



## DIY Mechanic

### Chilton's Library





This project is supported by the Arizona State Library, Archives & Public Records, a division of the Secretary of State, with federal funds from the Institute of Museum and Library Services.

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### Chilton's Library: What you'll find

- Maintenance and specifications
- Step-by-step service and repair procedures
- Labor estimating tool
- Vacuum & Wiring diagrams
- Close-up photographs and illustrations
- [ASE test prep quizzes](#) for the most popular certification exams – future mechanics

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### Searching is Easy!

Vehicle Selector

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# 2002 Nissan Xterra



## CHILTON LIBRARY

- Select Vehicle
- Repair
- Labor Estimating
- Bulletins/Recalls
- Maintenance

Your Current Vehicle: 2002 Nissan Xterra

Data is available for the following:

- Repair
- Labor Estimating
- Bulletins/Recalls
- Maintenance



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General Information & Identification

Body

Brakes

Chassis Electrical

Diagnostic Trouble Codes

Driveline

Engine Cooling

Engine Electrical

Engine Mechanical

Engine Performance & Emission Controls

Fuel Systems

Heating, Ventilation, & Air Conditioning

Steering

Suspension

Transmission, Clutch, & Transfer Case

Wiring Diagrams

## Repairs

Select the category of Repair Needed

Let's find out how to change the fuel pump.

**Fuel Systems**

Animations and Tech Tips

- Click to view: Fuel/air mixture
- Click to view: A basic fuel injection system
- Click to view: Ported fuel injection

[Get the Flash Player]

Videos

- Click to view: About the air/fuel ratio
- Click to view: Restricted fuel filters can cause a lean mixture, emissions
- Click to view: The PCM can adjust long-term fuel trim to compensate for gradual changes in operating conditions. When an on-trip reset can occur
- Click to view: Catalyst Converter Theory & Operation

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To get the full benefit from a charge of gasoline, it must be vaporized and mixed with air. When properly mixed, the fuel vapor is suspended within the air stream as it travels toward the cylinder. If the fuel is not fully vaporized, the fuel will not remain suspended and can puddle in the intake manifold. This can result in a failure of fuel to reach the cylinder, causing a lean condition in some cylinders.

For the fuel to burn efficiently, the fuel and air must be mixed in the proper amounts, called an air/fuel ratio (A:F ratio). The air/fuel ratio is the numerical comparison of the amount of air to the amount of fuel, both measured by weight. It has been found that a stoichiometric ratio of 14.7 parts air mixed with one

Injector Fuel Air

Cylinder

The fuel must be mixed with air for efficient combustion to occur.

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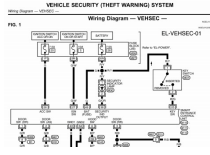
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## Wiring Diagrams

Once you master the codes in the diagrams you will be able to understand:

- Location of the Parts
- Power Supply Source
- Ground Supply and Location
- Color Coding of the Wires
- Major Components such as Relays, Solenoids, Sensors and Modules
- Computer including its location and connection.




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## Labor Estimating

CHILTON LIBRARY

[Select Vehicle](#) | [Repair](#) | [Labor Estimating](#) | [Bulletin/Recalls](#) | [Maintenance](#) | [ASE Test Prep quizzes](#) | [Help](#) | [Logout](#)

Your Current Vehicle: 2002 Nissan Xterra

[Search Operations](#) | [View Operations](#)

Select a vehicle

[SYSTEMS](#) | [BRAKES](#) | [ANTI-LOCK](#) | [Actuator Assy, Replace](#)

Actuator Assy, Replace	System: BRAKES
Anti-Lock Brake System Component Each, Diagnose	Subsystem: ANTI-LOCK
Anti-Lock Relay, Replace	Operation: Actuator Assy, Replace
Control Module, Replace	Time Category: <b>Regular</b> <b>Severe</b>
Fault Codes, Retrieve	Description: 1998-04
Front Rotor Sensor Assy, Replace	OEM/Dealer (hrs): 1.4
Front Sensor Assy, Replace	Regular (hrs): 2.1
Rear Rotor Sensor Assy, Replace	Notes:

Regular (hrs) - Chilton suggested service times based on normal operating conditions  
 Severe (hrs) - Chilton suggested service times based on severe operating conditions  
 OEM/Dealer (hrs) - OEM warranty times

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## Labor Estimating Taking a closer Look

System: BRAKES  
Subsystem: ANTI-LOCK  
Operation: Actuator Assy, Replace  
Time Category: **Regular** **Severe**

Description:	OEM/Dealer (hrs):	Regular (hrs):
1998-04	1.4	2.1

Notes:  
**Regular (hrs)** - Chilton suggested service times based on normal operating conditions  
**Severe (hrs)** - Chilton suggested service times based on severe operating conditions  
**OEM/Dealer (hrs)** - OEM warranty times

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## Bulletins/Recalls

Technical Service Bulletin is issued by a vehicle manufacturer when there are several occurrences of an unanticipated problem.



**Technical Bulletin**

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**SERVICE CAMPAIGN BULLETIN**

Reference: **NTB03-118** Date: **December 10, 2003**

### VOLUNTARY SERVICE CAMPAIGN WINDOW REGULATOR

**CAMPAIGN I.D. #:** PU306 & PU307  
**APPLIED VEHICLES:** 2001 Altima (L30)  
 2001-02 Frontier (D22), crew cab and king cab  
 2001-02 Xterra (MDG2)  
**APPLIED VINs:** Vehicles built within the following VIN ranges:  
 Altima




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## Technical Service Bulletins

**1**

Advanced Filter

- ALL Systems
- ALL Symptoms
- ALL Trouble Codes

**2**

Quick Search

TSB #

Keyword




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## Maintenance

Please select your vehicle configuration from the items below, or from the full chart list.

Collapse filter

Vehicle Configuration Filter	
Submodel:	XE
Liters:	3.3
Fuel Type:	GAS
# of Cylinders:	6
Drive Type:	4WD
Body Type:	Sport Utility

Submodel	Body	Liter	Cylinders	Fuel Type	Drive	Transmission	
SE	Sport Utility	3.3	6	GAS	RWD	Automatic	<a href="#">View Chart</a>
SE	Sport Utility	3.3	6	GAS	RWD	Standard	<a href="#">View Chart</a>
XE	Sport Utility	2.4	4	GAS	4WD	Standard	<a href="#">View Chart</a>
XE	Sport Utility	3.3	6	GAS	4WD	Automatic	<a href="#">View Chart</a>
XE	Sport Utility	3.3	6	GAS	4WD	Standard	<a href="#">View Chart</a>




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## Chilton's Library

- ASE Test Prep Quizzes
- Help File
- Access Chilton's Library
- Access remotely
- Ask the Librarians for help!
- Any Questions?



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