

Real Estate Inspection Report and Additional Information



S. Havana Street, Englewood, CO

Inspection Date:
07/15/2016

Prepared For:
Brittany B.



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INSPECTION REPORT SUMMARY

Inspection Date: 07/15/2016
Summary information for: Brittany B.
For the property located at: S. Havana Street, Englewood, CO

The following is a summary of the inspector's findings during this inspection. These are items that were determined by the inspector as being worthy of further attention, investigation, or improvement. Some of these conditions are of such a nature as to require repair or modification by a skilled craftsman, technician or specialist. Others can be easily handled by a homeowner.

Although the summary is a good tool for the Real Estate transaction, it is recommended that you read through the main body of the report as soon as possible. The body of the report will include a complete listing of the defects and deficiencies found, more in-depth information on the systems and components of the home, the details and limitations of the inspection, and maintenance tips specific to the home.

In listing these summary items, your inspector is not offering any opinion as to who, among the parties of this transaction, should take responsibility for addressing any of the concerns. As with most other facets of your transactions, we recommend consultation with your Real Estate Professional.

SIGNIFICANT ISSUES:

In the opinion of the inspector, the following items could be expensive to repair/ replace (estimated to cost more than \$500), are life safety related, and/or are items that if not addressed in the short term could cause costly problems.

EXTERIOR

SIDING:

Much of the wood siding on the building was old, weathered, worn, and in fair condition. The paint/stain was weathered, worn, peeling and missing in many areas. Correction will involve siding repair and significant repainting.



BALCONY DECK:

As observed from the ground looking up at the bottom of the deck, and from the deck surface, areas of significant moisture damage/rot were observed on the joists under the deck. The ends of several deck surface boards were loose and sticking up since the screws are not able to hold in the rotted joists. In our opinion, these conditions could result in partial or complete collapse of the deck which can result in serious injury or death. Since the deck is old, proper correction should involve replacement of the entire deck system. We recommend contacting the HOA to discuss their plan for replacing this deck. We recommend that the deck not be used until it is repaired.



FURNACE

CARBON MONOXIDE:

Very high levels of Carbon Monoxide "CO" gasses of over 2,200 parts per million were detected in the vent gasses leaving the furnace when tested with a Bacharach Fyrite Pro CO testing device after operating the furnace for a short time. A normal level of Carbon Monoxide in these vent gasses should be under 30 ppm. Although these vent gasses are exiting the furnace/house through the metal vent pipe, and no Carbon Monoxide was detected in the house air, these levels are an indication of a serious problem with the furnace. Although unlikely, this would be a serious life safety danger if the vent gasses were to enter the living space. We recommend further inspection and correction as necessary by a qualified HVAC contractor prior to operating this furnace. Since the furnace is 37 years old, correction should involve replacement of the furnace.



COMBUSTION AIR:

The "combustion" air for the furnace and water heater is being provided by vent registers in the door allowing interior air to enter the mechanical closet. Adequate fresh air around all fuel burning appliances is vital for their safe operation. The addition of combustion air vents from the house exterior may be required when the furnace or water heater is replaced.



WATER HEATER

AGE:

The water heater was found to be 18 years old, based on the date code in the serial number. The typical life expectancy for a water heater is 12-15 years. This water heater is well beyond its life expectancy. Consideration should be given to replacing the water heater before leakage and potential flooding occur. It is required by law to obtain a permit from the local building department to install a water heater.

WINDOW GLASS

An approximate 4' long crack was observed in the glass of one window above the sliding glass door. This may be a result of a defect in the glass or damage during installation. This window appears to be newer and may be under warranty. Correction will involve replacement of the glass unit.



KITCHEN

SINK DRAIN:

No trap was observed in the plumbing drain under the right side of the sink. The purpose of a trap is to keep potentially dangerous sewer gasses from entering the living space. Correction should involve the installation of a proper drain trap by a professional plumber.



IMPORTANT INFORMATION & NOTABLE ISSUES:

In the opinion of the inspector, the following items are non-critical conditions that should be addressed in the near future.

GARAGE

FIRE BARRIER:

Many indications of previous water leaks and poor quality repairs were observed on the ceiling and walls of the garage and storage room. These are breaches in the firewall between the garage and the living spaces. It is proper practice to have a firewall, consisting of 5/8" thick drywall, joints taped and covered with joint compound, between the garage and any living space. Correction will involve repair as necessary.



OBSERVATIONS:

Some storage items were observed in the garage storage room including an old toilet. Consideration should be given to asking the current owner to remove these items.



AIR CONDITIONING SYSTEM

CONDENSING UNIT:

The air conditioning condensing unit was located on the roof of this building and was not accessible. We recommend asking the current owner about the age of this unit. If it is not newer, we recommend further inspection by a qualified HVAC contractor.

ELECTRICAL SYSTEM

BRANCH CIRCUITRY

The following electrical deficiencies were found:

- An outlet in the kitchen cabinet above the microwave was wired with reverse polarity - the hot and neutral wires have been reversed where they are attached on the back of the outlet.
- A mystery dimmer switch was observed at the top of the stairway where the light or switched outlet was not identified.



- No electricity was observed at half of an outlet at the north east wall of the living room. A blank cover plate with electrified wiring inside was observed on the wall near the hallway. It appears that wiring in this box may be connected to the outlet and is designed for a switch to be installed to control the outlet.
- A light switch was found at the kitchen entry where the controlled light fixture, outlet or appliance was not identified. We recommend asking the current owner about the function of this switch.
- No strain relief cable clamp is installed where the electrical wires enter the bottom of the disposal. The wires are against the sharp sheet metal edge that could cut through the wires. This is a potential shock and fire hazard.

These are potential fire, shock and safety hazards. We recommend further inspection and correction as necessary by a professional electrician.

INTERIOR

FLOORS:

Several slightly soft spots and surface scratches were observed on the laminate floor in front of the kitchen entrance. These are cosmetic deficiencies where repair would be optional.

CEILING CONDITION:

Repairs were observed on the popcorn ceiling around two of the skylights. These areas appeared to be dry at the time of the inspection. We recommend asking the current owner about the history of leakage at the skylights.

It is possible that the acoustic spray "popcorn" ceiling on homes built before 1980 contain small amounts of Asbestos. Asbestos can be cancer causing if it is disturbed and the airborne fibers are breathed into the lungs. Identification of Asbestos in the home can only be performed by a laboratory and is beyond the scope of this inspection. If Asbestos is present, the EPA recommends that the surface be left alone, encapsulated with paint or professionally removed. Further information on Asbestos can be obtained from the EPA website at www.EPA.gov.

MAIN ENTRY DOOR:

A repaired crack was observed in the wood frame of the front entry door indicating forced entry at some point in time. The door is operational. Full repair may involve replacement of the entire door and frame.



SLIDING GLASS DOORS:

The handle lock was not operational at the sliding glass door. This is a security issue. Correction may involve repair or replacement of the locking mechanism/handle.



INTERIOR DOORS:

- The closet bypass doors were partially "off track" and not sliding properly at the master bedroom.
- Minor issues were observed with several interior doors. Corrections should involve minor repairs.

SMOKE DETECTORS:

A minimal amount of smoke detectors were observed in the house. Standards for new homes require at least one smoke detector on each floor, one outside bedrooms and bathrooms, and one in each bedroom. Consideration should be given to installing additional smoke detectors as a safety precaution especially when children will be living in the house.

CARBON MONOXIDE DETECTORS:

No carbon monoxide detector was observed in this house. As of July 1, 2009, it is required that all properties listed for sale have a carbon monoxide detector installed within 15' of all bedroom entrances. A carbon monoxide detector is an important, potential life saving device. The carbon monoxide detector can be a plug-in or battery powered unit. We recommend that a proper carbon monoxide detector be installed per Colorado State Law requirements.

BATHROOMS

SINK DRAIN(S):

- Minor leakage was observed in the drain under the master bathroom sink when the sink was filled and drained. Correction will likely involve minor repair.
- An improper pipe connection was observed at the drain pipe under the hall bathroom sink. Correction should involve minor repair.

TOILET:

The bowls of the toilets were found to be very loose where they are secured to the floor in both bathrooms. If a bowl is this loose, proper repair should include removal of the toilet and replacement of the wax ring seal. Other hidden problems may exist under the toilets. Correction should involve further inspection and repair by a professional plumber.

TUB/SHOWER FAUCETS:

- The diverter failed to divert all of the water from the spout to the shower head in the hall bathroom. This is a waste of water. Correction will involve replacement of the spout.
- Very minor water dripping leakage was observed at the control handle when the water was turned on in the hall bathroom shower.
- Water was observed to be leaking from the shower head connection or the pivot point on the body when the shower was turned on in both bathrooms. Correction may involve replacement of the shower heads.

SHOWER DOOR:

The shower door hits the frame and was unable to close properly at the hall bathroom.



VENTILATION:

It appears that the ceiling mounted exhaust fans in both bathrooms are an older style that simply filters the air and blows it back into the room. This can lead to moisture related problems, including mold, if the shower is used on a regular basis. It is current proper practice (and has been for many years) that any bathroom have an openable window or exhaust fan venting to the outdoors. Verification will involve disassembly of the fans and further investigation. Upgrading would involve extending these vents to the outdoors.

MAINTENANCE / UPGRADE LIST:

This is a convenience list of minor items that exhibit normal wear-and-tear or and are in need of maintenance or repair once you move into the house. These may also be recommendations for improvements. Often these items are cosmetic in nature and do not affect the habitability of the property.

INTERIOR

WALL CONDITION:

Many minor "nail pops" and other minor deficiencies were observed in the textured finish of the walls throughout the house. These are cosmetic deficiencies. Correction will likely involve re-texturing these walls by a professional drywall repair contractor.

STAIRS & HANDRAILS:

Gaps up to 7 1/4" were observed between the balusters at the stairway safety railing. Present standards for new homes require a 4" or less gap on all railing systems. This is a potential safety hazard for small children. Although not required, consideration should be given to installing more balusters, replacing the railing system or installing a screen system.

KITCHEN

GFCI OUTLETS:

No GFCI ground protection is installed in the kitchen area where this safety feature is currently required on new homes. GFCI ground fault circuit interrupter is potential life saving shock hazard protection. Although this safety protection was not required at the time of construction, installation of GFCI protection at all countertop outlets is recommended as a safety upgrade.

LAUNDRY AREA

WASHER:

Older style black rubber water supply hoses were observed behind the washing machine. These hoses are constantly pressurized and have a history of bursting and flooding homes. This is one of the most common reasons for homeowner insurance flooding



claims. We recommend replacing the hoses with modern "burst resistant" hoses available at most hardware stores.

DRYER VENT:

A flexible white vinyl dryer vent hose was observed behind the dryer. Vinyl vent hoses are not an approved material due to the possibility of causing a dryer/house fire. Correction will involve replacement with a flexible metal vent.



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READING THIS REPORT

ORIENTATION OF THE HOUSE

For the purposes of direction, comments in this report are written as if the inspector were standing at the front door facing the property.

REPORT TERMINOLOGY DEFINITIONS

- **Deficient** - is unsafe or is not performing its intended function
- **Further Evaluation** - warrants additional examination by a specialist in the appropriate trade
- **Monitor** - regularly observing a system or component to see if a situation (usually a deficiency) has subsided or is progressing.

DOCUMENTATION IN THE REPORT

We realize that this report is a tool to learn specific details of the property, some positive and some negative, and use this information to make an informed decision regarding the purchase of this property, and be a valuable reference after you take possession. When writing the report, we choose to include important details and observed deficiencies that we feel would be beneficial to your buying decision, not a documentation of everything that we see. We vary the detail of the report in some areas depending on the financial impact than it may have. We try to be clear, concise and to the point rather than giving you insignificant information on everything that we observe.

SCOPE OF INSPECTION AND INSPECTION LIMITATIONS

The scope of the inspection is detailed at the beginning of each section of the report, and on the Pre-Inspection Agreement.

AMERICAN SOCIETY OF HOME INSPECTORS

This inspection was performed in a manner consistent with the Standards of Practice of the American Society of Home Inspectors, a copy of which is available on request or can be viewed at www.ashi.org.



INSPECTION CONDITIONS

CLIENT & SITE INFORMATION:

FILE #: 2016-0715.
 DATE & TIME OF INSPECTION: 07/15/2016 10:00 AM.
 INSPECTION LOCATION: S. Havana Street #B, Englewood, CO.

BUILDING CHARACTERISTICS:

REPORTED AGE: 37 years old.
 BUILDING TYPE: Condominium.
 UNIT LOCATION: The third level of a three story building.

UTILITY SERVICES:

UTILITIES STATUS: All utilities on.

GENERAL INFORMATION:

CONDO OCCUPIED? No.
 PEOPLE PRESENT: Buyer.
 COMMENTS: The exterior of this unit and the common areas were not examined in detail except as specifically noted. The various components of the common areas, such as the roofing, building exterior, grounds, paving... etc. are typically the responsibility of the Homeowners Association. Records regarding the available funds for maintenance or replacement, based on annual costs of each of the common area items, should be on hand. Information in this regard is contained in the "reserve study" which should be available from the HOA. We recommend reviewing the annual statement to determine the financial condition of the HOA. It is important for the HOA to be in good financial condition to be able to cover any future expenses.

EXTERIOR

SYSTEM DESCRIPTION: The exterior components of a building work together to provide a weathertight skin and provide protection against intruders. Good exterior systems are attractive, durable and require little maintenance.

INSPECTION DESCRIPTION: Since the exterior of the building is typically the responsibility of the Homeowners Association, we do a visual inspection of the exterior directly around the Condo unit and report only on visual deficiencies that would affect the structure and performance of the unit itself. Since windows and doors are common to both the exterior and interior of the home and we operate them during the interior inspection, we report on these items in the "Interior" sections.



SIDING:

GENERAL SIDING CONDITIONS:

Much of the wood siding on the building was old, weathered, worn, and in fair condition. The paint/stain was weathered, worn, peeling and missing in many areas. Correction will involve siding repair and significant repainting.

BALCONY:

DECK:

As observed from the ground looking up at the bottom of the deck, and from the deck surface, areas of significant moisture damage/rot were observed on the joists under the deck. The ends of several deck surface boards were loose and sticking up since the screws are not able to hold in the rotted joists. In our opinion, these conditions could result in partial or complete collapse of the deck which can result in serious injury or death. Since the deck is old, proper correction should involve replacement of the entire deck system. We recommend contacting the HOA to discuss their plan for replacing this deck. We recommend that the deck not be used until it is repaired.

HOUSE STRUCTURE

The structure of a home is the skeleton, which includes the foundation system, floors, walls and roof. The structural inspection is performed on the exterior and interior of the home and consists of identification of materials, observation of proper original construction and deficiencies that have occurred since the house was built. Much of the structural inspection is spent identifying cracks and other signs of movement that have resulted from structural deficiencies. Since this is a visual inspection and much of the structure is hidden below the ground and behind the finished walls, floors and ceilings of the house, the structural inspection is limited.

STRUCTURAL CONDITION

OVERALL COMMENTS:

The visible structural systems and components of the interior of the condo were observed to be properly installed and in good overall condition. No significant structural deficiencies were found. Structural inspection of the building outside of the condo interior is beyond the scope of this inspection.

GARAGE

DESCRIPTION: Although primarily designed for the storage of automobiles, the garage has a wide variety of uses. If attached to the house, it is important that the garage provide a fire barrier and, by today's standards, be partially sealed to prevent dangerous fumes from entering the home.

INSPECTION DESCRIPTION: Our visual examination of the garage includes all automobile and people doors, automatic door opening and closing systems, general structure, floor, walls, ceiling, windows, electrical and plumbing components. We examine the fire resistant factors, the dangerous fume factors and the insulation system.

LIMITATIONS: Since, as a general rule, we do not move items during our inspection, any automobiles and storage may conceal defects. Determining the heat resistance rating of firewalls is beyond the scope of this inspection. The garage door opener remote units are not tested. Exterior garage door opener keypads are also not tested. Check with the homeowner regarding the security codes for these items.

RECOMMENDATIONS: It is recommended that the garage door opener automatic return safety device(s) be frequently tested to insure proper operation. Current standards for new homes require an invisible light beam at each auto door entrance and a pressure sensor on the door itself each of which if activated, will stop and reverse the direction of the door. These safety features are designed to minimize possible injury to children and also help to prevent vehicle damage. Entrance doors from the garage to the house should be fire rated and have an automatic closure to keep fire and dangerous fumes out of the living area.



- FIRE BARRIER:** Many indications of previous water leaks and poor quality repairs were observed on the ceiling and walls of the garage and storage room. These are breaches in the firewall between the garage and the living spaces. It is proper practice to have a firewall, consisting of 5/8" thick drywall, joints taped and covered with joint compound, between the garage and any living space. Correction will involve repair as necessary.
- OBSERVATIONS:** Some storage items were observed in the garage storage room including an old toilet. Consideration should be given to asking the current owner to remove these items.

HEATING

SYSTEM DESCRIPTION: Heating systems generate bundles of heat and distribute them to the various parts of the house. Natural gas and electricity are the typical energy sources used. The heat is often generated centrally, in a furnace or boiler, and is distributed by using air through duct systems or water through pipes. Since staying warm in winter is so popular here in Colorado, there are many different types, brands, models, quality levels and energy efficiency levels of heating systems.

INSPECTION DESCRIPTION: Our visual examination of the heating systems includes identifying the type, brand, model, capacity, age and fuel of the system(s). It includes operating of the unit using the thermostat and visually inspecting the ignition, burners, heat exchanger, blower fan, combustion air, venting, filter and ducting or piping system. We test for fuel leaks and excess carbon monoxide levels. Humidifiers are observed but not disassembled.

HEAT EXCHANGERS: The heat exchanger is the most critical part of most heating units. It separates the flame and exhaust gasses from the air in the house. Heat exchangers can fail in one of two ways - it rusts through or it cracks. With either condition, the exhaust gasses can escape through the opening and get into the air supply to the house. Potentially deadly situations may occur when 2 things happen together; 1. The fuel (natural gas) is not being burned efficiently and is releasing CO carbon monoxide, and 2. The exhaust gasses enter the home through an opening in the heat exchanger. When this happens, a new heat exchanger is needed. Since the heat exchanger is the costliest part of a heating unit, in most situations the entire unit is replaced. Heat exchangers have an average life expectancy of 20-30 years.

During an industry standard home inspection examination of a heat exchanger, only 5-15% of the heat exchanger is visible using a flashlight and mirror. In some high efficiency units, the heat exchanger is not visible at all. To examine a heat exchanger in more detail, the heating unit must be disassembled. This is a job for a heating system specialist and is beyond the scope of a standard home inspection.

CARBON MONOXIDE TESTING: We do perform a non-destructive CO carbon monoxide test on furnaces and water heaters to identify high levels of this deadly gas. However, newer mid and high efficiency units do not allow access of our testing probe directly into the exhaust gasses.

LIMITATIONS: The inspector does not light pilot lights. Safety devices are not tested by the inspector. Thermostats are not checked for calibration or timed functions. Adequacy, efficiency or the even distribution of air throughout a building cannot be addressed by a visual inspection. Electronic air cleaners, humidifiers and dehumidifiers are beyond the scope of this inspection. Have these systems evaluated by a qualified individual. Subjective judgment of system capacity is not a part of the inspection. Asbestos materials have been commonly used in older heating systems. Determining the presence of asbestos can ONLY be performed by laboratory testing and is beyond the scope of this inspection.

RECOMMENDATIONS: Many fuel systems on natural gas burning furnaces are delivered from the manufacturer adjusted to work at sea level and are not re-adjusted during installation. Here in the Mile High City it is very common for these appliance to be burning more fuel than is necessary for optimal efficiency. It is also common for furnaces to go many years without being properly serviced. We highly recommend that you have the furnace cleaned, serviced



and adjusted prior to, or soon after, moving in. When arranging for service, make sure that the service company will remove the burners, remove the blower, do a thorough inspection of the heat exchanger, and adjust the gas valve for our altitude as part of their service. With the increased price of natural gas lately, often you will pay for the servicing within the first one to two winters of use.

FURNACE:

CAPACITY:	82,000 BTU's.
AGE:	This appears to be the original furnace - 37 years old.
FUEL TYPE:	Natural Gas.
COMBUSTION AIR:	The "combustion" air for the furnace and water heater is being provided by vent registers in the door allowing interior air to enter the mechanical closet. Adequate fresh air around all fuel burning appliances is vital for their safe operation. The addition of combustion air vents from the house exterior may be required when the furnace or water heater is replaced.
VENTING:	The visible section of the heating system vent appears to be properly installed and functioning as intended.
CARBON MONOXIDE:	Very high levels of Carbon Monoxide "CO" gasses of over 2,200 parts per million were detected in the vent gasses leaving the furnace when tested with a Bacharach Fyrite Pro CO testing device after operating the furnace for a short time. A normal level of Carbon Monoxide in these vent gasses should be under 30 ppm. Although these vent gasses are exiting the furnace/house through the metal vent pipe, and no Carbon Monoxide was detected in the house air, these levels are an indication of a serious problem with the furnace. Although unlikely, this would be a serious life safety danger if the vent gasses were to enter the living space. We recommend further inspection and correction as necessary by a qualified HVAC contractor prior to operating this furnace. Since the furnace is 37 years old, correction should involve replacement of the furnace.

COOLING

SYSTEM DESCRIPTION: This section pertains to Central Air Conditioning systems, permanently mounted Window and Wall mounted non-central systems, Evaporative Cooler (Swamp Cooler) systems and Heat Pump systems.

INSPECTION DESCRIPTION: Our visual examination of Central Air Conditioning systems and Heat Pump systems includes identifying the brand, age, capacity and reporting on the condition of the Condenser unit, power source, refrigerant lines, condensation drain system and general system condition. We operate the system when the temperature is above 65 degrees with the normal operating controls for the unit.

We visually examine only permanently mounted window and wall AC units by operating the unit and reporting on its performance and condition.

LIMITATIONS: Central air conditioning units are complicated systems with many brands and models that require specialized tools and training to thoroughly inspect and test them properly. This type of testing is beyond the scope of a standard building inspection.



AIR CONDITIONING INFORMATION:

TYPE: Central air conditioning. This system distributes the cool air through the same ducting system as the heating system. The system consists of 2 main components, the condensing unit is located outside the house and the evaporator unit is built into the supply air plenum just above the furnace. Two refrigerant lines (pipes), one insulated and one uninsulated, run between the 2 units. Simply put, this system pulls the heat out of the inside of the house and dumps it outside.

AIR CONDITIONING SYSTEM:

CONDENSING UNIT: The air conditioning condensing unit was located on the roof of this building and was not accessible. We recommend asking the current owner about the age of this unit. If it is not newer, we recommend further inspection by a qualified HVAC contractor.

SYSTEM OPERATION: The temperature differential between the supply and return air registers was measured with an infrared thermometer and was found to be cooling the air between 15 and 25 degrees. This is within the normal operating range for an air conditioner and is an indication that the system is functioning properly.

CENTRAL A.C. MAINTENANCE TIPS:

1. It is important for the outside condenser unit to sit level. Monitor this unit for levelness and re-level if off by more than 5 degrees.
2. Never run the AC system when the temperature is at or below 65 degrees. This may do permanent damage to the compressor.
3. Keep shrubbery or vegetation several feet away from the condenser unit for proper cooling.
4. Use care not to damage the soft cooling fins on the exterior of the condenser unit.
5. It is not necessary to cover the condenser unit in the winter. Operating the AC system with a cover installed can permanently damage the compressor.
6. Monitor the insulation on the larger refrigerant line and replace as needed.
7. Keep the evaporator coil unit within the furnace plenum clean by replacing or cleaning the furnace filter frequently - both in the heating and cooling seasons.
8. A properly operating AC system should be cool the air 15-25 degrees. This can be measured with a thermometer at the return and supply air ducts.
9. Have the entire central air conditioning system inspected and serviced every 3-5 years by a licensed HVAC contractor.

ELECTRICAL SYSTEM

SYSTEM DESCRIPTION: The Electrical System brings electricity to the building and distributes it throughout the home. It consists of the cables bringing the electricity from the utility, a means of splitting this electricity into "branch circuits" and delivering it into the areas of the home, a system to enable lights and fixtures to be plugged into the system, and a safety system to prevent or minimize electrical shock to humans.

INSPECTION DESCRIPTION: Our inspection consists of a visual examination of the "service drop" from the utility to the house, identifying the voltage and amperage capacity to the house, a visual examination of the service panel system with the cover removed, identification of the main electrical shutoff system, an examination of any sub-panels, a visual examination of the grounding system, testing of a representative number (at least 1 per room) of electrical outlets with a testing device to confirm that the outlets are grounded and wired properly and the operation of light switches and fixed electrical appliances to confirm that they have electricity to them. We observe and test GFCI outlets.

LIMITATIONS: Virtually all branch circuit wiring is enclosed in walls and covered junction boxes and is not visible during a home inspection. Removal of outlet, switch or junction box covers is beyond the scope of this inspection. Testing of the main electrical shutoff, breaker switches and fuses is beyond the scope of this inspection. Furnishings



and storage may limit us from testing electrical outlets. Inspection of low voltage systems, telephone wiring, intercoms, alarm systems, TV cable, timers are beyond the scope of this inspection.

RECOMMENDATIONS: In case of emergency, it is a good idea to make sure family members are familiar with where and how to shut off the electrical power to the house. Also, any electrical repairs should be approached with caution. The power to the branch circuit or the entire house should be turned off prior to beginning any repair efforts, no matter how trivial the repair may seem.

DESCRIPTIVE INFORMATION:

VOLTAGE: 120/240 volts. This is standard for modern homes.

MAIN ELECTRICAL PANEL:

**MAIN DISTRIBUTION
PANEL LOCATION:** In the hallway.

BRANCH CIRCUITRY

CONDITION: The following electrical deficiencies were found:

An outlet in the kitchen cabinet above the microwave was wired with reverse polarity - the hot and neutral wires have been reversed where they are attached on the back of the outlet.

A mystery dimmer switch was observed at the top of the stairway where the light or switched outlet was not identified.

No electricity was observed at half of an outlet at the north east wall of the living room. A blank cover plate with electrified wiring inside was observed on the wall near the hallway. It appears that wiring in this box may be connected to the outlet and is designed for a switch to be installed to control the outlet.

A light switch was found at the kitchen entry where the controlled light fixture, outlet or appliance was not identified. We recommend asking the current owner about the function of this switch.

No strain relief cable clamp is installed where the electrical wires enter the bottom of the disposal. The wires are against the sharp sheet metal edge that could cut through the wires. This is a potential shock and fire hazard.

These are potential fire, shock and safety hazards. We recommend further inspection and correction as necessary by a professional electrician.

ELECTRICAL OUTLETS:

CONDITION: The accessible and tested electrical outlets were found to be modern "3 prong" grounded outlets and were found to be operating properly unless otherwise noted elsewhere in this report.

GFCI (Ground Fault Circuit Interrupter)

GFCI (Ground Fault Circuit Interrupter): GFCI protection is installed in some of the locations where this safety feature is currently required on new homes. GFCI protection may not have been a requirement when this house was built so this condition is not considered to be a deficiency. GFCI's are important modern safety devices and are currently required on all bathroom, kitchen counter, bar counter, exterior and garage outlets. Consideration should be given to installing GFCI's as part of an electrical safety upgrade after taking possession of the property.

GFCI's: Ground Fault Circuit Interrupters (GFCI's) are a potential life saving device that that can very quickly cut off



the flow of electricity in the event of a shock situation. Modern standards require GFCI's for water hazard areas. Ground fault protection is currently required for receptacles in areas such as the exterior of the house, garage, pool & spa, basement, bathrooms and all receptacles in the kitchen area. Ground fault protection can be provided by a ground fault circuit breaker (at the electrical panel) or by a ground fault receptacle.

One ground fault receptacle can protect other receptacles which are connected to it. If there is no power in one of the receptacles in the area where ground fault protection is required, ground fault receptacles in other locations should be checked and reset if necessary. It is recommended that GFCI receptacles be tested, by pushing the "test" and "reset" buttons on the receptacle, on a monthly basis.

PLUMBING

SYSTEM DESCRIPTION: The plumbing system consists of the "supply side" which provides water for drinking, washing, cooking and irrigation, and the "waste side" which gets rid of used water and waste. In this section we also include the water heating equipment.

INSPECTION DESCRIPTION: Our visual examination of the plumbing system includes identifying the water supply source, identifying the waste disposal system, identifying the main supply shut-off, identifying the supply and waste pipe materials, checking the static water pressure, viewing the venting system and looking for any problem areas with the system. We visually examine the water heater(s) for its type, size, age, fuel burned, burner flame appearance, venting, connections, identification of safety devices, availability of combustions air and any accessories it may have. We operate the plumbing system and water heater with normal operating faucets and controls, we do not test shut-off valves and safety devices.

LIMITATIONS: Most of the supply and waste plumbing pipes are hidden inside the walls, ceilings and floors of the building and are not visible during the inspection. Leakage, obstructions or other problems may exist but are hidden and impossible to see. Instead, we look for slow drains that may indicate clogged pipes and water damage to finish surfaces that may indicate leaking pipes. Inspecting overflows in the bathtubs and sinks is beyond the scope of this inspection. Examining the main waste pipe from the house to the sewer is beyond the scope of this inspection. This is a very expensive pipe to fix or replace and we suggest talking to the current owner to see if there is any history of problems. Services are available to inspect the inside of this pipe with a video "snake" camera if needed. Testing for water quality including radon-in-water and lead testing is beyond the scope of this inspection.

PLUMBING INFORMATION:

WATER SUPPLY:	PUBLIC WATER SUPPLY: The home has a public water supply pipe leading from the street main supply pipe to the house plumbing system. Be advised that the buried pipe running from the house to the street is the responsibility of the homeowner.
WASTE DISPOSAL:	PUBLIC SEWER SYSTEM: Waste from the home plumbing system flows by gravity into a municipal sewer system normally located under the street or alley. Be advised that the buried pipe running from the house to the street is the responsibility of the homeowner.



SUPPLY PLUMBING:

- MAIN WATER SHUT-OFF:** The main water shut-off valve is located near the water heater.
- WATER FLOW:** Functional flow of water at the various fixtures was judged to be adequate. Several fixtures were operated simultaneously. Minor changes in flow when other fixtures are turned on or turned off is considered normal.
- WATER SUPPLY PIPE MATERIAL:** The visible water supply piping material in this house was observed to be modern copper piping.
- WATER SUPPLY CONDITION:** The exposed and accessible supply piping appears to be properly installed and in good condition.

WASTE PLUMBING:

- DRAIN WASTE PIPE MATERIAL:** Original cast Iron with some modern plastic pipe.
- DRAIN, WASTE & VENT SYSTEM:** The visible drain piping appears to be properly installed and in good condition.

WATER HEATER:

- FUEL TYPE:** Natural gas.
- AGE:** The water heater was found to be 18 years old, based on the date code in the serial number. The typical life expectancy for a water heater is 12-15 years. This water heater is well beyond its life expectancy. Consideration should be given to replacing the water heater before leakage and potential flooding occur. It is required by law to obtain a permit from the local building department to install a water heater.
- SIZE:** 40 Gallons.
- OPERATION:** The water heater was observed to be properly installed and was operational - the water at the plumbing fixtures was hot.

INTERIOR - GENERAL

DESCRIPTION: This section reports on the common components and general observations of the interior of the home. We will focus on individual rooms in the Kitchen, Laundry, Common Rooms, Bedrooms and Bathrooms sections to follow.

INSPECTION DESCRIPTION: Our visual examination of the Interior of the home includes floors, walls, ceilings, doors, windows, skylights, stairs & handrails, fireplaces, smoke detectors and fans. We check for functionality, general condition, excessive wear and visual defects. As a general rule, cosmetic deficiencies are considered normal wear and tear and are not reported.

SMOKE DETECTORS: Our inspection of smoke detectors includes making sure that they are present and in the proper locations. **We do not test smoke detectors.** Current standards require at least one smoke detector on each level and one in every bedroom. We recommend that you replace all smoke detector batteries and test all the units shortly after you have moved into the house and every year following.

LIMITATIONS: As a general rule, home inspectors do not move furniture, pull up carpet or other floor coverings, or do any kind of destructive testing (if we move one thing, we are expected to move everything...). Therefore, the condition of floors and walls under and behind any furniture or coverings cannot be judged. Damage to walls, stains on floors and the like may be not visible to the inspector.



RECOMMENDATIONS: Since many defects may be covered by furniture and not visible to the inspector, we highly recommend a thorough examination of the home after the furniture is moved out and prior to closing.

FIRE EXTINGUISHERS: We highly recommend that all houses have at least 2 portable fire extinguishers installed, one near the kitchen and one in the garage near the entrance to the house. A third extinguisher, located near the bottom of the stairs in the basement, would be a smart idea as well. Some insurance policies offer discounts if fire extinguishers are installed.

CARBON MONOXIDE: Carbon Monoxide (CO) is a colorless, odorless gas that can be fatal to humans. This gas can come from Automobiles or any fuel burning appliance in the home. Modern technology has now made it inexpensive and easy to install (CO) Carbon Monoxide detectors. These detectors offer continuous measurement of CO levels and will sound an alarm if high levels are reached. Digital display models (recommended) can now be purchased for less than \$50. I recommend installing a CO continuous detector as a safety upgrade for you and your family.

FLOORS:

CONDITION: As a general observation, the floors appear to be in good condition showing normal wear and tear for the age of the house.

Several slightly soft spots and surface scratches were observed on the laminate floor in front of the kitchen entrance. These are cosmetic deficiencies where repair would be optional.

WALLS & CEILINGS:

WALL CONDITION: Many minor "nail pops" and other minor deficiencies were observed in the textured finish of the walls throughout the house. These are cosmetic deficiencies. Correction will likely involve re-texturing these walls by a professional drywall repair contractor.

CEILING CONDITION: Repairs were observed on the popcorn ceiling around two of the skylights. These areas appeared to be dry at the time of the inspection. We recommend asking the current owner about the history of leakage at the skylights.

It is possible that the acoustic spray "popcorn" ceiling on homes built before 1980 contain small amounts of Asbestos. Asbestos can be cancer causing if it is disturbed and the airborne fibers are breathed into the lungs. Identification of Asbestos in the home can only be performed by a laboratory and is beyond the scope of this inspection. If Asbestos is present, the EPA recommends that the surface be left alone, encapsulated with paint or professionally removed. Further information on Asbestos can be obtained from the EPA website at www.EPA.gov.

DOORS:

MAIN ENTRY DOOR: A repaired crack was observed in the wood frame of the front entry door indicating forced entry at some point in time. The door is operational. Full repair may involve replacement of the entire door and frame.

SLIDING GLASS DOORS: The handle lock was not operational at the sliding glass door. This is a security issue. Correction may involve repair or replacement of the locking mechanism/handle.

INTERIOR DOORS: The closet bypass doors were partially "off track" and not sliding properly at the master bedroom.

Minor issues were observed with several interior doors. Corrections should involve minor repairs.



WINDOWS:

- FRAME MATERIAL:** Vinyl.
- WINDOW CONDITION:** The windows tested appear to be properly installed and in good condition. No notable deficiencies were observed.
- WINDOW GLASS:** An approximate 4' long crack was observed in the glass of one window above the sliding glass door. This may be a result of a defect in the glass or damage during installation. This window appears to be newer and may be under warranty. Correction will involve replacement of the glass unit.

STAIRS & HANDRAILS:

- CONDITION:** The stairs were used several times during the inspection. The various components appear to be properly installed and no deficiencies were noted during use.
- Gaps up to 7 1/4" were observed between the balusters at the stairway safety railing. Present standards for new homes require a 4" or less gap on all railing systems. This is a potential safety hazard for small children. Although not required, consideration should be given to installing more balusters, replacing the railing system or installing a screen system.

SMOKE DETECTORS:

- COMMENTS:** A minimal amount of smoke detectors were observed in the house. Standards for new homes require at least one smoke detector on each floor, one outside bedrooms and bathrooms, and one in each bedroom. Consideration should be given to installing additional smoke detectors as a safety precaution especially when children will be living in the house.

CARBON MONOXIDE DETECTORS:

No carbon monoxide detector was observed in this house. As of July 1, 2009, it is required that all properties listed for sale have a carbon monoxide detector installed within 15' of all bedroom entrances. A carbon monoxide detector is an important, potential life saving device. The carbon monoxide detector can be a plug-in or battery powered unit. We recommend that a proper carbon monoxide detector be installed per Colorado State Law requirements.

FIREPLACES & STOVES:

- FIREPLACE:** The fireplace was observed to be in good overall condition. The damper door was operated and was found to be functional.

KITCHEN

INSPECTION DESCRIPTION: Our visual inspection of the kitchen area includes the sink, counters, cabinets, walls, ceilings, floors, windows, doors, plumbing, lighting, electrical and pantry. We visually examine all built-in appliances and confirm the function of the appliances by using the normal operating controls.

LIMITATIONS: We do not examine or report on any non-built-in appliances such as free-standing refrigerators and countertop microwave ovens. Although we normally run the dishwasher through an entire wash cycle, no opinion is offered as to the adequacy of dishwasher operation. The self or continuous cleaning operations, cooking functions, clocks, timing devices, lights and thermostat accuracy of ovens and ranges are not tested during this inspection.



KITCHEN - GENERAL:

OVERALL CONDITION: The kitchen was observed to be in fair overall condition showing a significant amount of wear-and-tear for its age.

APPLIANCES:

GENERAL COMMENT: All the permanently installed appliances were tested using normal operating controls and were found to be in satisfactory working condition.

Some of the appliances in this kitchen are old and are beyond their expected service lives. Although the appliances were operating at the time of the inspection, expect to repair or replace them in the near future.

GARBAGE DISPOSAL:

PLUMBING:

SINK DRAIN: No trap was observed in the plumbing drain under the right side of the sink. The purpose of a trap is to keep potentially dangerous sewer gasses from entering the living space. Correction should involve the installation of a proper drain trap by a professional plumber.

DISHWASHER DRAIN: No back-flow prevention device was observed on the dishwasher drain hose to prevent dirty water from the disposal from siphoning back into the dishwasher as observed in the sink base cabinet. Often a "high loop" backflow prevention can be created by elevating a portion of the dishwasher drain hose to be above the level of the disposal connection. A simple pipe clamp can be installed to hold the pipe in this position.

ELECTRICAL:

GFCI OUTLETS: No GFCI ground protection is installed in the kitchen area where this safety feature is currently required on new homes. GFCI ground fault circuit interrupter is potential life saving shock hazard protection. Although this safety protection was not required at the time of construction, installation of GFCI protection at all countertop outlets is recommended as a safety upgrade.

LAUNDRY AREA

INSPECTION DESCRIPTION: Our visual examination of the laundry area includes the room finishes and function, and the identification and examination of the appliance energy sources, plumbing and venting systems.

LIMITATIONS: Washing machines and dryers are not moved, tested or inspected and the condition of any walls or flooring hidden by them cannot be judged. Drain lines and water supply valves serving washing machines are not operated.

NOTES & RECOMMENDATIONS: We highly recommend using stainless steel wire-mesh-reinforced washing machine hookup hoses. These hoses are much stronger and last longer than the regular hoses. Although slightly more expensive, this is inexpensive insurance to avoid a costly flood situation.

Dryers can be 240 volt electric or natural gas appliances. If you are moving a dryer into the house, make sure it matches the energy source that is available. In many cases, gas lines can be extended to the laundry room if necessary. Electric dryer standards recently changed from a 3 prong plug/receptacle to a 4 prong plug/receptacle. If the plug on your dryer doesn't match the new house receptacle, you have 2 options; 1. Have an electrician upgrade the receptacle to a 4 prong type, or 2. Purchase a 3 or 4 prong plug-and-cord kit for less than \$20 at the hardware store and change the cord and plug as you are moving the dryer. This is a fairly easy retrofit and will not affect the performance of the dryer.



WASHER AND DRYER:

- WASHER:** The visible portions of the supply and drain plumbing for the washing machine were observed to be installed correctly and in good condition. Testing of the operation of the washing machine is beyond the scope of this inspection.
- Older style black rubber water supply hoses were observed behind the washing machine. These hoses are constantly pressurized and have a history of bursting and flooding homes. This is one of the most common reasons for homeowner insurance flooding claims. We recommend replacing the hoses with modern "burst resistant" hoses available at most hardware stores.
- DRYER:** A 240 volt electrical outlet was observed for the dryer. This outlet requires a 3 prong dryer plug. Testing the operation of the dryer is beyond the scope of this inspection.
- DRYER VENT:** A flexible white vinyl dryer vent hose was observed behind the dryer. Vinyl vent hoses are not an approved material due to the possibility of causing a dryer/house fire. Correction will involve replacement with a flexible metal vent.

BATHROOMS

INSPECTION DESCRIPTION: Our visual examination of bathrooms includes sinks, shower/tub surrounds, shower pans, faucets, drains, ventilation, cabinets, countertops, toilets, lighting, electrical, plumbing, walls, ceilings, floors, doors, windows, and heating source. We examine the bathroom for proper function of components, signs of water damage, active leakage, general condition and excessive wear. We do a subjective test of water flow by running multiple fixtures at one time. As in the "Interior Rooms" sections, **we report only on uncommon components and observed deficiencies rather than a description of each and every component of every bathroom.**

LIMITATIONS: Bathtub/shower surrounds and shower pans are visually checked for leakage, but leaks often do not show except when the shower is in actual use. We look for clues indicating water damage on floors, around bathtub/shower surrounds, at sink areas and around toilets, but concealed surfaces such as carpet and tile often do a good job of hiding any damage.

RECOMMENDATIONS: Bathrooms are often the highest maintenance rooms in the house. Very minor imperfections can allow water to get into the wall or floor areas and cause damage. Caulking joints with a high quality silicone caulk on an as-needed or yearly basis is recommended. Water will leak through grout joints in tile if not sealed properly. Sealing tile with a high quality liquid grout sealer on a yearly basis is recommended.

- SINK DRAIN(S):** Minor leakage was observed in the drain under the master bathroom sink when the sink was filled and drained. Correction will likely involve minor repair.
An improper pipe connection was observed at the drain pipe under the hall bathroom sink. Correction should involve minor repair.
- TOILET:** The bowls of the toilets were found to be very loose where they are secured to the floor in both bathrooms. If a bowl is this loose, proper repair should include removal of the toilet and replacement of the wax ring seal. Other hidden problems may exist under the toilets. Correction should involve further inspection and repair by a professional plumber.
- TUB/SHOWER FAUCETS:** The diverter failed to divert all of the water from the spout to the shower head in the hall bathroom. This is a waste of water. Correction will involve replacement of the spout.
Very minor water dripping leakage was observed at the control handle when the water was turned on in the hall bathroom shower.
Water was observed to be leaking from the shower head connection or the pivot point on the body when the shower was turned on in both bathrooms. Correction may involve replacement of the shower heads.



SHOWER DOOR:

The shower door hits the frame and was unable to close properly at the hall bathroom.

VENTILATION:

It appears that the ceiling mounted exhaust fans in both bathrooms are an older style that simply filters the air and blows it back into the room. This can lead to moisture related problems, including mold, if the shower is used on a regular basis. It is current proper practice (and has been for many years) that any bathroom have an openable window or exhaust fan venting to the outdoors. Verification will involve disassembly of the fans and further investigation. Upgrading would involve extending this vents to the outdoors.

