



#### OUR VALUED CUSTOMER

**Cori Nastro**Service Consultant

**M. Ortiz**Certified Technician

#### YOUR VEHICLE

<b>Year</b> 2007	(	<b>Make</b> Chevrolet		<mark>Model</mark> Avalanche	Engine Type 5.3L V8 0 OHV (MFI)
Odometer		VIN	#	License #	Date
71,201		3GNEC12017	G133587		5/4/2016

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## **Original Customer Requests**

The following is what you requested we perform or investigate regarding your vehicle:



A. 108 POINT INSPECTION



**OIL CHANGE** 



**SHOP SUPPLIES** 



# Package Results

### Multi Point Inspection Pre Owned

Failed Task	Observation	Recommendation	Done
Inspect/measure left rear brake pads/shoes	2/32" (1.587 MM)		
Inspect/measure right rear brake pads/shoes	2/32" (1.587 MM) Replace rear brake pads and resurface rotors		
Inspect/measure left front brake pads/shoes	3/32" (2.379 MM)		
Inspect/measure right front brake pads/shoes	3/32" (2.379 MM)	Replace front brake pads and resurface rotors	
Inspect windshield wiper blades	Found wiper blades to be worn out	Replace windshield wiper blades	

Cautioned Task	Observation	Recommendation	Done
Inspect/measure left rear tire tread	6/32" (4.762 MM)		
depth			
Inspect/measure right rear tire	6/32" (4.762 MM)		
tread depth			

Cautioned Task	Observation	Recommendation	Done
Inspect/measure left front tire tread depth	6/32" (4.762 MM)		
Inspect/measure right front tire tread depth	6/32" (4.762 MM)	<ul><li>Perform alignment</li><li>Balance all four tires</li></ul>	
Inspect battery terminals/cables	Found battery to be dirty and in need of service	Service battery	
Check idle speed	Found throttle body to be dirty	Clean and service throttle body	
Inspect air cleaner element	Found air cleaner element to be dirty	Replace air filter element	
Inspect accessory drive belts	Found serpentine belt to be in poor condition	Replace serpentine belt     Replace A/C belt	
Check power locking system operation	<ul> <li>Found right rear power door lock to be inoperative</li> <li>Found left rear power door lock to be inoperative</li> </ul>	REPLACE DOOR LOCK ACTUATOR	

Passed Tasks					
✓ Visually inspect EVAP system	✓ Inspect catalytic converter	Inspect exhaust system heat shields			
Inspect exhaust system for leaks, damage, and loose parts	Inspect inner fenders and mud guards	Inspect under car splash shields			
Inspect frame and chassis	Inspect lug nuts/wheel studs	Inspect rims for damage			
Check tire pressure	Inspect brake calipers and wheel cylinders	Inspect brake hoses and lines			
Inspect rear brake drums/rotors	Inspect front brake drums/rotors	Check rear sway-bar links and bushings			
Check rear suspension bushings	✓ Check rear strut/shock mounts	✓ Check steering gear assembly			
Check front strut/shock mounts	Check front sway-bar links and bushings	Check control arm bushings			
✓ Check/lubricate tie-rod ends	✓ Check/lubricate ball joints	Check rear wheel bearings for noise/play			
Check front wheel bearings for noise/play	Inspect u-joints and driveline slip-joints	Inspect front axle CV joints and boots			
Inspect rear axle CV joints and boots	Inspect torque mounts	Inspect engine mounts			
Inspect manual transmission mounts for damage	Inspect automatic transmission mounts for damage	Check rear differential fluid level/condition			
Check rear axle seals for leaks	Check rear differential for leaks	Inspect fuel tank, lines, and connections			
Check power steering system for leaks	Check engine for oil leaks	Check cooling system for leaks			
Check brake system for leaks	Check automatic transmission cooler hoses for damage or leaks	Check automatic transmission for leaks			
✓ Visually inspect AIR system	✓ Visually inspect PCV system	✓ Visually inspect EGR system			
Check alternator/charging system	Check battery fluid level	Inspect wiring harness and connections			
Inspect fuel hoses, lines, and connections	Inspect carburetor and choke	Inspect fuel injection system			

Inspect ignition wires (spark plug wires)	Inspect distributor cap and rotor	Check distributor advance and ignition timing
Inspect timing belt/balance shaft belts	Inspect ABS diagnostic system (ABS warning light)	Inspect brake booster
/ Inspect radiator cap	Check electric cooling fan operation	✓ Inspect fan hub
Inspect cooling system hoses	Check condenser cooling fan operation	Inspect heater hoses
Check windshield washer fluid level/condition	Check power steering fluid level/condition	Check engine oil level/condition
Check engine coolant level/condition	Check brake fluid level/condition	Check automatic transmission fluid level and condition
Inspect/lubricate door latches and mechanisms	Inspect/lubricate sunroof and check for leaks	Inspect body for damage, dings, and dents
Check hazard light operation	Check brake light operation	Check back-up light operation
Check taillight, turn signal, side marker, and license plate lights	Inspect taillight, turn signal, and side marker assemblies for cracks/damage	Check headlight low and bright beam
Inspect headlight assemblies for cracks/damage	Check seatbelts for normal operation/condition	Inspect SRS system
Check power seat operation	Check power antenna operation	Check windshield wiper/washer operation
Check horn operation	Check power window operation	Inspect rear window defroster operation
Check air flow switching control (floor, dash vent, and defroster outlets)	Check blower motor operation (all speeds)	Inspect cabin air/HEPA filter (if equipped)
Check air conditioning operation	Check brake pedal travel/free-play	Check dash and interior lights
Inspect SRS diagnostic system (SRS warning light)	Inspect ABS diagnostic system (ABS warning light)	Inspect onboard diagnostics system (check engine light)
Scan vehicle computer for fault codes	Inspect parking brake adjustment/operation	Inspect rear shocks and struts; check operation
Inspect front shocks and struts; check operation	Check front differential for abnormal noise	Check rear differential for abnormal noise
Check for abnormal engine noise/vibrations	Check shift lock operation	Check automatic transmission for normal operation/shifting
Check cruise control operation (including resume)	Check engine performance/smooth acceleration	Check starter/starting system

Additional Observations	Recommendation
DASH PANEL CRACKING AND BROKEN	REPLACE DASH PANEL PAD
REAR HVAC HEAD MISSING KNOBS	REPLACE REAR HVAC CONTROL HEAD OR KNOBS



/ Check ease of starting

# Recommended Services

Our technicians recommend the following services for your vehicle.

Original Customer Requests		Status	Cost	Deferred	Approved
A. 108 POINT INSPECTION			\$178.00		X
OIL CHANGE (OIL CHANGE)			\$60.00		
SHOP SUPPLIES (SHOP SUPPLIES)			\$75.00		
Subtotal			\$313.00		\$178.00
Inspection & Additional Recommendations	Insp	Status	Cost	Deferred	Approved
Replace rear brake pads and resurface rotors (2/32" (1.587 MM))	X	Fail	\$299.99		See AI-14
Replace front brake pads and resurface rotors (3/32" (2.379 MM))	X	Fail	\$299.99		See AI-14
Replace windshield wiper blades (Found wiper blades to be worn out)	x	Fail	\$65.00		See AI-24
Subtotal			\$664.98		
Clean and service throttle body (Found throttle body to be dirty)	x	Caution	\$86.99		
REPLACE DOOR LOCK ACTUATOR (Found left rear power door lock to be inoperative, Found right rear power door lock to be inoperative)	x	Caution	\$503.87		
Balance all four tires (6/32" (4.762 MM))	x	Caution	\$60.00		See AI-16
Replace serpentine belt (Found serpentine belt to be in poor condition)	X	Caution	\$299.99		See AI-20
Service battery (Found battery to be dirty and in need of service)	X	Caution	\$55.00		See AI-22
Perform alignment (6/32" (4.762 MM))	х	Caution	\$135.00		See AI-29
Replace air filter element (Found air cleaner element to be dirty)	X	Caution	\$65.00		See AI-31
REPLACE DASH PANEL PAD (DASH PANEL CRACKING AND BROKEN)		Caution	\$1,633.85		
REPLACE REAR HVAC CONTROL HEAD OR KNOBS (REAR HVAC HEAD MISSING KNOBS)		Caution	\$597.00		
Subtotal			\$3,436.70		
Totals, Taxes and Fees				Deferred	Approved
Estimate Subtotal				\$0.00	\$178.00
shop fees					
Tax					
Estimate Total					
For "See AI-" items see the "Additional Information" section					



## **Additional Information**

Below is information we feel would help you better understand some of the reasons for taking preventive maintenance steps -- steps that help to ensure the reliability and safety of your vehicle for you and your family.

\*\* The following section may contain instructions for servicing various components of your vehicle. These are an overview of the process that will be performed by a skilled technician in our shop. They are not intended to be a guide for a "do-it-yourself" operation.

#### Replace Brake Pads/Shoes

#### **Operation Description:**

Raise the vehicle on an approved automotive lift. Remove the wheels to gain access to the brakes. (1)Disk Brakes: Remove the brake caliper and then remove the brake pads. Inspect the rotors for signs of damage or excessive wear. Replace or resurface the rotor as necessary. Inspect the brake caliper and brake hoses for damage and leaks. Replace as necessary. Replace the brake pads. (2)Drum Brakes: Remove the brake drum. Remove the brake shoes. Inspect the brake hardware, wheel cylinders and hoses for damage. Replace as necessary. Inspect the brake drum for damage, or excessive wear. Replace or resurface the drum as necessary. Clean the brake drum and backing plate. Replace the brake shoes. Reinstall the brake drum. Adjust the brakes as necessary. Reinstall the wheels and torque the lug nuts to the vehicle manufacturer's specifications.



AI-14

Damaged Brake Rotor (metal to metal contact

Installing New Brake Pads

#### Significance:

This repair is all about safety. Your vehicle's brake system is only as good as your brake pads and/or brake shoes. The safety of you and your family depends on your brake system working properly and stopping your vehicle - every time. Aside from the obvious safety issues, neglecting the maintenance of your brake pads and shoes can cause the friction material on your brake pads and shoes to completely wear out. This condition can leave your brake pad/shoe steel backing plates contacting the rotors/drums and will destroy the drums/rotors leaving you with an expensive repair bill

#### Advantage:

There are no shortcuts when it comes to your vehicle's brakes. Having a Professional Automotive Technician check and service brakes on a regular basis is essential to your safety behind the wheel. Maintaining your brake system by replacing your brake pads and shoes before they are completely worn out will help keep your brakes working properly and save you money by avoiding unexpected damage to your brake components caused by metal to metal contact.

#### **Operation Description:**

Carefully lift the vehicle on an approved automotive vehicle lift. Adjust the air pressure in all of the tires. Visually inspect the condition of the tires at this time. Remove all of the wheels and balance them on a dynamic spin balancer. Reinstall the tires on the vehicle in accordance with manufacture's rotation pattern, and then torque the wheel lugs to secure wheels to vehicle following the recommended torque procedures.



Irregular wear due to tire imbalance.



Dynamic Tire Balancing Equipment.

AI-20

#### Significance:

Under inflated tires can rob your vehicle of its fuel economy and performance. A tire that is out of balance can cause a severe wheel vibration or shimmy. If this important step is omitted, tire wear will be uneven and you will have to replace the tires far more frequently than tires that are rotated and maintained according to a vehicle maintenance schedule. Automotive tires take a lot of punishment and require very little servicing in return. Regular tire rotation and balancing is a very cost effective preventative maintenance procedure.

#### Advantage:

The tires on your vehicle are the only thing between you and the road surface. You have a lot "riding" on your tires in terms of safety and performance. Make tire rotations and balancing a regular part of your vehicle's scheduled maintenance program. Enjoy the benefits of a smooth ride, better handling, and improved fuel economy.

#### Replace Accessory Drive Belts (Fan Belts (V-Belts)

#### **Operation Description:**

Loosen the drive belt tensioner and remove the old belt. Repeat this step for any other belts that require replacement. Inspect the tensioner and idler pulley bearings for noise or signs of wear. Replace any tensioner or idler pulleys that require replacement. Install the new belt and tensioner to factory specifications. Repeat this step for any additional belts that require replacement. Start the engine, and after a minute or so, shut the engine off. Recheck the belt tension and make final adjustments as necessary.



Cracked/Worn Accessory Drive Belt

#### Significance:

The accessory drive belt(s) on your vehicle performs many functions. The Power Steering System, Alternator (charging system), and Air conditioning System are all driven by accessory drive belts. On some vehicles, accessory drive belts also drive the water pump, engine cooling fan, and Air Injection Pump (emission control). Accessory drive belts wear during normal engine operation, and need to be checked and replaced periodically. Keep this point in mind, as you can lose one or more systems if a belt is broken. For example, a broken fan or waterpump belt can cause severe overheating which could result in expensive repairs, or even total engine failure. A broken power steering belt can result in the loss of your vehicle's power steering system, which could make your vehicle very difficult to steer. This condition could be dangerous if a quick steering maneuver is necessary. A broken alternator belt could cause your vehicle to lose all of its electrical power, and could eventually result in a dead battery. This condition could cause the engine to shut off and not restart.



New Accessory Drive Belt

#### Advantage:

Make sure that the drive belt(s) on your vehicle are in good condition. This is an important point to keep in mind as you attempt to keep your vehicle reliable and safe. Drive belt replacement is recommended at certain mileage intervals, This step can also save you money by avoiding possible engine damage and costly engine repairs. Don't wait, have your drive belts inspected and replaced whenever it is recommended by the vehicle manufacturer!

Service Battery Al-22

#### **Operation Description:**

The first step is to remove the negative battery cable. Next remove the positive battery cable. Clean all corrosion and dirt from the battery top and case. Clean the battery terminals and battery cable ends with a terminal cleaner tool and battery cleaning solution. Remove the battery service caps and top off the cells with distilled water as necessary. Replace the caps. Reinstall the positive battery cable. Reinstall the negative battery terminal last. Coat the terminals and battery cable ends with anti-corrosive treatment.



Corroded Battery Cable Terminal

#### Significance:

The battery is the heart of your vehicle's electrical system. Neglecting the battery can result in your vehicle not starting when you need it most. If battery cable ends are neglected, corrosion can make its way into the battery cables causing a high resistance condition that will cause starting problems and can cause other problems with your vehicles electrical system that can be expensive to repair.



Clean, Maintained Battery Cable Terminal

#### Advantage:

A clean, well maintained battery will last longer and perform better than a neglected one. Additionally, it will help ensure that your engine will start when you need it to most. Keeping your battery serviced ensures that your vehicles electrical system will continue to work properly.

#### Replace Windshield Wiper Blades

#### **AI-24**

#### **Operation Description:**

Remove the wiper blades from the wiper arms following the vehicle manufacturer's instructions (found in the owner's guide). Install new wiper blade assemblies onto the wiper arms. Thoroughly clean the windshield.

#### Significance:

The ability to drive safely interests all of us. Having a clean windshield is a necessity for safe driving. Most driving decisions are dependent on the driver having a clear view of the road ahead. Worn or torn wiper blades do not effectively clean the windshield, and a dirty windshield can obstruct the drivers view, possibly resulting in an accident.

#### Advantage:

Most wiper blade manufacturers recommend replacing your wiper blades every 6 months or 6,000 miles. Something as simple and as inexpensive as replacing your windshield wiper blades will make your driving experience for you and your family a safer one.



Impaired View From Worn Wiper Blades



New Wiper Blades.

AI-29

#### Perform Wheel Alignment

#### **Operation Description:**

Inspect the front and rear suspension components for any signs of wear or damage. Using wheel alignment equipment, adjust the suspension and wheels to the vehicle manufacture's specifications.

#### Significance:

Vehicle suspensions can wear with age and repeated heavy use. Rough road surfaces and an occasional pothole can change the vehicle's wheel alignment. A wheel alignment can improve your steering control and overall vehicle handling. It can also help prevent abnormal tire wear by bringing the vehicle suspension components back to the vehicle manufacturer's specifications. This important step will keep your vehicle driving the way it was designed to. Keep in mind that a vehicle alignment is necessary any time a worn suspension part is replaced.

#### Advantage:

Even slightly worn suspension components can affect the vehicle's wheel alignment. This can lead to premature wear of tires and reduce overall vehicle comfort and safety. A vehicle with worn out suspension parts can be unsafe to drive. Maintaining your vehicle suspension and performing regular wheel alignments along with tire rotation can help keep your vehicle safe and reliable.



Abnormal Tire wear From a Vehicle that is out of Alignment.



A Wheel alignment being Performed.

#### **Operation Description:**

Remove the Air Filter Element from the air filter housing. Clean the air filter housing and inspect the fresh air duct hose for damage, dirt or obstructions. Inspect the warm air intake hose for signs of deterioration. Replace as necessary. Install a new filter element, and then reinstall the air filter housing access panel.



Extremely
Dirty/Restricted Air
Filter



New Air Filter

#### **Significance:**

A dirty or clogged air filter can affect the fuel economy and overall vehicle performance. Both Diesel and Gasoline powered engines are designed to maintain a specific air/fuel ratio. A restricted air filter can affect the way the engine maintains the correct air/fuel mixture. If the air filter is restricted, the fuel mileage and overall vehicle drivability can deteriorate rapidly.

#### Advantage:

Replacing your air filter element is a quick and effective way to keep your engine running at its peak performance.