



Star Home Inspection Services

Home Inspection Report

1112 S Liberty, Independence, MO 64050

Inspection Date: 05/13/2009

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Report Overview

THE HOUSE IN PERSPECTIVE

This is a well built home. As with all homes, ongoing maintenance is required and improvements to the systems of the home will be needed over time. *The improvements that are recommended in this report are not considered unusual for a home of this age and location.* Please remember that there is no such thing as a perfect home.

CONVENTIONS USED IN THIS REPORT

For your convenience, the following conventions have been used in this report.

Major Concern: a system or component which is considered significantly deficient or is unsafe. Significant deficiencies need to be corrected and, except for some safety items, are likely to involve significant expense.

Safety Issue: denotes a condition that is unsafe and in need of prompt attention.

Repair: denotes a system or component which is missing or which needs corrective action to assure proper and reliable function.

Improve: denotes improvements which are recommended but not required.

Monitor: denotes a system or component needing further investigation and/or monitoring in order to determine if repairs are necessary.

Please note that those observations listed under “Discretionary Improvements” are not essential repairs, but represent logical long term improvements.

- For the purpose of this report, it is assumed that the house faces east.

IMPROVEMENT RECOMMENDATION HIGHLIGHTS / SUMMARY

The following is a synopsis of the potentially significant improvements that should be budgeted for over the short term. Other significant improvements, outside the scope of this inspection, may also be necessary. Please refer to the body of this report for further details on these and other recommendations.

All issues found in this report should be addressed with the appropriate parties to make any improvements, corrections or repairs necessary. All improvements, corrections and repairs should meet the satisfaction of the client named on this report and the inspection agreement associated with this report prior to closing. This report and the findings listed herein are intended for the client only and is not transferable without a signed written agreement.

Foundation

- **Monitor:** Common minor settlement cracks were observed in the foundation walls. This implies that some structural movement of the building has occurred. Cracks of this type should be watched for any sign of additional movement. In the absence of any sign of ongoing movement, repair should not be necessary.
- **Monitor:** The basement floor slab has typical cracks usually the result of shrinkage and/or settling of the slab as it cures. Shrinkage cracks are very common and are not normally a concern.

Sloped Roofing

- **Repair:** Exposed nail heads were observed in the roofing shingles and/or ridge caps. All exposed nail heads should be caulked to reduce the potential of leaks.
- **Monitor:** Minor damage to the roofing material was observed (example at the southwest side of the roof).
- **Monitor:** Prior repairs to the roof were observed. This suggests previous problems have been experienced.

Flat Roofing

- **Monitor, Repair:** The rolled roofing is in fair condition. Water staining was noted at northwest room below flat roof. Water appears to pond on the membrane. Ponding shortens roof life and increases the potential for damage if leaks occur. When re-roofing the roof should be appropriately sloped, or drains should be provided.
- **Note:** Rolled roofing (example at west side of house) is prone to leaking and requires close monitoring and higher than normal maintenance.

Flashings

- **Monitor, Repair:** The plumbing vent flashing boots are split making them vulnerable to leaks. It's recommended that the boots be caulked or the flashing replaced.
- **Repair:** The installation of the flashing is improper or incomplete and should be repaired to avoid leaks (flashing at roofing on west side).

Chimneys

- **Repair:** A rain cap and vermin screen should be installed on the masonry chimney and the chimney flue should be checked for damage. Damaged flues can be unsafe.

Gutters & Downspouts

- **Repair:** The downspout(s) should discharge water at least five (5) feet from the house. Storm water should be encouraged to flow away from the building at the point of discharge.
- **Repair:** It is recommended that gutters and downspouts be installed to avoid spilling roof runoff around the building – a potential source of water entry or water damage (example at west side).

Exterior Walls

- **Major Concern, Repair:** The exterior of the house needs to be painted.
- **Repair:** Localized rot was observed in the trim around siding (example at the northwest basement man door trim). Following repair of the damaged areas (which should be combined with exterior painting/maintenance) proper maintenance of the siding and control of water from roof or surface runoff can avoid further damage.
- **Repair:** Tree branches should be trimmed away from the house to avoid damage to the building.
- **Repair:** The trim at the northwest corner of the house should be resecured and caulked.

Windows

- **Repair:** Missing storm windows/screens should, ideally, be repaired or replaced as necessary.
- **Repair:** Some of the windows are in need of glazing (putty) improvements.

Garage

- **Monitor:** The garage floor slab has typical cracks usually the result of shrinkage and/or settling of the slab as it cures. Shrinkage cracks are very common and are not normally a concern.

Lot Drainage

- **Recommend:** The grading should be improved to promote the flow of storm water away from the house. This can often be accomplished by the addition of top soil. The ground should slope away from the house at a rate of one inch per foot for at least the first ten feet. At least eight (8) inches of clearance should be maintained between soil level and the bottom of exterior wall siding.
- **Recommend:** Covers should be provided for the basement window wells to keep storm water out of the well.

Porch Steps

- **Repair, Safety Issue:** The steps have deteriorated noticeably. Repairs are recommended to reduce a trip hazard.

Driveway

- **Monitor:** The driveway concrete has settled and cracked. Persisting movement may result in the need for repairs.
- **Repair, Safety Issue:** The driveway presents a trip hazard (example at garage overhead door entry). This condition should be altered for improved safety.

Walkway

- **Monitor:** The public walkway has settled and cracked. Persisting movement may result in the need for repairs.

Retaining Wall

- **Monitor:** The driveway concrete block retaining wall shows evidence of slight movement. This condition should be monitored. It is impossible to determine the rate of movement during a one time visit to the house.
- **Repair, Safety Issue:** The rebar at the front east retaining wall should be cut flush with concrete. This represents a safety concern.

Landscaping

- **Repair:** Shrubs, bushes and/or vines growing on exterior walls need to be trimmed away from the structure to reduce the risk of water damage and insect infestation.

Steps

- **Recommend, Safety Issue:** As there is a danger of falling, a railing should be provided for the east steps near the street and the north steps to garage.

Main Panel

- **Repair:** The main panel cover plate (sometimes called the “Dead Front”) is missing some screws.

Auxiliary Panel(s)

- **Repair:** Circuits within the auxiliary panel at the top floor that are doubled up (referred to as “double taps”) should be separated. Each circuit should be served by a separate fuse or breaker.

Distribution Wiring

- **Repair:** Abandoned wiring in the basement should be replaced or appropriately terminated.
- **Repair:** Loose wiring in the basement should be secured.
- **Repair:** All junction boxes should be fitted with cover plates, in order to protect the wire connections.
- **Repair:** The wiring in the northwest sunroom is inoperative.

Knob & Tube Wiring

- **Repair:** Any knob-and-tube wiring that is exposed during renovations should be replaced.

Outlets

- **Repair:** Some outlets are inoperative (example at northwest sunroom and outlets marked “inop” with blue tape). These outlets and circuits should be investigated.
- **Repair:** An outlet is loose (example at basement bathroom). It should be repaired.
- **Repair:** An outlet has reversed polarity (i.e. it is wired backwards). This outlet in the master bedroom marked “rev pol” with blue tape and the circuit should be investigated and repaired as necessary.
- **Repair:** Ungrounded 3-prong outlets marked with blue tape should be repaired. In some cases a ground wire may be present in the electrical box and simply needs to be connected. If no ground is present “repair” can be as simple as filling the ground slot with epoxy. Better, since having a ground increases safety, a grounded circuit could be strung to this outlet, or a separate ground wire could be connected. Some electrical codes allow the installation of a ground fault circuit interrupter (GFCI) type outlet where grounding is not provided. In this case the GFCI may work but can’t be tested by normal means.
- **Repair:** Missing outlet cover plates should be replaced to avoid a shock hazard.

Switches

- **Repair:** The function of the light switch in the dining room marked with blue tape and in the basement to the right of the bathroom door is unknown. Further investigation is required.
- **Repair:** Missing switch cover plates should be replaced to avoid a shock hazard. Renovations were in progress at the time of inspection.

Lights

- **Repair:** The light is inoperative (examples in basement, garage exterior, master bathroom, top floor and front porch). If the bulbs are not blown, the circuit should be repaired.
- **Repair:** The damaged light fixture in the basement should be repaired or replaced (bulb broke off in fixture).
- **Repair:** The loose light fixture in the master bedroom closet should be repaired or replaced.

Smoke Detectors

- **Repair:** The installation of smoke detectors outside sleeping areas is recommended.
- **Repair:** It is suspected that the batteries in the smoke detectors are defunct. This should be investigated.

Furnace

- **Improve:** The dirty air filter at the basement furnace should be replaced.
- **Repair:** The missing air filter for the attic furnace should be replaced.

Supply Air Ductwork

- **Repair:** Missing or damaged vent register covers should be replaced.
- **Repair:** Supply heat/cool was not present at some ceiling duct openings.
- **Monitor:** Supply air flow is less than ideal. Rebalancing the ductwork, blower cleaning or repairs, filter replacement, or additional duct work may be needed to obtain good air flow.
- **Repair:** Loose fitting joints and/or openings in the ductwork or unused ducts should be improved.

Unused Piping

- **Monitor:** Old boiler piping in the basement was noted. Removal can be undertaken as desired.

Central Air Conditioning

- **Improve:** The air conditioning system servicing the upstairs requires servicing.
- **Repair:** Damaged insulation on refrigerant lines should be repaired.
- **Repair:** The outdoor unit of the north air conditioning system is out of level. This should be improved.
- **Improve:** The outdoor unit of the south air conditioning system requires cleaning.

Attic

- **Improve:** Storage items in attic laying on ductwork should be removed.

Water Heater

- **Repair:** Water heaters in garages should be on a raised platform so that the pilots, burner or heating elements are not closer than 18 inches from the garage floor.

Gas Piping

- **Repair, Safety Issue:** *A gas leak was detected with a TIF 8800 gas/carbon monoxide detector and confirmed with soapy water (at flex piping connection in basement furnace marked with blue tape). This is a serious safety concern. It is recommended that the gas utility, HVAC company or plumber be engaged as soon as possible to make the necessary repairs. The current occupants of the home should also be notified.*
- **Repair:** Flexible gas appliance connections should not pass through walls, floors or the appliance housing as is the case of the basement furnace. This connector should be replaced with one of suitable solid gas piping.

Supply Plumbing

- **Repair:** The supply piping to the washing machine is leaking.

Plumbing Fixtures

- **Monitor:** Some of the plumbing fixtures are older.
- **Monitor:** The basement bathroom was not inspected due to storage blocking access.
- **Repair:** The 2nd floor hall bath sink drain plug is inoperative or missing and needs repair.
- **Monitor:** The basement sink near the washing machine was observed to drain slowly, suggesting that an obstruction may exist.
- **Repair:** The toilet is inoperative (flapper chain is missing at 2nd floor hall bathroom).
- **Repair:** Some of the 2nd floor hall bath tub/shower fixture handles are missing.
- **Monitor, Repair:** The 2nd floor hall bathroom tile is cracked.
- **Repair:** The northwest hose bib is inoperative.
- **Repair:** The master bathroom sink faucets are inoperative. Renovations were in progress at the time of inspection.

Fireplaces

- **Improve:** The main floor fireplace damper is missing.
- **Note:** The main floor fireplace is configured for aesthetic appeal rather than functionality.

Wall / Ceiling Finishes

- **Monitor:** Water staining was noted.
- **Monitor, Repair:** Damage to the interior finish was observed.
- **Monitor:** Typical flaws were observed that could include loose tape, minor cracks, rough seams, peeling paper, nail popping, minor patching, etc. Any repairs would be discretionary.
- **Monitor:** Signs of mildew/mold were observed (example at northwest sunroom ceiling).

Floors

- **Monitor, Repair:** The tile floor in the 2nd floor hall bath is damaged.
- **Monitor, Repair:** The vinyl flooring in the basement and at the kitchen closet is damaged.
- **Monitor:** Some damage was observed at hardwood floors (suspect openings used for supply duct renovations).

Windows

- **Monitor:** Some of the window(s) are painted shut. Improvement can be undertaken as desired.
- **Monitor, Repair:** The window(s) is cracked (example at north main floor library). Improvement is not a high priority.
- **Repair:** Damaged screens were noted on windows.
- **Monitor:** It may be desirable to replace window screens where missing. The owner should be consulted regarding any screens that may be in storage.
- **Repair:** Sash cords (the ropes that hold up the windows) are missing on some windows.

Doors

- **Repair:** Doors should be trimmed or adjusted as necessary to work properly (example at basement storm screen and 2nd floor southwest bedroom closet).
- **Monitor, Repair:** Minor damage/surface wear was noted on some door(s).

Kitchen Cabinets

- **Repair:** Damaged or missing mudroom drawer should be repaired.

Stairs

- **Repair:** A handrail should be provided for the stairway leading to the top floor.

Basement Leakage

- **Monitor:** The basement shows evidence of moisture penetration. *It should be understood that it is impossible to predict the severity or frequency of moisture penetration on a one-time visit to a home.* Virtually all basements exhibit signs of moisture penetration and virtually all basements will indeed leak at some point in time. The visible evidence is not unusual for a home of this age, construction and location. Further monitoring of the foundation will be required to determine what improvements, if any, will be required. Basement leakage rarely affects the structural integrity of a home.

The vast majority of basement leakage problems are the result of insufficient control of storm water at the surface. The ground around the house should be sloped to encourage water to flow away from the foundations. Gutters and downspouts should act to collect roof water and drain the water at least five (5) feet from the foundation or into a functional storm sewer. Downspouts that are clogged or broken below grade level, or that discharge too close to the foundation are the most common source of basement leakage. Please refer to the Roofing and Exterior sections of the report for more information.

In the event that basement leakage problems are experienced, lot and roof drainage improvements should be undertaken as a first step. Please beware of contractors who recommend expensive solutions. Excavation, damp-proofing and/or the installation of drainage tiles should be a last resort. In some cases, however, it is necessary. Your plans for using the basement may also influence the approach taken to curing any dampness that is experienced.

THE SCOPE OF THE INSPECTION

All components designated for inspection in the ASHI® Standards of Practice are inspected, except as may be noted in the "Limitations of Inspection" sections within this report.

It is the goal of the inspection to put a home buyer in a better position to make a buying decision. Not all improvements will be identified during this inspection. Unexpected repairs should still be anticipated. The inspection should not be considered a guarantee or warranty of any kind.

This inspection is visual only. A representative sample of building components are viewed in areas that are accessible at the time of the inspection. No destructive testing or dismantling of building components is performed.

Please refer to the pre-inspection contract for a full explanation of the scope of the inspection.

WEATHER CONDITIONS

Dry weather conditions prevailed at the time of the inspection.
The estimated outside temperature was 75 degrees F.

RECENT WEATHER CONDITIONS

Wet weather conditions have been experienced in the days leading up to the inspection.

Structure

DESCRIPTION OF STRUCTURE

Foundation:	•Poured Concrete •Concrete Block •Basement Configuration
Columns:	•Steel
Floor Structure:	•Wood Joist •Concrete
Wall Structure:	•Wood Frame
Ceiling Structure:	•Joist •Rafters
Roof Structure:	•Rafters •Solid Plank Sheathing

STRUCTURE OBSERVATIONS

Positive Attributes

The construction of the home is good quality. The materials and workmanship, where visible, are good. The visible joist spans appear to be within typical construction practices. The inspection did not discover evidence of substantial structural movement.

General Comments

No major defects were observed in the accessible structural components of the house.

RECOMMENDATIONS / OBSERVATIONS

Foundation

- **Monitor:** Common minor settlement cracks were observed in the foundation walls. This implies that some structural movement of the building has occurred. Cracks of this type should be watched for any sign of additional movement. In the absence of any sign of ongoing movement, repair should not be necessary.
- **Monitor:** The basement floor slab has typical cracks usually the result of shrinkage and/or settling of the slab as it cures. Shrinkage cracks are very common and are not normally a concern.

LIMITATIONS OF STRUCTURE INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Structural components concealed behind finished surfaces could not be inspected.
- Only a representative sampling of visible structural components were inspected.
- Furniture and/or storage restricted access to some structural components.
- Engineering or architectural services such as calculation of structural capacities, adequacy, or integrity are not part of a home inspection.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Roofing

DESCRIPTION OF ROOFING

Roof Covering:	•Asphalt Shingle •Roll Roofing
Roof Flashings:	•Metal
Chimneys:	•Masonry
Roof Drainage System:	•Aluminum •Downspouts discharge above & below grade
Skylights:	•None
Method of Inspection:	•Walked on roof

ROOFING OBSERVATIONS

Positive Attributes

The roof coverings are to be in generally good condition. Where investigated, eave protection has been installed below the sloped roof coverings. This reduces the risk of roof leakage, should ice damming develop in the winter. The installation of the roofing materials has been performed in a professional manner. The quality of the installation is above average. Better than average quality materials have been employed as roof coverings. The steep pitch of the roof should result in a longer than normal life expectancy for roof coverings. The chimneys do not show signs of significant deterioration. The gutters are clean.

General Comments

Trim away tree branches close to the roof.

RECOMMENDATIONS / OBSERVATIONS

Sloped Roofing

- **Repair:** Exposed nail heads were observed in the roofing shingles and/or ridge caps. All exposed nail heads should be caulked to reduce the potential of leaks.
- **Monitor:** Minor damage to the roofing material was observed (example at the southwest side of the roof).
- **Monitor:** Prior repairs to the roof were observed. This suggests previous problems have been experienced.

Flat Roofing

- **Monitor, Repair:** The rolled roofing is in fair condition. Water staining was noted at northwest room below flat roof. Water appears to pond on the membrane. Ponding shortens roof life and increases the potential for damage if leaks occur. When re-roofing the roof should be appropriately sloped, or drains should be provided.
- **Note:** Rolled roofing (example at west side of house) is prone to leaking and requires close monitoring and higher than normal maintenance.

Flashings

- **Monitor, Repair:** The plumbing vent flashing boots are split making them vulnerable to leaks. It's recommended that the boots be caulked or the flashing replaced.
- **Repair:** The installation of the flashing is improper or incomplete and should be repaired to avoid leaks (flashing at roofing on west side).

Chimneys

- **Repair:** A rain cap and vermin screen should be installed on the masonry chimney and the chimney flue should be checked for damage. Damaged flues can be unsafe.

Gutters & Downspouts

- **Repair:** The downspout(s) should discharge water at least five (5) feet from the house. Storm water should be encouraged to flow away from the building at the point of discharge.
- **Repair:** It is recommended that gutters and downspouts be installed to avoid spilling roof runoff around the building – a potential source of water entry or water damage (example at west side).





LIMITATIONS OF ROOFING INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Not all of the underside of the roof sheathing is inspected for evidence of leaks.
- Evidence of prior leaks may be disguised by interior finishes.
- Estimates of remaining roof life are approximations only and do not preclude the possibility of leakage. Leakage can develop at any time and may depend on rain intensity, wind direction, ice build up, and other factors.
- Antennae, chimney/flue interiors which are not readily accessible are not inspected and could require repair.
- Roof inspection may be limited by access, condition, weather, or other safety concerns.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Exterior

DESCRIPTION OF EXTERIOR

Wall Covering:	•Wood Siding
Eaves, Soffits, And Fascias:	•Vinyl
Exterior Doors:	•Metal •Solid Wood
Window/Door Frames and Trim:	•Wood •Vinyl Clad
Entry Driveways:	•Concrete •Gravel
Entry Walkways And Patios:	•Concrete
Porches, Decks, Steps, Railings:	•Concrete •Wood
Overhead Garage Door(s):	•Wood •Automatic Opener Installed
Surface Drainage:	•Level Grade •Graded Away From House
Retaining Walls:	•Wood •Concrete •Block
Fencing:	•None

EXTERIOR OBSERVATIONS

Positive Attributes

The exterior siding that has been installed on the house is relatively low maintenance. Window frames are clad, for the most part, with a low maintenance material. The wood window frames are in generally good condition. The aluminum soffits and fascia are a low-maintenance feature of the exterior of the home. There is no significant wood/soil contact around the perimeter of the house, thereby reducing the risk of insect infestation or rot. The auto reverse mechanism on the overhead garage door responded properly to testing. This safety feature should be tested regularly as a door that doesn't reverse can injure someone or fall from the ceiling. Refer to the owner's manual or contact the manufacturer for more information. Freeze resistant hose bibs (exterior faucets) have been installed.

General Comments

The exterior of the home has lacked some maintenance; repairs are needed.

RECOMMENDATIONS / OBSERVATIONS

Exterior Walls

- **Major Concern, Repair:** The exterior of the house needs to be painted.
- **Repair:** Localized rot was observed in the trim around siding (example at the northwest basement man door trim). Following repair of the damaged areas (which should be combined with exterior painting/maintenance) proper maintenance of the siding and control of water from roof or surface runoff can avoid further damage.
- **Repair:** Tree branches should be trimmed away from the house to avoid damage to the building.
- **Repair:** The trim at the northwest corner of the house should be resecured and caulked.



Windows

- **Repair:** Missing storm windows/screens should, ideally, be repaired or replaced as necessary.
- **Repair:** Some of the windows are in need of glazing (putty) improvements.

Garage

- **Monitor:** The garage floor slab has typical cracks usually the result of shrinkage and/or settling of the slab as it cures. Shrinkage cracks are very common and are not normally a concern.

Lot Drainage

- **Recommend:** The grading should be improved to promote the flow of storm water away from the house. This can often be accomplished by the addition of top soil. The ground should slope away from the house at a rate of one inch per foot for at least the first ten feet. At least eight (8) inches of clearance should be maintained between soil level and the bottom of exterior wall siding.
- **Recommend:** Covers should be provided for the basement window wells to keep storm water out of the well.

Porch Steps

- **Repair, Safety Issue:** The steps have deteriorated noticeably. Repairs are recommended to reduce a trip hazard.

Driveway

- **Monitor:** The driveway concrete has settled and cracked. Persisting movement may result in the need for repairs.
- **Repair, Safety Issue:** The driveway presents a trip hazard (example at garage overhead door entry). This condition should be altered for improved safety.

Walkway

- **Monitor:** The public walkway has settled and cracked. Persisting movement may result in the need for repairs.

Retaining Wall

- **Monitor:** The driveway concrete block retaining wall shows evidence of slight movement. This condition should be monitored. It is impossible to determine the rate of movement during a one time visit to the house.
- **Repair, Safety Issue:** The rebar at the front east retaining wall should be cut flush with concrete. This represents a safety concern.



Landscaping

- **Repair:** Shrubs, bushes and/or vines growing on exterior walls need to be trimmed away from the structure to reduce the risk of water damage and insect infestation.

Steps

- **Recommend, Safety Issue:** As there is a danger of falling, a railing should be provided for the east steps near the street and the north steps to garage.

LIMITATIONS OF EXTERIOR INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- A representative sample of exterior components was inspected rather than every occurrence of components.
- The inspection does not include an assessment of geological, geotechnical, or hydrological conditions, or environmental hazards.
- Screening, shutters, awnings, or similar seasonal accessories, fences, recreational facilities, outbuildings, seawalls, break-walls, docks, erosion control and earth stabilization measures are not inspected unless specifically agreed-upon and documented in this report.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Electrical

DESCRIPTION OF ELECTRICAL

Size of Electrical Service:	•120/240 Volt Main Service - Service Size: 200 Amps
Service Drop:	•Overhead
Service Entrance Conductors:	•Aluminum
Service Equipment & Main Disconnects:	•Main Service Rating 200 Amps •Breakers •Located: Basement
Service Grounding:	•Copper •Water Pipe Connection
Service Panel & Overcurrent Protection:	•Panel Rating: 200 Amp •Breakers •Located: Basement
Sub-Panel(s):	•Panel Rating: 100 Amp •Fuses •Located: East Attic •Panel Rating: 125 Amp •Breakers •Located: Top floor hall
Distribution Wiring:	•Copper
Wiring Method:	• Non-Metallic Cable "Romex" •Fabric-Covered •Knob-and-Tube Copper
Switches & Receptacles:	•Grounded and Ungrounded
Ground Fault Circuit Interrupters:	•Bathroom(s) •Whirlpool •Exterior •Kitchen
Smoke Detectors:	•Present

ELECTRICAL OBSERVATIONS

Positive Attributes

The size of the electrical service is sufficient for typical single family needs. Generally speaking, the electrical system is in good order. All outlets and light fixtures that were tested operated satisfactorily. The distribution of electricity within the home is good. Ground fault circuit interrupter (GFCI) devices have been provided in some areas of the home. These devices are extremely valuable, as they offer an extra level of shock protection. All GFCI's that were tested responded properly. Dedicated 220 volt circuits have been provided for all 220 volt appliances within the home. All visible wiring within the home is copper. This is a good quality electrical conductor.

General Comments

Inspection of the electrical system revealed the need for several minor repairs. Although these are not especially costly to repair, they should be high priority for safety reasons. *Unsafe electrical conditions represent a shock hazard.* A licensed electrician should be consulted to undertake the repairs recommended below.

RECOMMENDATIONS / OBSERVATIONS

Renovations were in progress at the time of the inspection and some light fixtures, outlets, and switches were not functional.

Main Panel

- **Repair:** The main panel cover plate (sometimes called the "Dead Front") is missing some screws.

Auxiliary Panel(s)

- **Repair:** Circuits within the auxiliary panel at the top floor that are doubled up (referred to as "double taps") should be separated. Each circuit should be served by a separate fuse or breaker.

Distribution Wiring

- **Repair:** Abandoned wiring in the basement should be replaced or appropriately terminated.
- **Repair:** Loose wiring in the basement should be secured.
- **Repair:** All junction boxes should be fitted with cover plates, in order to protect the wire connections.
- **Repair:** The wiring in the northwest sunroom is inoperative.

Knob & Tube Wiring

- **Repair:** Any knob-and-tube wiring that is exposed during renovations should be replaced.

Outlets

- **Repair:** Some outlets are inoperative (example at northwest sunroom and outlets marked “inop” with blue tape). These outlets and circuits should be investigated.
- **Repair:** An outlet is loose (example at basement bathroom). It should be repaired.
- **Repair:** An outlet has reversed polarity (i.e. it is wired backwards). This outlet in the master bedroom marked “rev pol” with blue tape and the circuit should be investigated and repaired as necessary.
- **Repair:** Ungrounded 3-prong outlets marked with blue tape should be repaired. In some cases a ground wire may be present in the electrical box and simply needs to be connected. If no ground is present “repair” can be as simple as filling the ground slot with epoxy. Better, since having a ground increases safety, a grounded circuit could be strung to this outlet, or a separate ground wire could be connected. Some electrical codes allow the installation of a ground fault circuit interrupter (GFCI) type outlet where grounding is not provided. In this case the GFCI may work but can’t be tested by normal means.
- **Repair:** Missing outlet cover plates should be replaced to avoid a shock hazard.

Switches

- **Repair:** The function of the light switch in the dining room marked with blue tape and in the basement to the right of the bathroom door is unknown. Further investigation is required.
- **Repair:** Missing switch cover plates should be replaced to avoid a shock hazard. Renovations were in progress at the time of inspection.

Lights

- **Repair:** The light is inoperative (examples in basement, garage exterior, master bathroom, top floor and front porch). If the bulbs are not blown, the circuit should be repaired.
- **Repair:** The damaged light fixture in the basement should be repaired or replaced (bulb broke off in fixture).
- **Repair:** The loose light fixture in the master bedroom closet should be repaired or replaced.

Smoke Detectors

- **Repair:** The installation of smoke detectors outside sleeping areas is recommended.
- **Repair:** It is suspected that the batteries in the smoke detectors are defunct. This should be investigated.

Discretionary Improvements

During the course of any renovating, it is recommended that old wiring be replaced.

LIMITATIONS OF ELECTRICAL INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Electrical components concealed behind finished surfaces are not inspected.
- Only a representative sampling of outlets and light fixtures were tested.
- Furniture and/or storage restricted access to some electrical components which may not be inspected.
- The inspection does not include remote control devices, alarm systems and components, low voltage wiring, systems, and components, ancillary wiring, systems, and other components which are not part of the primary electrical power distribution system.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Heating

DESCRIPTION OF HEATING

Energy Source:	•Gas •Electricity
Heating System Type:	•Forced Air Furnace •Manufacturer: Unico (Electric in attic) •Serial Number: 9902A37992
Vents, Flues, Chimneys:	•Manufacturer: Goodman (Basement) •Serial Number: 0310073590
Heat Distribution Methods:	•Plastic •Ductwork

HEATING OBSERVATIONS

Positive Attributes

The heating system is in generally good condition. This is a high efficiency heating system in the basement. Heating a home with a this type of heating system should be relatively economical. Adequate heating capacity is provided by the system. The heating system is controlled by a “set back” thermostat. This type of thermostat, if set up correctly, helps reduce heating costs.

General Comments

Minor repairs to the heating system are necessary.

RECOMMENDATIONS / OBSERVATIONS

Furnace

- **Improve:** The dirty air filter at the basement furnace should be replaced.
- **Repair:** The missing air filter for the attic furnace should be replaced.

Supply Air Ductwork

- **Repair:** Missing or damaged vent register covers should be replaced.
- **Repair:** Supply heat/cool was not present at some ceiling duct openings.
- **Monitor:** Supply air flow is less than ideal. Rebalancing the ductwork, blower cleaning or repairs, filter replacement, or additional duct work may be needed to obtain good air flow.
- **Repair:** Loose fitting joints and/or openings in the ductwork or unused ducts should be improved.

Unused Piping

- **Monitor:** Old boiler piping in the basement was noted. Removal can be undertaken as desired.

LIMITATIONS OF HEATING INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- The adequacy of heat supply or distribution balance is not inspected.
- The interior of flues or chimneys which are not readily accessible are not inspected.
- The furnace heat exchanger, humidifier, or dehumidifier, and electronic air filters are not inspected.
- Solar space heating equipment/systems are not inspected.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Cooling / Heat Pumps

DESCRIPTION OF COOLING / HEAT PUMPS

Energy Source:	•Electricity
Central System Type:	•Air Cooled Central Air Conditioning •Manufacturer: Goodman
	•Serial Number: 0404793052
	•Manufacturer: Heil •Serial Number: E051228593
Size of Circuit:	•Breaker Size In Main Panel: Unmarked

COOLING / HEAT PUMPS OBSERVATIONS

Positive Attributes

The capacity and configuration of the system should be sufficient for the home. The location of the return air vents is well suited to air conditioning.

General Comments

This system has not been maintained.

RECOMMENDATIONS / OBSERVATIONS

Central Air Conditioning

- **Improve:** The air conditioning system servicing the upstairs requires servicing.
- **Repair:** Damaged insulation on refrigerant lines should be repaired.
- **Repair:** The outdoor unit of the north air conditioning system is out of level. This should be improved.
- **Improve:** The outdoor unit of the south air conditioning system requires cleaning.

LIMITATIONS OF COOLING / HEAT PUMPS INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Window mounted air conditioning units are not inspected.
- The cooling supply adequacy or distribution balance are not inspected.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Insulation / Ventilation

DESCRIPTION OF INSULATION / VENTILATION

Attic Insulation:	•Rolled Fiberglass in Main Attic
Roof Cavity Insulation:	•None Visible
Exterior Wall Insulation:	•Not Visible
Basement Wall Insulation:	•None Visible
Vapor Retarders:	•Kraft Paper
Roof Ventilation:	•Roof Vents
Exhaust Fan/vent Locations:	•Bathroom •Dryer

INSULATION / VENTILATION OBSERVATIONS

Positive Attributes

Insulation levels are typical for a home of this age and construction.

RECOMMENDATIONS / ENERGY SAVING SUGGESTIONS

Attic

- **Improve:** Storage items in attic laying on ductwork should be removed.

LIMITATIONS OF INSULATION / VENTILATION INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Insulation/ventilation type and levels in concealed areas are not inspected. Insulation and vapor barriers are not disturbed and no destructive tests (such as cutting openings in walls to look for insulation) are performed.
- Potentially hazardous materials such as Asbestos and Urea Formaldehyde Foam Insulation (UFFI) cannot be positively identified without a detailed inspection and laboratory analysis. This is beyond the scope of the inspection.
- An analysis of indoor air quality is not part of our inspection unless explicitly contracted-for and discussed in this or a separate report.
- Any estimates of insulation R values or depths are rough average values.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Plumbing

DESCRIPTION OF PLUMBING

Water Supply Source:	•Public Water Supply
Service Pipe to House:	•Copper
Main Water Valve Location:	•Front Wall of Basement
Interior Supply Piping:	•Plastic
Waste System:	•Public Sewer System
Drain, Waste, & Vent Piping:	•Plastic •Cast Iron
Water Heater:	•Gas •Approximate Capacity (in gallons): 75 •Manufacturer: Bradford White •Serial Number: TD5183250
Fuel Shut-Off Valves:	•Natural Gas Main Valve At Meter

PLUMBING OBSERVATIONS

Positive Attributes

The plumbing system is in generally good condition. The piping system within the home, for both supply and waste, is a good quality system. The water pressure supplied to the fixtures is above average. Only a slight drop in flow was experienced when two fixtures were operated simultaneously.

General Comments

The plumbing system requires some typical minor improvements.

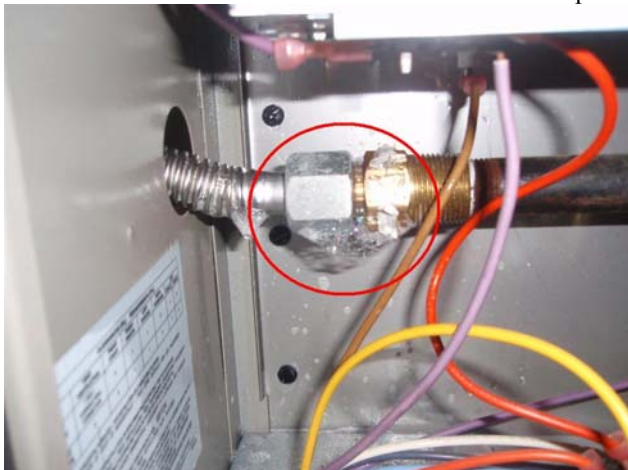
RECOMMENDATIONS / OBSERVATIONS

Water Heater

- **Repair:** Water heaters in garages should be on a raised platform so that the pilots, burner or heating elements are not closer than 18 inches from the garage floor.

Gas Piping

- **Repair, Safety Issue:** *A gas leak was detected with a TIF 8800 gas/carbon monoxide detector and confirmed with soapy water (at flex piping connection in basement furnace marked with blue tape). This is a serious safety concern. It is recommended that the gas utility, HVAC company or plumber be engaged as soon as possible to make the necessary repairs. The current occupants of the home should also be notified.*
- **Repair:** Flexible gas appliance connections should not pass through walls, floors or the appliance housing as is the case of the basement furnace. This connector should be replaced with one of suitable solid gas piping.



Supply Plumbing

- **Repair:** The supply piping to the washing machine is leaking.

Plumbing Fixtures

- **Monitor:** Some of the plumbing fixtures are older.
- **Monitor:** The basement bathroom was not inspected due to storage blocking access.
- **Repair:** The 2nd floor hall bath sink drain plug is inoperative or missing and needs repair.
- **Monitor:** The basement sink near the washing machine was observed to drain slowly, suggesting that an obstruction may exist.
- **Repair:** The toilet is inoperative (flapper chain is missing at 2nd floor hall bathroom).
- **Repair:** Some of the 2nd floor hall bath tub/shower fixture handles are missing.
- **Monitor, Repair:** The 2nd floor hall bathroom tile is cracked.
- **Repair:** The northwest hose bib is inoperative.
- **Repair:** The master bathroom sink faucets are inoperative. Renovations were in progress at the time of inspection.

LIMITATIONS OF PLUMBING INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Portions of the plumbing system concealed by finishes and/or storage (below sinks, etc.), below the structure, or beneath the ground surface are not inspected.
- Water quantity and water quality are not tested unless explicitly contracted-for and discussed in this or a separate report.
- Clothes washing machine connections are not inspected.
- Interiors of flues or chimneys which are not readily accessible are not inspected.
- Water conditioning systems, solar water heaters, fire and lawn sprinkler systems, and private waste disposal systems are not inspected unless explicitly contracted-for and discussed in this or a separate report.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Interior

DESCRIPTION OF INTERIOR

Wall And Ceiling Materials:	•Drywall •Plaster •Paneling •Tile •Stucco
Floor Surfaces:	•Carpet •Tile •Vinyl/Resilient •Wood •Concrete
Window Type(s) & Glazing:	•Double/Single Hung •Fixed Pane •Thermal Pane •Single Pane
Doors:	•Wood-Solid Core •Wood-Hollow Core •Metal

INTERIOR OBSERVATIONS

General Condition of Interior Finishes

On the whole, the interior finishes of the home are in average condition. Typical flaws were observed in some areas.

General Condition of Windows and Doors

The majority of the doors and windows are good quality.

General Condition of Floors

The floors of the home are relatively level and walls are relatively plumb.

RECOMMENDATIONS / OBSERVATIONS

Wall / Ceiling Finishes

- **Monitor:** Water staining was noted.
- **Monitor, Repair:** Damage to the interior finish was observed.
- **Monitor:** Typical flaws were observed that could include loose tape, minor cracks, rough seams, peeling paper, nail popping, minor patching, etc. Any repairs would be discretionary.
- **Monitor:** Signs of mildew/mold were observed (example at northwest sunroom ceiling).

Floors

- **Monitor, Repair:** The tile floor in the 2nd floor hall bath is damaged.
- **Monitor, Repair:** The vinyl flooring in the basement and at the kitchen closet is damaged.
- **Monitor:** Some damage was observed at hardwood floors (suspect openings used for supply duct renovations).

Windows

- **Monitor:** Some of the window(s) are painted shut. Improvement can be undertaken as desired.
- **Monitor, Repair:** The window(s) is cracked (example at north main floor library). Improvement is not a high priority.
- **Repair:** Damaged screens were noted on windows.
- **Monitor:** It may be desirable to replace window screens where missing. The owner should be consulted regarding any screens that may be in storage.
- **Repair:** Sash cords (the ropes that hold up the windows) are missing on some windows.

Doors

- **Repair:** Doors should be trimmed or adjusted as necessary to work properly (example at basement storm screen and 2nd floor southwest bedroom closet).
- **Monitor, Repair:** Minor damage/surface wear was noted on some door(s).

Kitchen Cabinets

- **Repair:** Damaged or missing mudroom drawer should be repaired.

Stairs

- **Repair:** A handrail should be provided for the stairway leading to the top floor.

Basement Leakage

- **Monitor:** The basement shows evidence of moisture penetration. *It should be understood that it is impossible to predict the severity or frequency of moisture penetration on a one-time visit to a home.* Virtually all basements exhibit signs of moisture penetration and virtually all basements will indeed leak at some point in time. The visible evidence is not unusual for a home of this age, construction and location. Further monitoring of the foundation will be required to determine what improvements, if any, will be required. Basement leakage rarely affects the structural integrity of a home.

The vast majority of basement leakage problems are the result of insufficient control of storm water at the surface. The ground around the house should be sloped to encourage water to flow away from the foundations. Gutters and downspouts should act to collect roof water and drain the water at least five (5) feet from the foundation or into a functional storm sewer. Downspouts that are clogged or broken below grade level, or that discharge too close to the foundation are the most common source of basement leakage. Please refer to the Roofing and Exterior sections of the report for more information.

In the event that basement leakage problems are experienced, lot and roof drainage improvements should be undertaken as a first step. Please beware of contractors who recommend expensive solutions. Excavation, damp-proofing and/or the installation of drainage tiles should be a last resort. In some cases, however, it is necessary. Your plans for using the basement may also influence the approach taken to curing any dampness that is experienced.

LIMITATIONS OF INTERIOR INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions

- Furniture, storage, appliances and/or wall hangings are not moved to permit inspection and may block defects.
- Carpeting, window treatments, central vacuum systems, household appliances, recreational facilities, paint, wallpaper, and other finish treatments are not inspected.
- The adequacy of the fireplace draw cannot be determined during a visual inspection.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Appliances

DESCRIPTION OF APPLIANCES

Appliances Tested:

•Gas Range •Gas Cooktop •Microwave Oven •Dishwasher •Waste Disposer

Laundry Facility:

•Gas Piping for Dryer •Dryer Vented to Building Exterior •Hot and Cold
Water Supply for Washer •Waste Standpipe for Washer

Other Components Tested:

•Door Bell

APPLIANCES OBSERVATIONS

Positive Attributes

The appliances are to be in generally good condition. All appliances that were tested responded satisfactorily. The kitchen and laundry facilities are well organized. The kitchen cabinetry is above average quality.

RECOMMENDATIONS / OBSERVATIONS

LIMITATIONS OF APPLIANCES INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions

- Thermostats, timers and other specialized features and controls are not tested.
- The temperature calibration, functionality of timers, effectiveness, efficiency and overall performance of appliances is outside the scope of this inspection.

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.

Fireplaces / Wood Stoves

DESCRIPTION OF FIREPLACES / WOOD STOVES

Fireplaces:

•Gas (Master bedroom) •Cosmetic/Non-Functional - Located: Main floor

Vents, Flues, Chimneys:

•Masonry Chimney-Lined

FIREPLACES / WOOD STOVES OBSERVATIONS

General Comments

On the whole, the fireplace and it's components were found to be in average condition. Typical flaws were observed in some areas.

RECOMMENDATIONS / OBSERVATIONS

Fireplaces

- **Improve:** The main floor fireplace damper is missing.
- **Note:** The main floor fireplace is configured for aesthetic appeal rather than functionality.

LIMITATIONS OF FIREPLACES / WOOD STOVES INSPECTION

As we have discussed and as described in your inspection contract, this is a visual inspection limited in scope by (but not restricted to) the following conditions

- The interiors of flues or chimneys are not inspected.
- Firescreens, fireplace doors, appliance gaskets and seals, automatic fuel feed devices, mantles and fireplace surrounds, combustion make-up air devices, and heat distribution assists (gravity or fan-assisted) are not inspected.
- The inspection does not involve igniting or extinguishing fires nor the determination of draft.
- Fireplace inserts, stoves, or firebox contents are not moved.
- The adequacy of the fireplace draw is not determined during a visual inspection; for safety reasons, if no fire is burning we do not ignite fires nor light paper or other materials.

Other Fireplace/Stove Components Not Inspected:

- Interiors of flues or chimneys

Please also refer to the pre-inspection contract for a detailed explanation of the scope of this inspection.