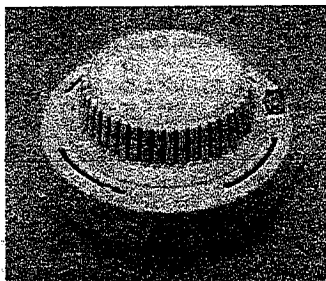


Garvan

BATTERY OPERATED PHOTOELECTRIC SMOKE ALARM



MODEL : SS-366



MAIN FEATURES :

- PHOTOELECTRIC SENSOR, IDEAL FOR SLOW SMOULDERING FIRES IS GENERAL THICK, BLACK SMOKE, LITTLE HEAT AND MAY SMOULDER FOR HOURS BEFORE BURSTING INTO FLAMES
- POWER & ALARM TEST BUTTON
- LOW BATTERY WARNING
- LOUD 85DB ALARM SIGNAL
- CANNOT BE FITTED WITH BATTERY MISSING
- SUPPLIED WITH WALL PLUGS & SCREWS

This instruction leaflet contains important information on the correct installation and operation of your smoke alarm. Read this leaflet fully before attempting installation and retain for future reference.

SPECIFICATION

Power Source: 9V battery (GOLD PEAK GP1604P or ULTRALIFE U9VL-J recommended)

Operation Current : <10uA (normal), <20mA operation (In Alarm)
 Sensitivity to smoke : 0.73% - 2.35%/ft.OBS
 Operation Temperature : 4.4°C-37.8°C
 Ambient Humidity : 10%-90%
 Horn Level : 85 Decibels at 3 metres (10 ft)
 Battery Life : 1 year minimum
 Approved to : UL 217

Model SS-366 Photoelectric Smoke Alarm is using an infrared photoelectric chamber to sense scattered light from smoke particles. Special features are incorporated in the design to facilitate calibration and testing.

Photoelectric smoke alarms respond first to slow smouldering fires. A smouldering fire generates large amounts of thick, black smoke with little heat and may smoulder for hours before bursting into flames.

NFPA REQUIRED PROTECTION

This equipment should be installed in accordance with the National Fire Protection Association's Standard 72. (National Fire Protection Association, Publications Department, Batterymarch Park, Quincy, MA02269)

For your information, the National Fire Alarm Code, NFPA 72, reads as follows:

- 11.5.1* Required Detection
 11.5.1.1* Where required by applicable laws, codes, or standards for a specific type of occupancy, approved single- and multiple-station smoke alarms shall be installed as follows:
- (1)* In all sleeping rooms and guest rooms
 - (2)* Outside of each separate dwelling unit sleeping area, within 6.4 m (21-ft) of any door to a sleeping room, the distance measured along a path of travel
 - (3) On every level of a dwelling unit, including basements
 - (4) On every level of a residential board and care occupancy (small facility), including basements and excluding crawl spaces and unfinished attics
 - (5)* In the living area(s) of a guest suite
 - (6) In the living area(s) of a residential board and care occupancy (small facility)

LOCATING THE SMOKE ALARM

This smoke alarm is a single station photoelectric alarm and should NOT be connected to other smoke alarms.

If your dwelling is on a single storey, for minimum protection you should fit an alarm in the hallway between the living areas (incl. Kitchens) and sleeping areas. Place it as near to the living areas as possible and ensure the audible alarm can be heard when the bedrooms are occupied. See Figure 1 for examples.

If your dwelling is multi-storey, for minimum protection one alarm should be fitted at the bottom of the staircase with further alarms fitted on each upstairs landing. This includes basements but excludes crawl spaces and unfinished attics. See Figure 2 for examples.

NOTE: For maximum protection an alarm should be fitted in every room (except kitchen, bathroom and garage).

DO NOT FIT AN ALARM IN THE KITCHEN or BATHROOM, as cooking fumes or steam may trigger the alarm.
DO NOT FIT ALARM IN A GARAGE, as exhaust fumes are likely to set it off.

IMPORTANT! Specific requirements for smoke alarm installation vary from state to state and from region to region. Check with your local Fire Department for current requirements in your area.

FIGURE 1 - SINGLE-STOREY DWELLING

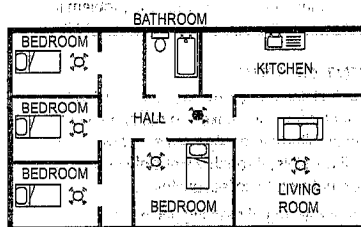
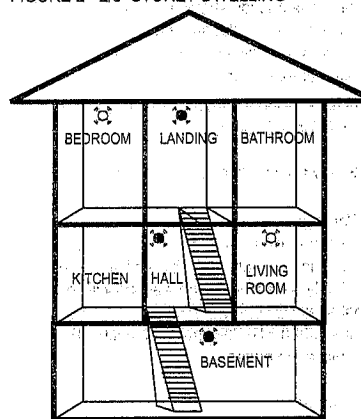




FIGURE 2 - 2/3 STOREY DWELLING



KEY:
 MAXIMUM PROTECTION
 MINIMUM PROTECTION

POSITIONING THE SMOKE ALARM

Ceiling Mounting

As hot smoke rises and spread out, it is advisable to mount on a ceiling in a central position. Avoid areas where there is no air circulation: E.g. Corners of rooms and keep away from items which may prevent the free flow of air. Place the unit at least 300mm from and light fitting or decorative object which might obstruct smoke/heat entering the alarm. Keep at least 300mm away from walls. See Figure 3i.

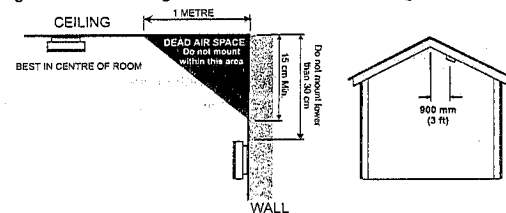
Wall Mounting

Do not mount tight into the corners. Put the top edge of your smoke alarm between 150 and 300mm below the ceiling. Keep at least 300mm from room corners. See Figure 3i

On a Sloping Ceiling

In areas with sloping or peaked ceilings install your Smoke Alarm 900mm from the highest point measured horizontally because "dead air" at the apex may prevent smoke from reaching the unit. See Figure 3ii.

Figure 3i- Positioning the smoke / heat detector Figure 3ii



Areas to be avoided include the following :-

- Situations where the temperature may fall below 4.4°C or rise above 37.8°C
- Humid areas such as bathrooms, kitchens, shower rooms where the relative humidity may exceed 90%
- Near a decorative object, door, light fitting, window molding etc., that may prevent smoke or heat from entering the alarm.
- Fume filled environments such as garages. Exhaust gases may cause false alarms.
- Adjacent to or directly above hot components such as radiators or wall vents that can affect the direction of air currents.
- In very dusty or dirty environments such as workshops.
- Locate unit at least 1.5m and route wiring at least 1m away for fluorescent light fittings as electrical "noise" and/or flickering may affect the unit. Do not wire into the same circuit as fluorescent lights or dimmers.
- Do not locate in insect infested areas. Insects and contamination on the Heat Alarm sensor can increase its response time.

INSTALLING THE SMOKE ALARM

This smoke alarm is powered by a battery and requires no additional wiring.

- Having established the mounting location ensure that there is no electrical wiring or pipe work in the area adjacent to the mounting surface.
- Take the mounting bracket and mark the two mounting hole locations.
- Drill holes in the positions marked and insert wall plugs into the holes.

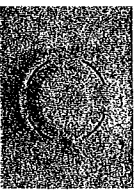
- Sew mounting bracket to mounting surface. DO NOT OVER TIGHTEN.
- Insert a 9V battery firmly into battery compartment on the rear of the detector. NOTE POLARITY OF CONNECTIONS. Ensure the metal tab is fully depressed when the battery has been fitted. NOTE - For the safety of the end user the smoke alarm cannot be fitted without its battery.
- Sliding the alarm onto the mounting base.
- Test the correct operation of the smoke detector by depressing the test button on the front of the detector. The unit should emit a loud pulsating alarm.



Screw mounting bracket to mounting surface



Sliding the alarm onto the mounting base



The alarm is ready to use

OPERATING YOUR SMOKE ALARM

Once the smoke alarm has been installed a small indicator light (LED), positioned under the test button, should flash approximately once a minute in normal operation. If smoke is detected the unit will emit a loud pulsating alarm with the LED flashing at the same time until the air is cleared. If there is any question as to the cause of the alarm, it should be assumed that the alarm is due to an actual fire and the dwelling should be evacuated immediately.

TESTING YOUR SMOKE ALARM

It is recommended that you test your smoke alarm once a week to ensure the detector is working correctly. Push and hold the test button for approximately 3 seconds. A loud pulsating alarm should sound to indicate the correct function. During the alarm condition the indicator light will flash quickly.

COMMON CAUSES AND AVOIDANCE OF FALSE ALARMS

The Smoke Alarm may be triggered by steam, condensation, normal smoke or fumes. Small insects getting into the smoke alarm chamber may cause

intermittent alarms. Keep away from the sources to avoid nuisance alarms. (See "Areas to be avoided" in the "Positioning the smoke alarm" section.)

ACTION IN THE EVENT OF A FALSE ALARM

- If the alarm does sound, check the house carefully in case there is a small fire smoulder somewhere.
- Check whether there are some sources of smoke or fumes. You should get your family into a safe place before your investigation.
- If there are frequent nuisance/false alarms it may be necessary to re-locate the device, if for some reasons the alarm continues to give false alarm, the units can be silenced by removing the batteries, if cleaning the alarm does not correct the problem it can be returned to the place where you bought it.

IN THE EVENT OF FIRE

- Leave the building as quickly as possible. Check room doors for heat or smoke. Do not open a hot door. Use an alternate escape route. Crawl along the floor, if possible, through a wet cloth or hold your breath. Do not stop to collect anything.
- Meet at a pre-arranged meeting place outside the dwelling and check everybody is there.
- Call the Fire Brigade from outside the building immediately. The brigade should be summoned regardless of the size of the fire and regardless of whether there is a facility for transmission of alarms to a remote manned centre.
- Do not go back inside a burning building and wait for the Fire Brigade to arrive.

MAINTAINING YOUR SMOKE ALARM

Low Battery Warning
If the smoke detector emits a short beep once every 40 seconds the battery is at the end of its life and should be replaced immediately. This low voltage warning will be given for at least seven (7) days. If the red indicator light (LED) does not flash every 40 seconds then replace the battery.

Battery Replacement

- This smoke alarm is powered by a 9V carbon zinc battery (alkaline and lithium batteries may also be used). A fresh battery should last for one year under normal operating conditions. Replace the batteries immediately once the smoke alarm start beeping (the low battery warning).
- To replace the battery, remove the alarm from the mounting plate by rotating the Alarm.
- NOTE POLARITY OF CONNECTIONS.
- Test the alarm for correct operation using test facility, whenever the battery is replaced.

WARNING: THE USE OF BATTERIES OTHER THAN THOSE RECOMMENDED ON THE BACK OF THE

SMOKE ALARM MAY BE DETRIMENTAL TO ITS OPERATION

Cleaning Your Alarm

Clean your smoke alarm regularly to prevent dust build up. This can be done by using a vacuum cleaner with the brush attachment. Clean gently around the front grilled section and sides. Never use water, cleaners or solvents since they may damage the smoke alarm. After cleaning, test your alarm by using the test button.

NOTE: If the alarm fails to operate currently, please send back to the address of manufacturer shown on the back label of the alarm.

LIMITATIONS OF YOUR SMOKE ALARM

- Smoke alarms are devices that can provide early warning of possible fires at a reasonable cost. However, they do have limitations.
- A battery powered alarm must have a battery of the specified type, in good condition and installed properly.
- Smoke alarms cannot provide an alarm if smoke does not reach the alarm. Therefore, smoke alarms may not sense fires starting in chimneys, walls, on roofs, on the other side of a closed door or on a different floor.
- Smoke alarms may not be heard if the alarm is located outside the bedroom or on a different floor, the sound may be blocked by distance, closed doors, or ambient noise such as traffic or stereo.
- Smoke alarms cannot be expected to sense fires caused by carelessness or by safety hazards. They may not give early warning of fast-growing fires caused by smoking in bed, violent explosions, escaping gas, improper storage of flammable materials, overloaded electrical circuits, natural causes such as lightning, children playing with matches or arson.

- Although smoke alarms can help save lives by providing an early warning of a fire, they are not a substitute for an insurance policy. Home owners and renters should have adequate insurance to protect their lives and property.
- An indication that current studies have shown smoke alarms may not awaken all sleeping individuals, and that it is the responsibility of individuals in the household that are capable of assisting others to provide assistance to those who may not be awakened by the alarm sound, or to those who may be incapable of safely evacuating the area unassisted.

IMPORTANT SAFEGUARDS

- Installation of your smoke alarm is only one step in your safety plan. Other important steps should be taken to further improve your safety:-
- Install the smoke alarm properly, following this instruction leaflet
- Test your smoke alarm weekly
- Replace the battery immediately once depleted
- Do not smoke in bed

- Keep matches & lighters away from children
- Store flammable materials in a proper manner and never use them near naked flames or sparks
- Maintain emergency equipment such as Fire Extinguishers, escape ladders etc and ensure all occupants know how to use them correctly.
- Plan an escape route/s from your building in advance and ensure all occupants are aware of them. Re-enforce this awareness periodically through-out the year.
- Make sure escape routes remain free of any obstructions.

Further information on fire safety can be obtained in a pamphlet titled "IN A FIRE SECONDS COUNT" published by the NFPA, Batterymarch Park, Quincy, MA 02269

THIS PRODUCT IS A SEALED UNIT AND CANNOT BE REPAIRED - IF THE UNIT IS TAMPERED WITH IT WILL INVALIDATE THE WARRANTY. IF THE UNIT IS FAULTY PLEASE RETURN IT TO YOUR ORIGINAL SUPPLIER WITH YOUR PROOF OF PURCHASE.

YOUR SMOKE ALARM WARRANTY

Garvan warrants to the enclosed smoke alarm will be free from defects in materials and workmanship under normal use and service for a period of three years from the date of purchase. Garvan will not be obligated to repair or replace parts which are found to be in need of repair because of misuse, damage or alterations occur after the date of purchase. Send the Smoke Alarm with proof of purchase, postage and return postage prepaid, to local distributor. The liability of Garvan arising from the sale of this smoke alarm or under the terms of this limited warranty shall not in any case exceed the cost of replacement of smoke alarm and in no case shall Garvan be liable for consequential loss or damages resulting from the failure of the smoke alarm.

GARVAN ENTERPRISES LTD. SHALL HAVE NO LIABILITY FOR ANY PERSONAL INJURY OR PROPERTY DAMAGE, OR ANY SPECIAL INCIDENTAL, CONTINGENT OR CONSEQUENTIAL DAMAGE OF ANY KIND RESULTING FROM A FIRE. THE EXCLUSIVE REMEDY FOR BREACH OF THE LIMITED WARRANTY CONTAINED HEREIN IS THE REPAIR OR REPLACEMENT OF THE DETECTIVE PRODUCT AT GARVAN ENTERPRISES LTD. S LIABILITY UNDER ANY OTHER REMEDY PRESCRIBED BY LAW EXCEED THE PURCHASE PRICE. YOUR SMOKE ALARMS IS NOT A SUBSTITUTE FOR PROPERTY, DISABILITY, LIFE OR OTHER INSURANCE OF ANY KIND. APPROPRIATE COVERAGE IS YOUR RESPONSIBILITY. CONSULT YOUR INSURANCE AGENT

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