Chapter 5.
Service Tool

Introduction

This chapter covers the process of installing and servicing the control via the L-Series Service Tool. It is assumed that the control has already been installed on the engine.

> **ⓘ NOTE**
> **Many applications are delivered pre-configured, calibrated, and tuned. These units do not require the use of the Service Tool.**

Description

The Service Tool software is used to configure, tune, and troubleshoot the L-Series control. This chapter describes installation and use of the Service Tool. It identifies the parameters available that can be viewed. It also provides detailed information on configuring and setting up the L-Series to the customer-specific field application.

The Service Tool software resides on a PC (personal computer) and communicates to the L-Series through connector pins 4 and 6. An external RS-232 transceiver is necessary to make communications possible with the Woodward L-Series service tool. A connectivity kit (Woodward # 8923-1061) can be purchased from Woodward to accomplish this.
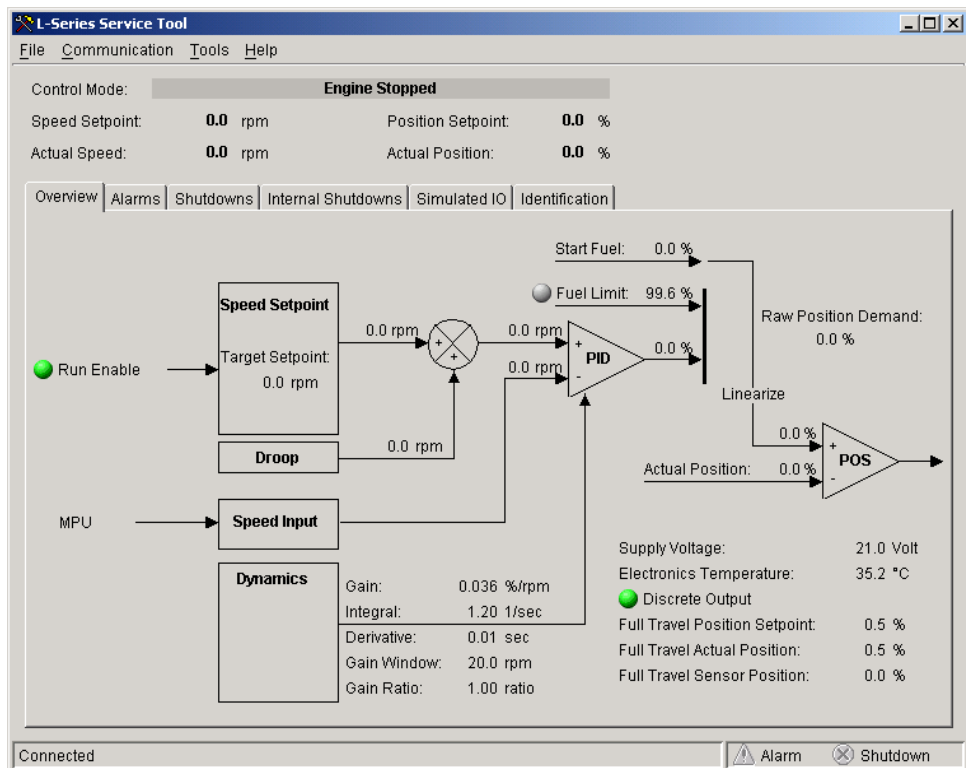

Figure 5-1. Example Service Tool Screen

The following hardware is required to work with the L-Series control:

- PC-compatible laptop or desktop computer* with at least one available serial communications port, and Windows 95/98/2000/NT/Me/XP as the operating system.
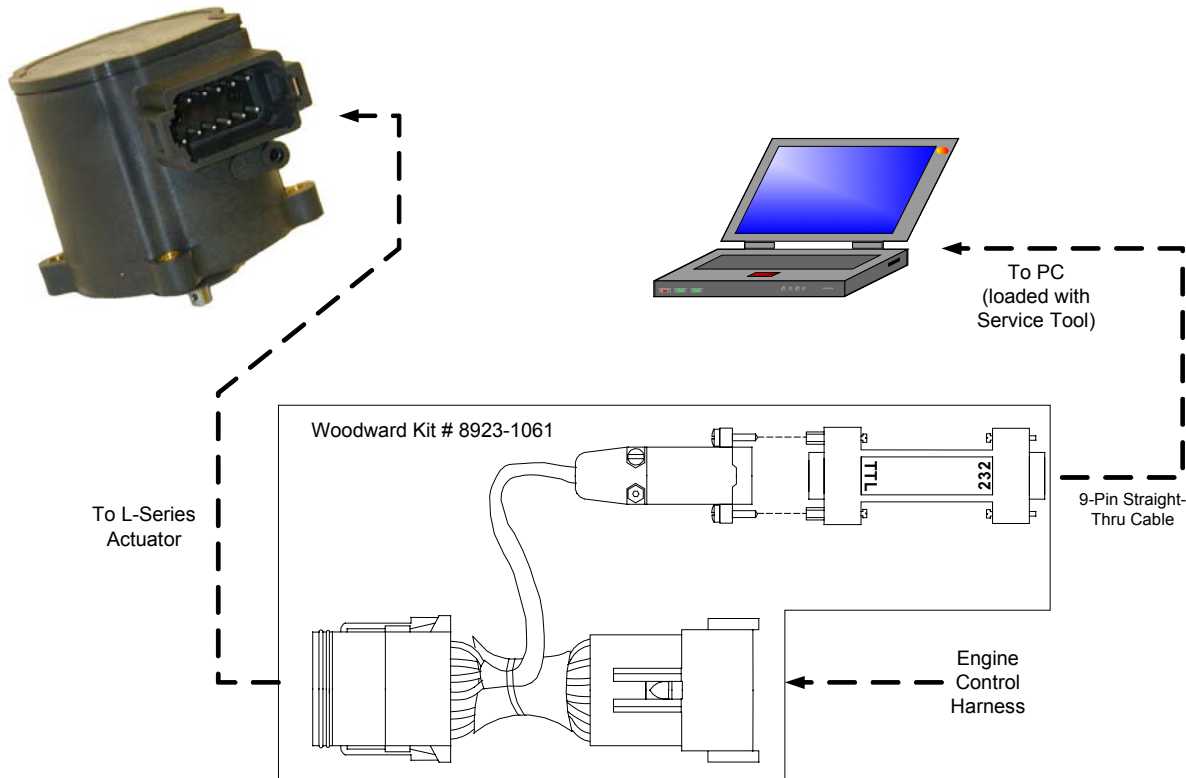- Programming/datalink harness as shown in Figure 5-2.

In addition to the hardware, the following are the distributions of tool software needed to communicate with the control:

- Woodward part number 9927-1222, L-Series Service Tool

⚠️ ***—CAUTION**
There is a potential for serial port damage when communicating with the L-Series control. This is caused by a difference in ac voltage between neutral and earth ground. If the PC RS-232 port ground is referenced to ac neutral, and the L-Series control is referenced to battery ground (ac earth ground), a large amount of current can be experienced. To avoid this situation, we strongly recommend placing an isolation transformer between the ac outlet and the PC.

Pinouts Viewed Looking into Control Connector and Computer Connector

Figure 5-2a. Programming Harness Connections