EXTERIOR SERVICE DOOR CONDITION:

The exterior service door was not tested / inspected due to the excess amount of storage in front of it.

WINDOWS:

CONDITION:

The garage windows were not tested for operation.

ATTIC

ATTIC ACCESS:

INSPECTION CONDITIONS:

Note: Items below the attic insulation are not inspected unless there is a compelling reason to do so. In most cases, insulation is not disturbed during the inspection.

HATCH CONDITION:

The hatch cover does not seal the opening properly (small gaps exist at the perimeter). This allows heat loss into the attic space to occur.

ACCESSIBILITY:

None of the areas above the vaulted portions of the home were accessible - so none of these spaces were inspected.

DESCRIPTION:

TYPE OF ROOF STRUCTURE:

Engineered Truss.

INSULATION TYPE & R-VALUE:

Loose-fill Fiber Glass (R value = approximately 3.2 per inch of thickness)

VAPOR BARRIER:

No problems noted.

Note: The entire vapor barrier is not viewed.

VENTILATION DESIGN:

Ridge vents with soffit vents.

INSULATION DEPTH:

INSULATION DEPTH:

Approximately 12 inches of insulation was installed in the attic, but the depth has been reduced significantly at many locations from rodent activity (mice). The depth is now approximately 8" at most accessible areas.

Tunnels in attic insulation (compacted insulation) allow more heat loss to occur, which decreases the energy efficiency of the home and also increase the potential for ice buildup on the roof during winter months. The installation of more insulation is recommended (14" is ideal; an R-value of 49 is the requirement for new construction in Minnesota).

Note: Most areas are currently inaccessible.

Less than 6 inches = Inadequate
6 - 8 inches = Minimal
9 - 12 inches = Good
14 - 20 inches = Excellent.

BASEMENT / FOUNDATION / STRUCTURE

LIMITATIONS & INSPECTION CONDITIONS:

SINGLE FAMILY HOME:

Water seepage and moisture penetration is common in basements and is usually the result of inadequate water management above ground. Most cases can be corrected by improving grading and drainage. Please note: The review of the basement cannot always detect the past or future possibility of water in this area.

STRUCTURE DESCRIPTION & MATERIALS:

FLOOR SUPPORTS:	TYPE OF SUBFLOOR:	FOUNDATION TYPE:	RIM JOIST INSULATION TYPE:
Engineered I-beams.	Plywood.	Block and mortar.	Fiberglass.

WATER CONTROL / EVIDENCE OF INTRUSION:

NO EVIDENCE OF PRESENT / PAST INTRUSION:

No signs of past or current leakage into the basement were found during the inspection.

DRAIN TILE:

Not applicable (a drain tile / sump pump system has not been installed).

The lack of a drain tile system & sump pump means that leakage prevention must be handled from the house exterior. Proper grading is needed (soil and paved surfaces must slope away from the home so water cannot pool next to the foundation). Gutters must be present and must not be clogged. All gutter extensions should terminate away from the foundation.

ELECTRICAL

LIMITATIONS:

SINGLE FAMILY HOME:

Electrical Limitations: A majority of accessible switches and outlets are tested for operation. Those that are inaccessible due to furniture, or storage, or those that have electronic items such as clocks, stereo systems, or computers plugged into them are not tested. Inoperative light fixtures often lack bulbs, or have dead bulbs installed (light bulbs are not changed during the inspection, due to time constraints). Motion lights are not tested for operation. Cover plates are rarely removed, unless there is a compelling reason to do so. Time-clock motors are not tested for operation. Low voltage systems - wiring that is not a part of the primary electrical distribution system - are not tested. Also, over current devices / circuit breakers (other than ground fault circuit interrupters) are not tested. Determining the number of outlets per circuit is also almost never determined.

Most homes over ten-years-old have had some electrical modifications and in many cases, these are made by non-professionals. When evidence of "amateur work" is found, it is reported. Since most electrical components are hidden, the condition of a majority of the system typically cannot be evaluated during a standard home inspection. For those reasons, it is always advised to check permit records at the home. If additional work has been made, but no permits were pulled, it is smart for buyers to ask for further evaluation of the electrical system by a licensed electrician - particularly if evidence of amateur work is found.

SERVICE DESCRIPTION:

SERVICE SIZE:	SERVICE TYPE:	TYPE OF PANEL:
120/240 Volt, 200-AMP: Very good size.	Underground conductors.	Circuit Breakers.

MAIN PANEL:

LOCATION:

Laundry room.

BOX & COVER:

The panel cover is painted shut and could not be easily removed. The interior components were not inspected as a result.

If further evaluation is desired, contact a licensed electrician to open and inspect the panel box.

INDEX IMAGE:

CIRCUIT BREAKER SIZING:

The air conditioner is over fused (has a larger breaker than it should, according to the manufacturer specs on the data plate). In this case, a 40-amp breaker is in use, but the data plate indicates that the maximum allowed circuit breaker is 30 amps. Over-fusing can result in premature damage to the compressor.

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PANEL GROUND / BONDING CONNECTIONS:

During the inspection, I attempt to visually document electrical system bonding. There is no way in the context of a home inspection to verify "effectiveness" of system bonding. All metallic systems in the building are required to be "bonded" (connected) to the building's electrical grounding system. Bonding creates a pathway to shunt static charges (that would otherwise buildup on the system) to earth and to provide a pathway to trip a breaker in the event that these bonded metallic components become energized.

SUBPANELS:

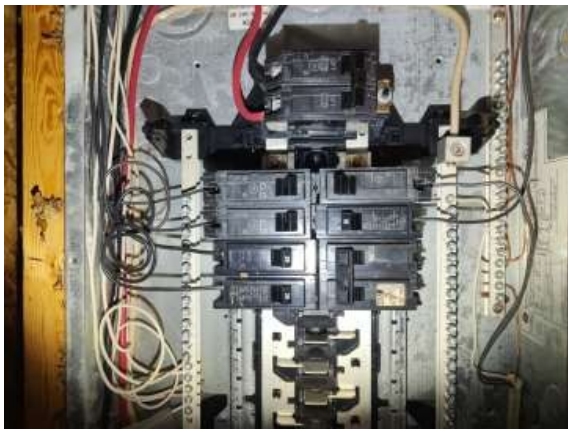
LOCATION(S):

Detached garage.

BOX & COVER:

A sub panel was added to the system after the house was built. However, there is no sticker inside the panel box that would indicate that the wiring was approved by the City Inspector. No obvious concerns were identified during the inspection.

I suggest that you ask the sellers for all paper work associated with this upgrade.



DISTRIBUTION WIRING:

DISTRIBUTION WIRING TYPE(S):

Modern non-metallic sheathed cable - copper wiring (Romex)

JUNCTION BOXES:

BASEMENT BOXES:

Some junction boxes are missing covers (behind ceiling panels). Tight fitting covers are required so that sparks / fire cannot spread to combustibles.

SWITCHES:

SWITCHES:

The 3-way switches do not operate properly (3-way circuit - for upstairs stairwell / hallway light fixture). This usually indicates that one or more of the switches was improperly installed, or that the wrong type of switch was installed. In this case, one of the switches was replaced with a dimmer switch, so this is likely where the mistake occurred.

The purpose for some of the switches was not determined (throughout the home).

OUTLETS:

INSPECTION CONDITIONS:

Note: A representative number of outlets are tested from each room. Not all outlets are tested. Some are not tested due to inaccessibility.

OUTLETS:

There is no power to one porch outlet - and to one kitchen outlet (adjacent side of same wall). The reason for this was not determined.

Reversed electrical polarity was detected at one second floor common area outlet (floor receptacle). This condition creates potential shock hazards and even though the repair is typically simple, it should be conducted by a licensed electrician. The cover plate for this outlet is also damaged.

EXTERIOR OUTLETS:

An open neutral was detected at one receptacle (outlet in tool shed - below the porch).

BASEMENT OUTLETS:

One receptacle for the drain plumbing sewage ejection pit is broken.

Some basement receptacles are loose.

KITCHEN OUTLETS:

Some kitchen outlets are not protected with Ground Fault Circuit Interrupters. Modern codes now require GFCI's at all kitchen receptacles.

BATHROOM OUTLETS:

Reversed electrical polarity exists at the basement bathroom outlet. This condition creates potential shock hazards and even though the repair is typically simple, it should be conducted by a licensed electrician.

FIXTURES / LUMINAIRES:

FIXTURES:

Recessed lights were installed in the second floor attic level ceilings, which penetrate the attic space (master bathroom).

Recessed lights that were manufactured prior to 1993 generally provide a major route for air leakage into the attic space, which increases energy bills, and also increases the risk of condensation in the attic space. Additionally, these fixtures are rarely rated for insulation contact, which can create potential overheating concerns. Upgrading the fixtures with modern, insulated canister is recommended.

Minimally, using LED bulbs with these fixtures will reduce heat loss.

BATHROOM FIXTURES:

A light fixture is located within 3 ft. of the bathtub / shower area, but is not of the approved, wet location type. This creates a potential shock hazard (first floor bathroom).