

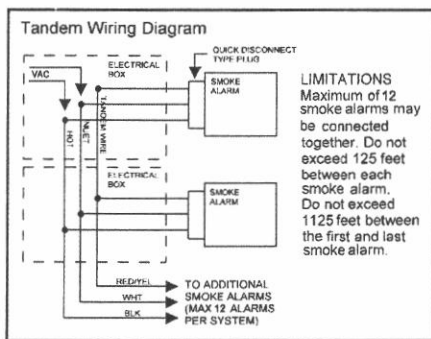
## WIRING TWO OR MORE SMOKE ALARMS Tandem Installation

**NOTICE:** All smoke alarms in a tandem installation must be controlled by the same fuse or circuit breaker. Otherwise tandem units will not operate. Tandem will operate in the event of AC power failure if battery is connected to the smoke alarm.

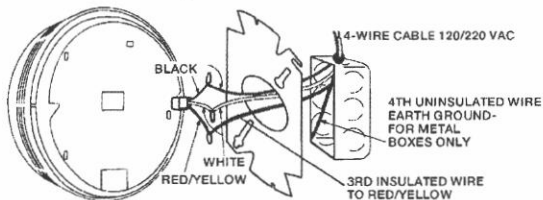
**LIMITATIONS:** A maximum of 12 smoke alarms ("9120/9123 or 9220/9223") may be connected together. Do not exceed 125 feet between each smoke alarm. Do not exceed 1125 feet between first and last smoke alarm.

**NOTICE:** A maximum of six (6) smoke alarms of either model 9120/9123 or 9220/9223 with the relay options (F, TF, HF) may be tandem interconnected.

Wire used for interconnection shall be in accordance with article 760 of the latest edition of National Electrical Code (NFPA 70) and must not exceed a resistance of 10 ohms.



- Run a minimum of 16 gauge, 3-conductor cable, plus ground (4 wires) to the first alarm junction box from a power supply and between all smoke alarms that are to be connected together. Use U.L. Listed Class 1 wire.
- Make wire connections to the supplied plug-in connector as follows: black to black, white to white, 3rd conductor to the red/yellow wire. The red/yellow wire should be stripped to make the connection. Connect ground wire between metal outlet boxes.



### NOTES ON TANDEM INTERCONNECTING MODELS

- DO NOT** connect Gentex smoke alarms to other manufacturers' smoke alarms.
- No more than 12 Gentex models 9120T, H/9123T, H or 9220T, H/9223T, H may be connected in tandem.
- No more than 6 Gentex models 9120F, TF, HF/9123F, TF, HF or 9220F, TF, HF/9223F, TF, HF may be connected in tandem.
- All units connected in tandem **MUST** get their power from the same circuit, that is, all smoke alarms in tandem must be controlled by the same fuse or circuit breaker.
- After installation to verify proper working conditions all horns must sound in this system.

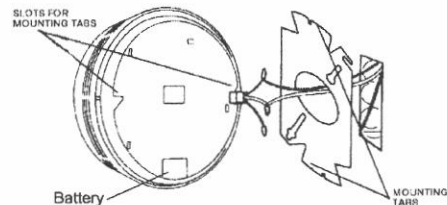
**CAUTION:** Failure to observe any of the conditions set forth may cause system malfunction and damage to the smoke alarm.

## BATTERY INSTALLATION

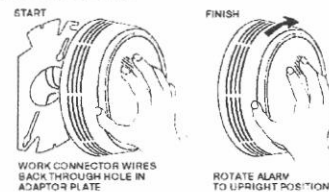
- Remove smoke alarm from mounting plate by turning counter-clockwise.
- Remove AC power connector and unsnap power leads from top of the old battery. Snap new battery onto snaps and reinsert battery through hole in back of smoke alarm. **WARNING:** Units with battery back-up will not provide power or transmit an alarm to AC only units in the event of an AC power failure. All battery back-up units in tandem with good batteries will operate normally during an AC power failure for a minimum of 24 hours.
- Use only Duracell MN 1604 battery with the 9000 Series smoke alarms.

## MOUNTING: PLATE & SMOKE ALARM

- Lace the connector through the provided mounting plate and secure the plate to the junction box.
- Plug the wire connector into the smoke alarm base.

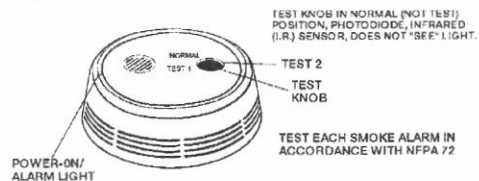


- Place smoke alarm up to mounting plate, rotating it clockwise until smoke alarm firmly snap locks into place. Keep smoke alarm parallel to mounting plate so upper and lower tabs on plate seat correctly into smoke alarm.



## CHECKOUT & TROUBLESHOOTING

- Turn test knob to NORMAL position and install battery and then supply house power to smoke alarm. The red indicator light should flash every 15-30 seconds, showing smoke alarm is operating properly.
- If red light is not flashing or the green LED is not on:
  - Check that the battery is installed.
  - Check the connector plug and wire connections. **NOTE:** Be sure you turn off power before checking wire connections.
  - If power supply and wiring check out, but red light does not flash or green LED is still off, return the smoke alarm to manufacturer. See TO RETURN A SMOKE ALARM.
  - When powering up smoke alarms in a tandem installation and all smoke alarms sound immediately, inspect all smoke alarms for those with an illuminated indicator light. These will be the trouble units.
- Testing with Test Knob:
  - Rotate test knob counter-clockwise to TEST 1 position and wait up to 20 seconds for smoke alarm to sound. If smoke alarm does not sound after 20 seconds, return smoke alarm for service.
  - After successfully testing smoke alarm, return test knob to NORMAL (non-test) position and wait 20 seconds for alarm to stop sounding.



- To test smoke alarm for high sensitivity, turn test knob clockwise to TEST 2 position. Alarm should remain silent.
- Make sure to return test knob back to its normal position.
- If your smoke alarm sounds during this test it means the smoke alarm's sensitivity has become too high and may cause false alarms.