019 Service charges are as under:

1. **Service charges applicable to the customers under Pradhan Mantri Ujjwala Yojana (PMUY) :**

Sr. No.	Nature of Services / Goods	Classification as Services / Goods	Charges (Rs.)	GST (Rs.)	Total Incl.GST
1	Mandatory Inspection of domestic installation to be done with cleaning the hotplate. (Once in Five years and charges are same irrespective of number of burner in stoves)	Services @ 18% GST	50.00	9.00	59.00

2. **Service charges applicable to all other consumers other than 'A' above**

S.No.	Nature of Services / Goods	Classification as Services / Goods	Charges (Rs.)	GST (Rs.)	Total Incl.GST
1	Visit & Administrative charges for release of New connection and preparation of SV at doorstep of customer (excl. statutory charges levied by State, if any) **Not applicable for** **1. Online connections with digital payments** **2. Connections released for Showroom**	Services @ 18% GST	100.00	18.00	118.00
2	Installation & demonstration charges for new connection (with SBC or DBC) / installation charges for DBC	Services @ 18% GST	100.00	18.00	118.00
3	Administrative charges for issuance of Domestic Gas Customer Card (DGCC) including cost of DGCC	Services/ Goods @ 18% GST	50.00	9.00	59.00
4	Collection of equipment from customer premises for preparation of Termination Voucher on request of customer	Services @ 18% GST	100.00	18.00	118.00
5	Mechanic visit charges (other than leakage) for:	Services @ 18% GST	200.00	36.00	236.00

	• Inspection of hotplates at the time of release of new connection to be done after cleaning the hotplate (in case the hotplate is not purchased from the LPG Distributor) • Servicing of hotplate				
6	Mandatory Inspection of domestic installation to be done with cleaning the hotplate. (Once in Five years and charges are same irrespective of number of burner in stoves)	Services @ 18% GST	200.00	36.00	236.00

The Distributors shall provide the GST compliant Invoice for any service charges levied to the customers in line with the above and the GST should be deposited with the concerned Department, as per norms. No further documentation charges to be levied. Distributor to display correct rate in show room as applicable on that day and modify the same as and when the same is revised.

5.11. Retail Selling Price

All LPG cylinders (except Free Trade LPG) are to be home delivered. The retail Selling Price (RSP) of LPG is communicated to the Distributors by OMCs from time to time. The RSP, applicable on the date of refill delivery, is to be charged by the Distributor to the customer. The RSP is inclusive of applicable taxes and home delivery charges in the authorized area of operation recorded in Distributorship agreement.

Durgam Kshetriya Vitraks (DKVs), who do not offer home delivery of LPG cylinders and supply refills from Show Room / Godown shall offer rebate to customers, equivalent to delivery charges element in Dealer Commission, from RSP, as Cash 'N' Carry (CNC) rebate.

Other Distributors, if not able to offer home-delivery due to reasons beyond their control, and under special circumstances /exigencies, may deliver cylinders from the godown/showroom on authorization from OMCs. In such case Distributor shall offer rebate to customers, equivalent to delivery charges element in Dealer Commission, from RSP, as Cash 'N' Carry (CNC) rebate.

State Government in consultation with OMCs may approve additional delivery charges, in line with provisions of LPG Control Order, over and above RSP, for delivery, depending on the geographical terrain. These extra charges shall be separately and explicitly mentioned in cash memo of refill supplies. No amount, over and above the price mentioned in cash memo, shall be recovered from the customer.

Corporation Billable Rate to Distributor:
The rate will depend on the market of Distributor and will be normally equal to RSP of cylinder in the market minus Distributor's commission (adjusted after applicable recoveries), with applicable taxes on commission.

5.12. Undertaking by Customer for Refill Ex Showroom / Godown

Distributors should not sell/deliver refills ex-showroom / Godown. However, in the case of customers enrolled by the distributors against TV / priority connection beyond his area of operations authorized by OMCs, (DKVs and FTL cylinders), refill delivery can be made ex Godown on taking Cash 'N' Carry undertaking from the customer with applicable Cash 'N' Carry rebate.

5.12.1. Undertaking by Customer

To,
Dear Sirs,

With regards to the LP Gas cylinder supplied to me ex-showroom/Godown at my specific request, I hereby give the following undertaking:

1. I shall strictly follow the procedure for disconnecting and connecting LPG cylinders which is laid down in the Instruction Card issued to me.
2. I understand the instructions clearly as explained to me by your staff and that the cylinder has been checked for leakage in my presence and is found to be safe.
3. Connecting or disconnecting the cylinders will be done by me or by persons working under my instructions.
4. I hereby absolve the suppliers of the LP Gas cylinders of any liability whatsoever in respect of any accident that may occur while changing the cylinders or attributable thereto and shall keep you and the Company viz. Indian Oil/Bharat Petroleum/Hindustan Petroleum Corporation Limited. Indemnified from all claims, demands, loss or damage arising or resulting from any accident caused by or due to the possession, use or storage of the cylinder by me.

Yours faithfully,
(Customer No. _____)
Signed in my presence _____
Signature _____
Address _____
_____

5.13. Responsibility for The Corporation's Equipment

The distributor is responsible to the Corporation for all equipment belonging to the Corporation (cylinders and Pressure Regulators) both in his stock and at customer's premises. A daily record of movement of cylinders and pressure regulators shall be kept as per provision made in OMC software. It is therefore essential for the Distributor to meticulously carry out the corporation's instruction, regarding accounting for equipment. In case of any loss or damage to equipment, the Corporation will recover the cost from the Distributor concerned at rates fixed by the Corporation. If the loss/damage is attributable to the customer, the Distributor may recover the cost from him except where Corporation authorize free replacement of equipment to the customer.

5.14. Theft of Cylinders from Distributor’s Godown

Theft cases are to be reported immediately to concerned OMC.

a) FIR should be lodged with the police and a copy of the same should be sent to OMC concerned
b) The concerned insurance company should also be promptly appraised of the situation, in writing, giving the facts of the case along with the copy of the FIR.
c) Appropriate follow-up should be maintained with the police authority to recover the stolen equipment.
d) Based on the FIR, concerned OMC will raise debit note on distributor with penal rate & final settlement on penal / tariff rate will be done based on the report from police Department.
e) Thereafter, if the equipment is declared partially traceable / untraceable by the police a final report to this effect should be submitted to the concerned OMC for final settlement in the matter. Details pertaining to the claims settled by the insurance company should be provided to the concerned OMC.
f) On payment of Penal / Tariff rate as applicable, concerned OMC will process entries to reduce Distributor’s stock equivalent to number of cylinders, for which penalty is to be paid by the Distributor.

5.15. Inventory Optimization

LPG equipment must be used to the best possible advantage for the following reasons:

a) In view of large investment made by OMCs in equipment procurement and also due to limited availability, distributors should maximize refill sales with the equipment inventory issued.
b) Wherever customers are not uplifting the refill / dormant, equipment should be retrieved.
c) The Distributor's profit depends on the number of genuine customers he can get, and the quantity of refills he can sell to these customers for their genuine requirement. Inefficient use of equipment means less customers, less gas sold and therefore less profit to the Distributor.

The Distributor thus has a responsibility to ensure that equipment is efficiently utilized. Some of the steps he can take are detailed below:

a) Distributor should maintain maximum inventory in the Godown as per licensed capacity approved by PESO and floor stock approved by OMCs, whichever is lower.
b) Ensure that defective/leaky cylinders do not accumulate in godown. Defective cylinders found during SQC to be returned in the same load. Defective / Leaky cylinders found during PDC at customers premises to be returned in the immediate subsequent load.

5.16. Reporting of LPG Accident:

The Distributor should be alert to all the information and market intelligence related to LPG business in their area and surrounding area. As and when any information related to any LPG-related incident is gathered, the same should immediately be informed to the Sales Officer and Area office/ Territory Office/ Regional Office of respective OMC. The same should also be informed to police station and Distributor's Insurance Company. The Distributor must also visit the accident site and gather information about the cause of accident and damages suffered.

The Distributor should also ascertain the possible cause of fire. If LPG leakage is not the cause, same should be brought out clearly while reporting. Monetary assessment of the damage should not be done. Documentary evidence from police/fire department is necessary to categorize an accident as LPG/Non-LPG Accident to avoid litigation at future date.

It is also imperative that even if the accident is assessed to be due to reasons other than LPG, and if an LPG cylinder / installation was engulfed in the fire caused by other sources, intimation is to be sent to insurance company for their timely survey, and so that they can arrive at correct reason for fire.

Following incidents are required to be reported:
a) All accidents involving installation of LPG equipment
b) All accidents involving vehicles carrying LPG
c) Any other accident which could reflect on LPG or LPG appliances and equipment.

5.16.1. Operating Procedures on Accident Reporting – in case of fire accident:

a) Distributor should immediately inform OMC Officer about the accident.
b) Distributor should visit the customer premises where accident has occurred immediately on receipt of information.
c) Distributor to collect all possible information regarding, time of accident, source of accident, persons injured, fatalities if any, property damage etc.
d) Distributor should speak to the customer, their relatives and neighbourhoods to ascertain the reasons for accident.

e) Distributor should take photographs of the accident site in digital format with date and time stamp.
f) Distributor to collect customer master details from OMC software like – consumer no., registered address, date of last refill, date of last mandatory inspection etc.
g) Distributor should immediately inform his / her insurance company to take care of any third-party claims which arises out of this accident.
h) Distributor to report the accident to nearest Police Station and take the copy of FIR, in case the accident is reported by the consumer.
i) Check if Fire Brigade attended the accident site or not & arrange for Fire Brigade Report.
j) Collect Hospital / Medical Bills / Death certificate if applicable to be submitted in original
k) If there was any news item in the local newspaper, then copy of the paper cutting to be submitted to Field / Sales officer / controlling OMC office.
l) To provide further details such as;
Consumer Status (SBC/DBC), date of last refill / cylinder installation date, Deliveryman details who has supplied the last refill, PDC done during last refill supply or not, details of leakage complaint registration by the consumer either on 1906 emergency help line or walk-in or any other mode.
m) Details of LPG Panchayat / safety clinics conducted in the area of the consumer
n) Distributor should assist consumer / legal heirs to fill Insurance claim form along with the necessary supporting documents as advised by insurance company.

5.17. Annual Return:

LPG distributors are required to provide the following information along with supporting documents pertaining to LPG distributorship by 31st December of every calendar year for the previous Financial Year in the web portal designed by the OMCs.

i. Name of the proprietor / partners / Company in latest balance sheet – (certified copy of relevant portion of Balance Sheet indicating "name of Capital a/c holders" will be required to be attached).
ii. Name of the proprietor / partners / Company in trade licence (RSL etc.) issued by State Govt. (wherever applicable),
iii. Explosive Licence (copy of licence to be uploaded)
iv. Name of the proprietor / partners / Company in Bank account. (Copy of Bank Certificate to be uploaded)
v. Name of owners of land or persons holding lease of land of the Godown and Showroom (Copy of documents showing current status to be uploaded)

In addition to above, the OMCs web portal designed for filing Annual Returns will also capture following details, validity of which will need to be confirmed by the distributor, as under:

a) Pan Card – system will capture and display the PAN card of proprietor or firm (in case of partnership) or Non individual entity.

b) Date of latest (current) partnership deed will be displayed – distributor will have to confirm the correctness.

c) System will also record and save certified copy of latest and earlier partnership deeds

No change in constitution of Distributorship will be made without prior written approval of Corporation.

5.18. Action Against Deviation in Distributorship Operations:

LPG Distributorship operations should be strictly in line with the LPG Distributorship Agreement / OMCs guidelines issued from time to time. Any deviations observed in the distributorship operations, including activities listed above will attract action in line with the prevailing Marketing Discipline Guidelines and /or Distributor Agreement.

6.0 RELEVANT GUIDELINES / ACTS APPLICABLE TO LPG BUSINESS:

6.1 Marketing Discipline Guidelines:

LPG distributorships are governed by the terms & conditions of the agreement entered between the OMCs and the Distributors. The various clauses of the distributorship agreement spell out the several responsibilities that have to be performed by the distributorships as well as by the OMCs.

Besides the responsibilities spelled out in the distributorship agreement, there are operating policies, procedures and practices that are required to be followed by the distributors to serve the LPG consumers. Further there are prohibited activities that must be avoided by the distributors. Action is also taken against erring Distributors under Marketing Discipline Guidelines (MDG). The MDG is an important part of the instructions issued by Corporation from time to time and falls under the clause on 'Faithful Performance' of the Distributorship/Dealership Agreement. These guidelines do not preclude any action under the Distributorship Agreement.

The last MDG was revised on 1.11.2018 to include the requirements of the PMUY scheme. (Refer copy of MDG circulated by the respective OMC from time to time). The same is also available on the corporate website of OMCs.

6.2 LPG (Regulation of Supply and Distribution) Order 2000:

The Order has been made by the Government of India under the power given to it under Section 3 of the Essential Commodities Act. The Order is intended to provide for the control of the production, supply and distribution of LPG in the interest of the general public to ensure equitable distribution, availability etc. in order to maintain conditions of normalcy in the marketing of LPG, which under the Act is an essential commodity.

The distributors must be acquainted, and comply with the provisions of the LPG Control Order and Amendments to the Order made from time to time.

6.3 Consumer Protection Act:

In order to safeguard the interests of the consumers, the Government has enacted the Consumer Protection Act, 1986, which has been suitably amended through an Ordinance in 1993. The Consumer Protection Act, 2019 was published on 9th August, 2019 replacing the original Act, 1986. The Act provides for better protection of the interests of the consumers. To that end, the Act provides for the establishment of consumer councils and other authorities to settle consumer disputes and in matter connected therewith. Under this act, the following Consumer Dispute Redressal Agencies have been set up.

a) The Consumer Dispute Redressal Forum known as District Forum has been established in each district.
b) The Consumer Dispute Redressal Commission known as State Commission has been established by the State Governments in the State Capitals.
c) The National Consumer Dispute Redressal Commission known as National Commission has been established in New Delhi.
d) The above forums are quasi-judicial bodies and a decision given by these commissions have judicial enforcement.
e) As per the Consumer Protection Act, 1986 a complaint can be filed in:
    i. District Consumer Disputes Redressal Forum (DCDRF): If the value of the claim is up to 20 lakhs.
    ii. State Consumer Disputes Redressal Commission (SCDRC): If the value of the claim exceeds 20 lakhs but is within one crore.
    iii. National Consumer Disputes Redressal Commission (NCDRC) If the value of the claim exceeds one crore.

6.4 Gas Cylinder Rules 2016:

6.4.1 General Conditions governing Gas Cylinders Rules:

a) Restriction on delivery or dispatch of cylinders.

1. No person shall deliver or dispatch any cylinder filled with any compressed gas to any other person in India who is not the holder of a license to possess such gas cylinder, or to their authorized agent unless, they are exempted under these rules to possess compressed gas cylinder without a license.
2. The gas cylinder delivered or dispatched by a person as above, shall be of the type for which they are licensed and shall not exceed the quantity which the person to whom it is delivered or dispatched is authorized to possess under these rules.

b) Prohibition of employment of Children & intoxicating person

No child under the age of eighteen (18) years, and no person who is in a state of intoxication, shall be employed in charge of loading or unloading, or transport of any compressed gas cylinder or in any premises licensed under these rules.

c) Prohibition of fire, smoking, lights and dangerous substances.

1. No person shall smoke, and no fire (apart from blow pipe flame for repairs) or no articles or such other substances of flammable nature, or materials liable to spontaneous ignition, or substances to cause or communicate fire or explosion shall be allowed at any time in proximity to a place where any cylinder for flammable gases is being filled, stored or handled.
2. No person in or near any place where cylinders containing flammable gases are filled, stored or handled shall have in his possession matches, fuses, mobile phone or any other appliance for producing ignition or explosion.

d) Special precautions against accidents. –

1. No person shall commit or attempt to commit any act, which may tend to cause a fire or explosion in, or about, any place where gas under pressure in a cylinders are stored, handled or transported.
2. Every person storing compressed gas cylinders, and every person in charge of, or engaged in, the storage, handling and transport of such gas cylinders, shall at all times-

   (i) comply with the provisions of these rules and the conditions of any license relating thereto;

   (ii) observe all precautions for the prevention of accident by fire or explosion;

   (iii) prevent any person from committing any acts referred to in sub-rule (1).

e) Handling and use:

a) The cylinder shall be adequately supported during handling.
b) Conveyors, trolleys and cradles of adequate strength shall, as far as possible, be used when moving the cylinders and care shall be taken to avoid any damage to the cylinder valve.
c) The cylinders shall be handled carefully and not be allowed to fall upon one another or otherwise subjected to any undue shock.
d) Sliding, dropping or playing with cylinders is prohibited.
e) Liquefied petroleum gas cylinder and cylinders containing liquefiable gases shall always be kept in an upright position and shall be so placed that they cannot be knocked over.
f) The cylinders used in horizontal position shall be so secured that they cannot roll.
g) Open flames, lights, mobile phones, lighting of fires, welding and smoking shall be prohibited in close proximity to any cylinder containing flammable gases except those while in use for welding, cutting or heating.
h) Working places shall not be classified as storage places for the purpose of licensing.

6.4.2 Storage of Cylinders:

a) Cylinders should be stored at cool/dry place and away from burners and flames.
b) The storage room or shed shall be of fire resistant construction.
c) LPG cylinders should not be stacked in Horizontal position.
d) Toxic gas cylinder should not be stored with LPG cylinders.

e) Cylinders should not be stored in such condition which will cause them to corrode.
f) Cylinders should not be stored with any combustible material.
g) Empty cylinder shall be segregated from filled ones and care shall be taken that all the valves are with safety cap on.

The distributors have to get acquainted and comply with the provisions of the Gas Cylinders Rules, as required periodically.

6.5 Essential Commodities Act:

The Essential Commodities Act is an act of Parliament of India which was established to ensure the delivery of certain commodities or products, the supply of which, if obstructed owing to hoarding or black-marketing would affect the normal life of the people.

An Act to provide, in the interest of the general public, for the control of production, supply and distribution of trade and commerce, in certain commodities including Petroleum and Petroleum products.

6.6 Prevention of Black Marketing and Maintenance of Supplies of Essential Commodities Act., 1980:

In order to prevent unethical trade practices like hoarding and black marketing etc., the Prevention of Black Marketing of Supplies of Essential Commodities, Act, 1980 is being implemented by the State Governments to detain persons whose activities are found to be prejudicial to the maintenance of Supplies of Commodities essential to the community.

Many states have Retail Selling License, which is issued by Collector of the District without which no distributor can sell LPG Cylinders.

6.7 Legal Metrology:

The Standards Of Weights And Measures (Enforcement) ACT,1985

a) LPG distributors are covered under this Law as they are dealing with Cylinders having fixed net weight.
b) The distributors should ensure that they receive correct weight cylinders.
c) The distributors must have weighing machine of approved specifications at Godown and the same should be stamped by Weights and Measures Department.
d) The distributor deliverymen must carry calibrated weighing scale to ensure delivery of correct weight cylinders.

7.0 DBTL (PaHal):

The modified {PAHAL) DBTL scheme was re-launched in 54 districts on 15.11.2014 in the 1st phase and in the rest of the country on 01.01.2015 as per the directives of Ministry of Petroleum and Natural Gas, Govt. of India.

Under the scheme, for receiving the subsidy amount against the domestic LPG cylinders (as per the applicable capping) directly in their bank a/c, the customers are required to become cash transfer compliant by submitting Aadhar with respective distributor and bank.

The LPG customers who are facing difficulties in linking their Aadhar with bank account, provision is available in the system to transfer subsidy via BTC (Bank Transfer Compliant) mode. To avail BTC mode, the customer is required to submit bank a/c details with LPG distributors in addition to Aadhar.

Aadhar card is required for transfer of LPG subsidy in DBTL scheme as per the provisions of Aadhar Act, except for the customers in the States of Assam, Meghalaya and J&K, who are exempted from submission of Aadhar for the getting LPG subsidy. However, if a customer is not having Aadhar card then he/ she can also submit the enrolment ID with relevant details at his/her LPG distributor and can receive subsidy via BTC (Bank Transfer Compliant) mode.

In case enrolment centers are not available, provisions are also available in OMC software for capturing details of such customer and giving them LPG subsidy on submission of any of the documents namely, Voter ID card or Ration card or Kisan Photo Passbook or passport or driver license and by taking suitable declaration from customer as mentioned in notification under section 7 of Aadhar Act 2016.

Permanent Advance

A one-time Advance provided to CTC consumer while joining PAHAL (DBTL) will be adjusted at the time of termination of connection.

8.0 CITIZEN CHARTER:

The main objective of the Citizen's Charter is to improve the quality of public services. This is done by letting people know the mandate of the Corporation, how one can get in touch with its officials, what to expect by way of services and how to seek a remedy if something goes wrong. The Citizen’s Charter does not by itself create new legal rights, but it surely helps in enforcing existing rights.

9.0 CUSTOMER CONNECT:

Every Distributor and his/her staff have to give utmost importance to customers while handling their queries / feedbacks on all occasions, whether talking to customers/ prospective customers, in telephone conversations, in correspondence etc.

The complaints can be easily avoided by showroom staff through suitable resolution of issues/ queries in a reasonable time frame. Each and every complaint should be properly recorded at the distributorship. Regular monitoring of issues, till its resolution will help to minimize the complaint. The staff handling customer queries /complaints should always be courteous. They should end the conversation by reading back the query and thanking the customer.

It is possible that newspaper reporters/journalists may approach Distributors for information regarding the product. In the interests of consistency, it is necessary that Distributors refer such requests to OMCs and that an accurate reply be given with the least delay.

Each distributor must contact at least 15 consumers every month to obtain feedback on the services rendered and for improvements necessitated/suggested, if any. Record of such customer contact should be readily available.

9.1 Roles of Showroom Staff:

a) Always be in Uniform while on duty and carry ID card. Should be presentable.
b) Behave in a courteous and polite manner.
c) Should be fully conversant with OMC software.
d) Take request from Customers for new / DBC connections.
e) Explain the process, documents required, checks to be carried out before releasing the connection.
f) Regular downloading of SMS/IVRS booking for timely refill supplies, wherever applicable.
g) Take request from Customers for Refill booking for walk-in customers.
h) Handle Customer Queries / complaints.
i) Maintain record of service complaints attended by him/ her.
j) Maintain daily record of movement of cylinders and PRs.
k) Generating Cash Memo. Update delivery confirmation, cash reconciliation and stock reconciliation
l) Indenting / Receipt / Stock Reconciliation
m) A safety & Insurance card must be handed over to the Customer with advice that the card should be prominently displayed near LPG installation
n) Daily customer feedback

Educate customers on Dos & Don'ts of LPG usage, and also show demo on safe uses of LPG at the time of enrolment.

The Distributor will ensure that Showroom staff, deliverymen, mechanics are periodically trained by OMC officers / competent authority and know the distinctive characteristics of LPG. Refer Technical section of the manual for LPG properties / significant characteristics of LPG.

10.0 CUSTOMER CENTRIC SERVICES:

Some of the customer centric initiatives taken by OMCs are given below:

10.1 Transparency Portal :

To bring transparency and efficiency in LPG distribution, OMCs have provided the portal with URL www.mylpg.in. Customer can navigate to respective OMC by logging thru www.mylpg.in. Options are available for users under 2 categories –

- **Services without login are**:
  I. Check if you need KYC
  II. Locate distributor
  III. Give up subsidy voluntarily
  IV. Buy 5 kg Cylinders
  V. PNG Consumer can opt for LPG cylinder supply at non-subsidised rate
  VI. Apply for new connection online
  VII. Give feedback online
  VIII. Find 17 digits LPG ID
  IX. Download section
  X. Other Services

- **Services available under Login:**
  i. Place order online
  ii. Opt Preferred Distributor
  iii. Rate Distributor
  iv. Surrender multiple connection
  v. Join Pahal
  vi. Register for Second cylinder

10.2 Consumer Relationship Management Through Mobile Platform:

LPG customers have registered their mobile numbers with OMCs. An Android/IOS based application has been launched for LPG functions such as refill booking, new connection booking, booking for second cylinder, complaints, history of supplies, hotplate repair, surrendering connections, and rating of distributors.

With the focus on providing better services to customers, OMCs, namely IOC, BPCL and HPCL have also introduced a common Unique Toll Free telephone Number: 18002333555, to redress the customers complaint. For leakage complaints also, there is Emergency Helpline number: 1906, which is manned 24X7 and has escalation matrix and feedback mechanism to ensure that the leakage compliant is resolved in shortest possible time.

10.3 eSAHAJ:

The 'SAHAJ (e-SV)' initiative enables the prospective customers to register, make payment online for availing LPG connection at their doorstep without visiting the LPG distributorship. The following are major benefits available to the customers under this facility:

a) **Reduction in Lead time:** Each stage in new connection release process can be electronically monitored resulting in reduction of lead time for release of new connection.
b) **Self-Selection:** Customers can select the desired equipment & required NFR/ARB/Beyond LPG products like hotplate, cylinder trolley etc. on web as per their need. Hence there is no possibility of forced selling of these products by distributors.
c) **Customer Education:** - On applying by web, process along with the documents required for availing a new connection are clearly mentioned. This educates the customer before applying.
d) **Tracking & Intimations:** -Tracking option and intimations by sms and emails also available at various stages.
e) **Cashless transactions:** Customers have freedom to pay by their Credit/Debit cards, Internet banking through a robust payment gateway. Besides transparency, it allows customers to take immediate buying decision rather than wait for cash.
f) **No visits to Showroom of distributor / Home Delivery:** This initiative gives immense flexibility to customer for registration of new LPG connections, sitting in the comfort of their homes / offices, pay online, no requirement for visiting OMC distributor's showroom for undertaking and formalities, thereby saving on time and energy. Original SV along with equipment requested by the customer are delivered at their home.
g) **Online Inter-Company De-duplication:** This facility is integrated with online intercompany de-dupe facility. As such multiple connection check is done across all 3 company data base, before intimation of release is sent to the prospective customer. All the above benefits are expected to result in greater Customer delight.
h) Since the customer makes exact online payment, complaints of overcharging are eliminated.

10.4 IVRS Booking:

OMCs have launched the newly enhanced Automated Unified System (AUS) for refill booking for the customers. This multimodal system, designed to make refill booking faster, simpler, and more efficient, enables customer to book your refills round the clock through IVRS supported system.

10.5 Portability of LPG Connections:

LPG consumers have been given the choice to switch from their old Distributor to another better star rating distributor within the cluster as per their choice within or across the OMCs. The objective of introducing portability was to provide customer greater choice to select his

distributor, and to bring competition amongst Distributors. The portability request is made electronically and completed without manual intervention. The customer has following value added benefits of the scheme as –

a) No transfer fee or additional security deposit will be charged for transfer of connection under portability scheme.
b) A complete electronic tracking of the portability request and closure is in place to ensure a consumer does not have any difficulty to move to a distributor of his choice.

This initiative is expected to usher in improvement in consumer service by the distributors as it will bring in competition in the cluster of Distributors, and bring choice to consumers who are unhappy with the service of their present Distributor and want to change their LPG Distributor within or across the Oil Company, or want to move to a distributor closer to their home.

10.6 Preferred Time Delivery (PTD):

Normally, LPG cylinders are delivered based on customer's booking, in serial order, on a first come first serve basis. No separate provision for refill delivery as per customer's convenient day and time is provided. Using the Preferred Day and Time option, customers can pay an additional amount in order to choose the day and time of their cylinder delivery. The day and time slots fixed for the delivery and the charges for the service are given below:

Table 5 – Charges for Preferred Time Refill Delivery

Time Slot	Charges per delivery in Towns with population of ten lakh and above	Charges per delivery in other Towns
Before 8 AM	Rs.50	Rs.40
8AM to 11 AM	Rs.25	Rs.20
11 AM to 3 PM	Rs.25	Rs.20
3 PM to 6 PM	Rs.25	Rs.20
6 PM to 8 PM	Rs.50	Rs.40
Only Saturday/Sunday (8 AM to 6 PM)	Rs.25	Rs.20

Detailed guidelines on Preferred Time Refill Delivery are available at respective OMCs web portal.

10.7 LPG connection of PNG customer:

Piped-Natural-Gas (PNG) consumers are now allowed by Govt. of India to keep one LPG connection in their household for which supply would be at non-subsidized rate. In view of the same, PNG consumers whose LPG connections have been blocked can now get their LPG connections unblocked by opting for cylinder supply at non-subsidized rate.

LPG connection of the customer can also be entrusted in safe custody against which a Special Termination Voucher called **'Safe Custody TV for PNG consumer'** will be given to the customer. The Safe Custody TV is without any restriction on validity and also transferable to any of the family members (Father, Mother, Son, Daughter, Brother, Sister) anywhere in the country on the same security deposit. No charges will be levied to the customer for entrusting their LPG connection in safe custody.

11.0 QUESTION / ANSWERS ON LPG:

a) What is LPG?

Liquefied Petroleum Gas (LPG) is a mixture of hydrocarbons, which are in gaseous state at ambient temperature and pressure but these are liquefied under pressure for easy storage, handling and transportation in pressurized vessels. It is obtained through Crude Oil refining or from Natural Gas through fractionation. Butane and Propane are the main constituent hydrocarbons in LPG. Others present in traces or small fractions are Iso-butane, butylene, n-butane, propylene etc. LPG is highly inflammable. LPG is odourless, color less and is heavier than air. Ehtyle Mercaptan is added as odouriser for detection of any leak. LPG as per IS: 4576 is being marketed in India.

b) Why is LPG Liquefied?

At normal temperature and pressure LPG is a gas. It is compressed into a liquid by application of moderate pressure. When this happens, the volume is reduced approximately 250 times. When the pressure is released (by opening the regulator knob) the liquid immediately becomes gas.

c) What is LPG used for?

As on 1st April, 2021, 33.06 crore customers in India already use LPG for cooking and heating water. LPG can also be used for heating rooms, and as fuel for refrigerators. In industry, LPG is widely used in workshops and laboratories, for metal cutting, non-ferrous welding, brazing and flame clearing, for generating special atmospheres required in heat treatment processes, textile industry, glass industry and for numerous other industrial applications.

d) Why should I change to LPG?

Look at the advantages LPG gives you:

- LPG Gives you an instant cooking flame. All you do is to light a match hold it over the burner head and turn the tap.
- LPG Gives you instant heat. There is no need to nurse the fire or wait for the appliance to warm up.
- LPG Gives you the correct amount of heat you require. The size of the blue flame is easily controlled. In some appliances there is a ‘simmer” position on the tap to help select the correct flame.
- LPG gives you constant heat for as long as you want, without effort.

- LPG adds to your comfort because cooking is quick and the kitchen does not get heated as with other fuels like wood and charcoal.
- LPG forms no soot or grime and keeps your kitchen clean.
- The LPG appliance is neat, attractive and easily cleaned. It lasts many years and requires little maintenance. It is a good investment.
- LPG is easy to store. The cylinder is clean and occupies very little space.
- Your LP Gas Distributor delivers a refill cylinder free of charge to your home. Just telephone or send a message.
- If your appliance needs attention, which will not be often, the Distributor will provide technical service. You will need to pay only for any replacement parts required plus a nominal ·service charge.
- LP Gas is backed by the extensive marketing experience of the Oil Corporations.

e) But is not LPG far more expensive than other fuels?

LPG appliances are highly efficient. LPG is quick, clean, convenient and safe. It cannot be pilfered. It is cheaper than most other fuels except perhaps kerosene but its advantages greatly outweigh the marginal extra cost. It is delivered at home.

f) What is the most economical way of using LPG?

Follow these simple rules:

- Put as little liquid in the pan as possible.
- The flame should cover only the bottom of the vessel and not spread over the sides.
- Turn the flame full on to start with. Once boiling starts reduce the flame to keep the contents of the pan simmering. If you leave the pan boiling with a big flame; cooking is not quicker, and gas is wasted.
- Cover the pan if possible.
- Turn the flame off everytime you stop using It. It is so easy to re-light.

g) Do I need to buy Special pans to cook with LPG?

No. You can use any kind of pan with LPG. However, if you are buying new pans, we recommend flat-bottomed ones.

h) How much LPG will I get in a full cylinder? How long will it last?

You can be sure that every LPG cylinder normally contains 14.2 kg. of gas, because the Corporation weighs and seals each cylinder. How long a cylinder lasts will depend on many things like:

a) The number of people in your household.
b) How many meals you prepare a day.
c) The types of cooking you do.
d) How carefully you use the gas.

i) How can I tell when a LPG cylinder is about to finish?

Frankly, the only accurate method is to weigh the cylinder since it has not yet been possible to evolve an apparatus that is sturdy, accurate and inexpensive. You will soon judge by experience how long a cylinder will last in your own kitchen. The LPG Distributor makes every effort to deliver refill cylinders promptly to save you from inconvenience. You can also take a 2nd cylinder facility to avoid dry outs.

j) Why does the flame lift from the burner port?

The right mix of LPG and air is required to give you the best blue coloured flame at your burner port. In case of any imbalance of Air-LPG mixture such things can happen. If air is more in the combustible mixture, the flame will lift off the burner port. You may get your burners checked as they may require a little repair or cleaning etc. to ensure right combustible mixture at the burner port. In case the pressure is higher than the designed rating, the flame may lift off the port. Please get the pressure regulator checked.

k) Why can't I buy a cylinder and pressure regulator?

It would not be to your advantage since these items cost far more than the deposit you pay. Further the LPG Distributor ensures that all loaned equipment is delivered to you in good condition. If there is any difficulty the Distributor changes the equipment free of charge unless of course the loss or damage has been caused by you. This service would not be possible if the equipment belonged to the customer.

l) Is it difficult to work with a LPG Installation?

No, it is simple. When you open the regulator knob and the appliance tap, the LPG vapour inside the cylinder is forced out of the open valve through a pressure regulator and the connecting hose until it reaches the appliance where it is mixed with air and burnt.

m) Is LPG more dangerous than other fuels?

LPG is just as safe as any other fuel. In fact, it is safer than most, because neither LPG itself nor the end-products produced by burning LPG in a suitable appliance, are poisonous to breathe.

Since LPG cannot burn without air, there can never be a 'Flash-back' into the cylinder. You can feel safe with LPG. The most thorough precautions are taken to ensure its safety. All you have to do is to handle it according to the simple instructions given.

- In normal use, a LPG cylinder can never shatter or burst into little pieces. The Oil Corporation with the vast experience at its disposal, has laid down rigid specifications for all LPG equipment. No item is put into service until it meets these specifications, which have been approved by Government Authorities concerned.
- Every new LPG cylinder is inspected by BIS or by a third party inspecting agency (TPIA) approved by PESO. Under the Gas Cylinder Rules 2016, after a new cylinder is initially tested at the manufacturer's plant, it is required to be re-tested periodically to ascertain the fitness for further service. The period of re-test as per latest norms is 10 years from the date of manufacture of cylinders and subsequently every five years.
- The Corporation employs specially trained inspectors to ensure that the cylinder valves/pressure regulators are manufactured to comply with rigid specifications.

- The hotplate is of a type approved by BIS, to ensure that the customer gets a safe and efficient appliance.
- LPG sold as a cooking fuel has a distinctive smell that helps you detect gas leakage at once. This smell disappears immediately the gas is burnt and is definitely not imparted to the food.
- LPG Distributors and their staff are trained to be safety-conscious and to explain to customers how they should use LPG safely.
- An Instruction Card is given to each customer containing the simple rules to be followed.

12.0 Probable questions of customers on transfer / re-activation of LPG connection & answers:

LPG is an essential product, associated with rising standard of living. We can all feel proud of being connected with it.

Potential customers will want information about the product and most frequently asked questions are available on the Web Portal of the respective OMCs. Distributor & their staff should get themselves acquainted with these questions and their answers.

Customers questions with answers related to transfer of LPG connection / reactivation of suspended, multiple connection are given below.

12.1 How to Transfer the LPG connection?

In case you are shifting your residence, you may follow any of the following options:

a) Transfer of connection within the Area of the Operation of the same Distributor:

Advise your distributor your new address with supporting proof of residence so that he effects the change in his records and your future supplies shall then be sent to your new place of residence.

b) Transfer of connection within the same town

In case your present distributor does not service your new place of residence, you may approach your LPG distributor with your original Subscription Voucher (SV). The distributor shall prepare a transfer termination voucher (TTV)/ City Transfer Advise out (CTA Out) for the place of your new residence. You can then approach the nearest Distributor serving your new place of residence along with proof of residence, TTV/CTA Out and DGCC booklet (Domestic gas consumer card). The distributor shall prepare a Transfer Subscription voucher (TSV)/City Transfer Advise IN against your TTV/CTA Out and shall provide you a new consumer number. These details will be updated in your DGCC booklet, (Domestic gas consumer card).

In this case of a shift of residence within the same town you are not required to surrender your equipment. Hence you can to carry your domestic cylinder and pressure regulator to your new residence.

c) While getting transferred out of town

In case you are transferred outside the town, you are required to surrender your LPG equipment viz. cylinder and pressure regulator to your distributor. In such a case, you may approach your distributor with your Subscription Voucher (SV) or Transfer Subscription Voucher (TSV) as the case may be & Domestic Gas Consumer Card (DGCC) along-with your Cylinder/s and Pressure Regulator. The distributor in turn will prepare a Termination Voucher (TV) in your name for your new place and refund the deposit held against the Cylinder/s and Regulator. Upon your request, the distributor will arrange to collect equipment from your premises, subject to payment of applicable charges. You will also be guided to the nearest distributor for future service. At the new place you can approach the nearest distributor for resuming your LPG supplies.

12.2 How do I transfer my connection to the Family Member?

Transfer of connection to family member is now permitted. In case the transferee in your family is not having a LPG connection you may please provide a request to your distributor with the following:

a) KYC of the Transferee
b) Proof of Address & Proof of Identity
c) Original Subscription Voucher (SV) in Your Name (If SV is missing Please provide Declaration from the transferee)

The KYC will be verified, multiple connections in the address mentioned for transfer will be checked and then the distributor will make a new Subscription voucher in the Transferee's name. Security deposit will remain the same as in the original SV.

a) If I am the Legal Heir, how do I transfer the LPG connection of my parents to me?

Transfer of connection to legal heir is now simplified. In case the transferee (legal heir) is not having a LPG connection you may please provide a request to your distributor with the following:

a) Declaration by Legal Heir
b) Copy of Death Certificate
c) KYC of the Legal Heir
d) Proof of Address & Proof of Identity
e) Original Subscription Voucher (SV) in the name of deceased (If SV is missing Please provide affidavit)

The KYC will be verified, then multiple connections in the address mentioned for transfer will be checked and then the distributor will make a new Subscription voucher in the Transferees name. Security deposit in such cases will remain the same as in the original SV.

b) How can I transfer my LPG connection to any another person?

A person who is holding a valid LPG connection with documents can transfer the connection in the name of a person outside family.

The person to whom the connection is to be transferred has to fill the KYC form and attach the Proof of Identity (POI) and Proof of Address (POA). Both the persons i.e. One who holds the connection (Transferor) and to whom it is to be transferred (Transferee) have to submit the declaration form duly signed. Both the KYC and declaration form need to be submitted to the distributor.

The Security deposit as prevailing at the time of transfer of such cases will be applicable.

c) Can LPG Connection Be Transferred without the Consent Letter from Transferor:

In case the person is holding the SV & equipment and is not in a position to submit consent letter from Transferor, He/ She can get the connection transferred to his/her name.

The person to whom the connection is to be transferred has to fill the KYC form and attach the Proof of Identity (POI) and Proof of Address (POA) and also submit the declaration form duly signed. Both the KYC and declaration form need to be submitted to the distributor.

12.3 How do I reactivate my blocked connection?

The connections are blocked in the following Scenarios:

a) In case there are more than one connection linked to your Aadhar number

Please surrender one of your connections and the other will be reactivated. Re-activation will be done thereafter once the formalities are completed. Please note that the connection will NOT be re-activated in case you have an additional connection.

b) In case your name / address is identified as having a multiple connection

In case your name appears in the suspect list of multiple connections, but you genuinely do not have an additional connection at your residence, you need to fill up the KYC format and submit the same to the distributor.

In case your address is the same but it is a separate part of the building & has a separate kitchen then you need to submit a Declaration to that effect along with the

KYC form duly filled in. The Distributor will send his representative to physically verify that there is no additional connection at your address.

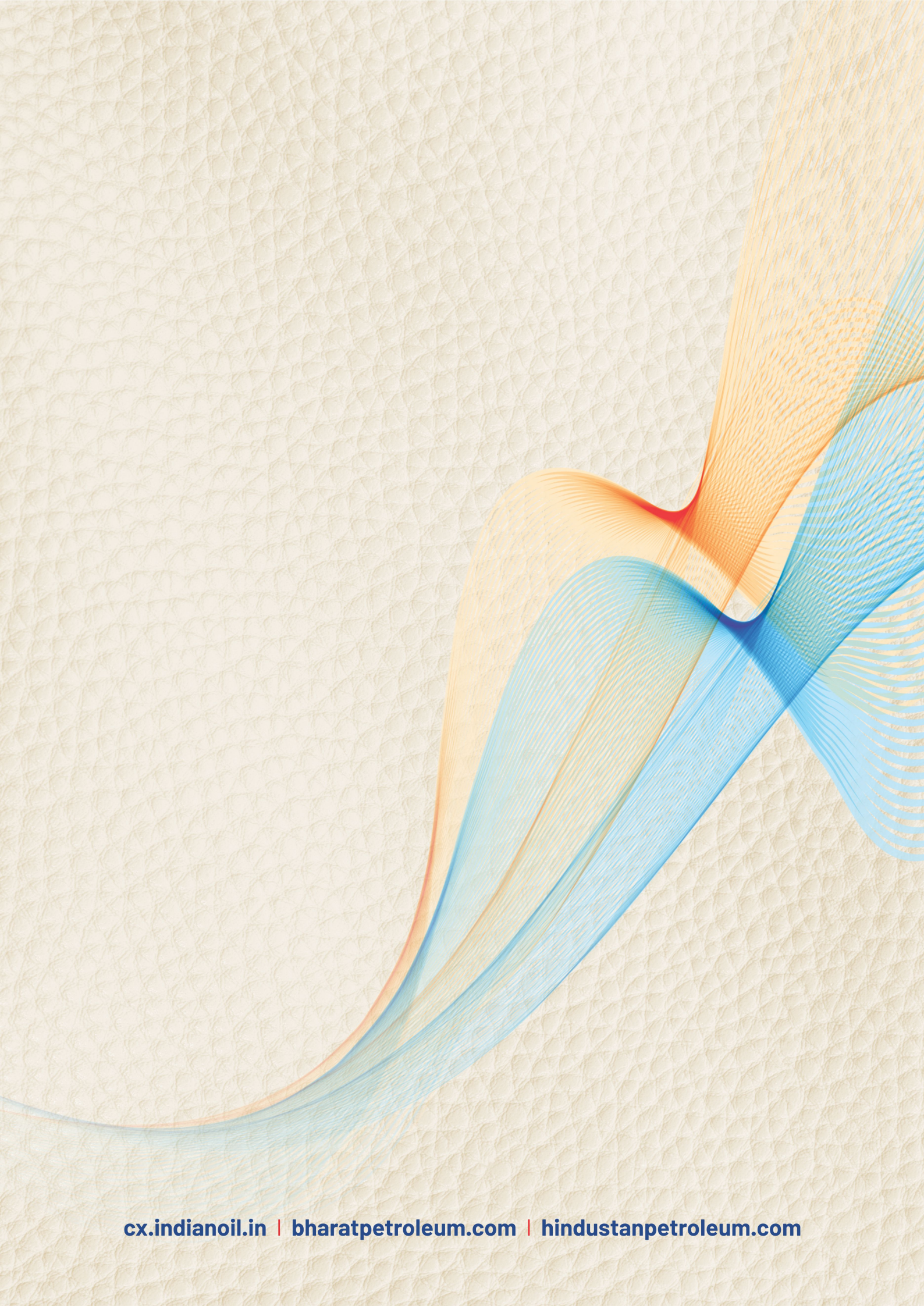
Re-activation will be done thereafter once the formalities are completed. However please note that the connection will NOT be re-activated in case you have an additional connection in the household.

c) In case you have not availed a LPG cylinder for a period of three years or more.

For reactivating LPG connection which is deactivated due to not availing LPG cylinder for more than three years you need to make an application and submit the same to your LPG Distributor along with the KYC form duly filled in. However please note that the connection will NOT be re-activated in case you have an additional connection.

Re-activation of the blocked connection will be done once the formality as enumerated in the above scenarios is completed.

Xxxxxxx



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