



# 2012 Fork Service Manual



## **INTRODUCTION**

This manual is intended to guide the user through basic service of Manitou front forks. Service is supported by the identification of common parts and assemblies that have been assembled into Service Kits. The purpose of this manual will be to describe conditions that may drive the need for service and to provide installation instructions for the kits.

Due to the time-consuming nature of suspension fork service, at this time our primary focus is to offer service kits that minimize the amount of downtime and labor involved.

**Important information is highlighted in this manual by the following notations:**

### **WARNING**

Failure to follow **WARNING** instructions could result in severe injury or death to the person inspecting or repairing the suspension fork or the user.

### **CAUTION**

A **CAUTION** indicates special precautions that must be taken to avoid damage to the product.

### **NOTE**

A **NOTE** provides key information to make procedures easier or clearer

**GENERAL WARNING:** Suspension forks by design can contain preloaded springs, gases and fluids under extreme pressure and warnings contained in this manual must be observed to reduce the possibility of injury or possible death. Following these instructions can help you reduce the risk of being injured. Any questions in regards to the information in this manual should be directed to Manitou Customer Service at (888) 686-3472.

**WARNING:** Suspension forks uses preloaded spring(s) to provide compression spring resistance. This system must be relieved of preload prior to servicing. Failure to relieve air pressure could result in injury or possible death.

**CAUTION:** Suspension forks use precision machined aluminum and other soft alloy components. Using correct tools for assembly is essential to prevent damage.

This manual is divided up into different sections, each one pertaining to a different part of the servicing of your fork. Below is a list of our fork models and which sections you will use to service your particular fork.

**Circus Comp/Match/Tower Comp Forks**

1. Section 1 – Casting Removal
2. Section 3 – Dust Seal Replacement
3. Section 4 – Coil Spring Service
4. Section 8 – Absolute+ Service
5. Section 10 – Casting Installation

**Minute Pro/Tower Pro Forks**

1. Section 1 – Casting Removal
2. Section 3 – Dust Seal Replacement
3. Section 5 – MARS Air Spring Service
4. Section 8 - Absolute+ Service
5. Section 10 – Casting Installation

**Circus Expert/Minute Expert/Tower Expert Forks**

1. Section 1 – Casting Removal
2. Section 3 – Dust Seal Replacement
3. Section 7 – ACT Air Service
4. Section 8 – Absolute+ Service
5. Section 10 – Casting Installation

**R7 Forks**

1. Section 1 – Casting Removal
2. Section 3 – Dust Seal Replacement
3. Section 6 – TS Air Service
4. Section 8 – Absolute+ Service
5. Section 10 - Casting Installation

**R7 MRD Forks**

1. Section 2 – MRD Casting Removal
2. Section 3 – Dust Seal Replacement
3. Section 6 – TS Air Service
4. Section 9 – Absolute+ MRD Service
5. Section 11 – MRD Casting Installation

**Marvel Expert Forks**

1. Section 1 – Casting Removal
2. Section 3 – Dust Seal Replacement
3. Section 8 – ISO Air Service
4. Section 8 – Absolute+ Service
5. Section 10 – Casting Installation

**Marvel Pro Forks**

1. Section 2 – MRD Casting Removal
2. Section 3 – Dust Seal Replacement
3. Section 8 – ISO Air Service
4. Section 9 – Absolute+ MRD Service
5. Section 11 – MRD Casting Installation