

### Basic Troubleshooting

**Compression Test** - The simplest and quickest way to successful repairs!

#### **Symptoms**

Hard Starting

Starts okay when cold but not when hot

Poor performance

Acts as if the carburetor is adjusted wrong

Poor idle

Does not start

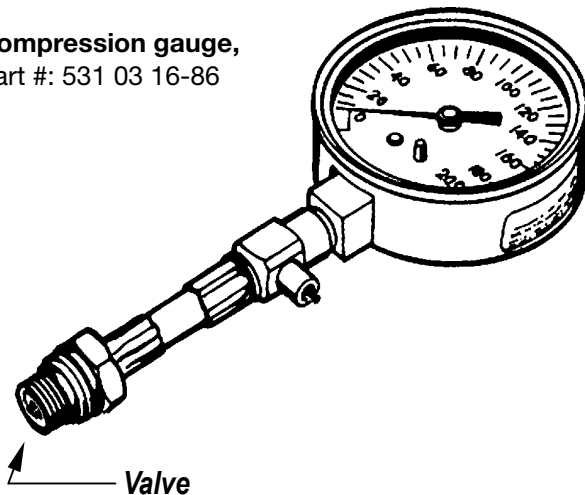
If you encounter a saw with any of these symptoms the most valuable troubleshooting tool is a

**Compression gauge**, (Part # 531 03 16-86)

A simple compression test eliminates one of the most common problem areas of cut-off saws.

*Even though the symptoms may indicate that it could be a fuel or ignition problem it is imperative to **first** establish that the compression is okay – normally; 7.9 bar, 115 psi or higher*

Compression gauge,  
Part #: 531 03 16-86



To get an accurate compression reading it is important that the compression gauge has a **valve** in the fitting that screws into the cylinder.

Test the compression on a **cold engine**.

Pull the engine over until the gauge stops moving (at least 5 times).

If the compression is **less than** 7.9 bar, 115 psi, check the conditions of the cylinder and piston before doing any other repairs. If **less than** 6.7 bar, 100 psi, the engine usually does not fire at all.

The running problems are **typically** not related to the cylinder and piston if the compression **exceeds** 7.9 - 8.3 bar, 115 - 120 psi.

A guide to different cylinder failures is available on the Partner **Failure Analysis** poster part no. 108 07 02-25.

