

HT200

Hydrostatic Drive



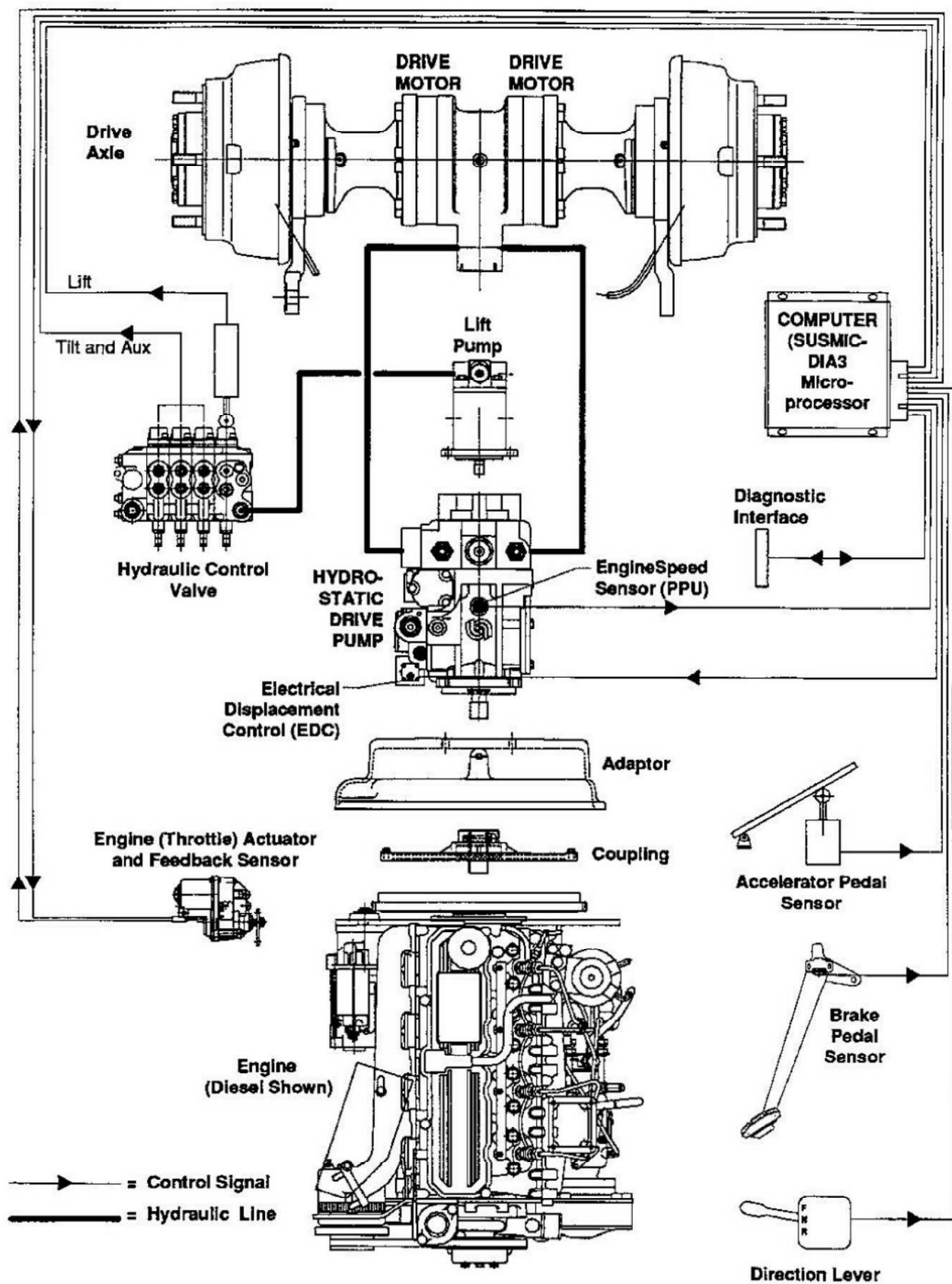
TECHNICAL TRAINING

Copyrighted Material
Intended for CLARK dealers only
Do not sell or distribute

Contents

About this Class.....	2
Safety.....	3
Section 1. Introduction to Hydrostatic Drive.....	4
System Description.....	4
Microprocessor.....	5
LED Indicators.....	6
Dia-3 Tester.....	7
Sensors, Switches, and Actuators.....	8
System Drawing.....	9
Electrical Components.....	10
Section 2. Programming the Susmic Dia-3.....	18
DIA-3 Quick Reference.....	18
Sensor Set-up Settings.....	18
Sensor Error Codes.....	19
Sensor Check Codes.....	19
Programming Procedures.....	20
Susmic-Dia 3 Operation Manual Version	25
Custom Adjustments of Driving Characteristics Version 6.4.....	43
Custom Adjustments of Driving Characteristics Version 6.3.....	43
Sensor and Actuator Error Diagnosis.....	56
Sensor Check Procedure.....	58
Section 3. Troubleshooting.....	67
Using Diagnostic LEDs.....	67
Driving Behavior Abnormal.....	69
Does Not Reach Maximum Speed.....	70
Section 4. Hydraulic System.....	72
Hydrostatic Transmission Specifications.....	73
System Drawing.....	74
Hydraulic Schematic.....	75
Pump Components.....	76
Adjusting Charge Pressures.....	77
Adjusting Main Pressures.....	78
Towing a Disable Vehicle.....	80
Start-Up Procedures.....	80
Section 5. Component Removal and Replacement.....	82
Hydrostatic System Plumbing.....	82
Drive Axle.....	83
Hydrostatic Pump.....	84
Pump Mounting.....	85
Axle General Arrangement.....	86
Engine Adjustments.....	87
Engine Idle Speed Adjustment.....	87
Maximum Governor Speed Adjustment.....	87

©Copyright Clark Material Handling Company 1998.



Electrical Components

Control System

The following control system components are mounted in various locations:

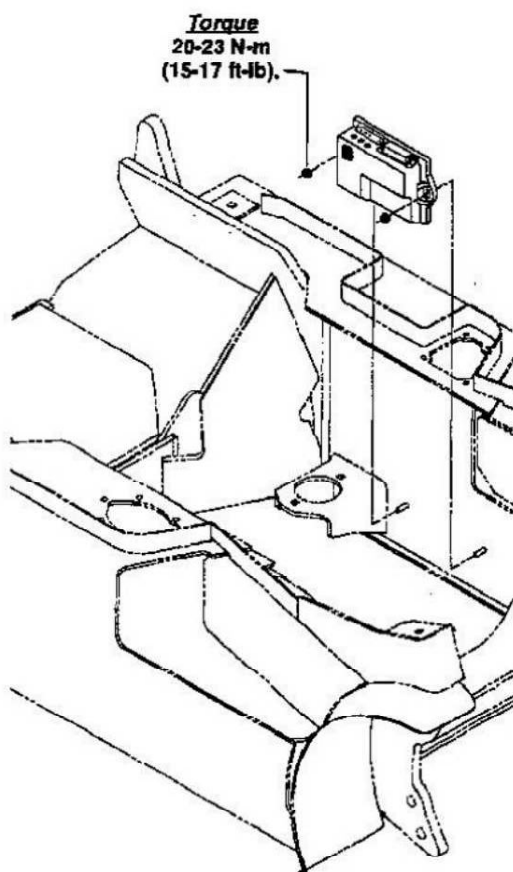
- Computer
- Engine (throttle) actuator
- Brake pedal sensor
- Accelerator pedal(s) and sensor
- Direction control switches
- Lift control sensor
- Tilt and aux control sensors.

Location and mounting of these controls are illustrated on the following pages. Service notes are provided where special procedures are necessary.

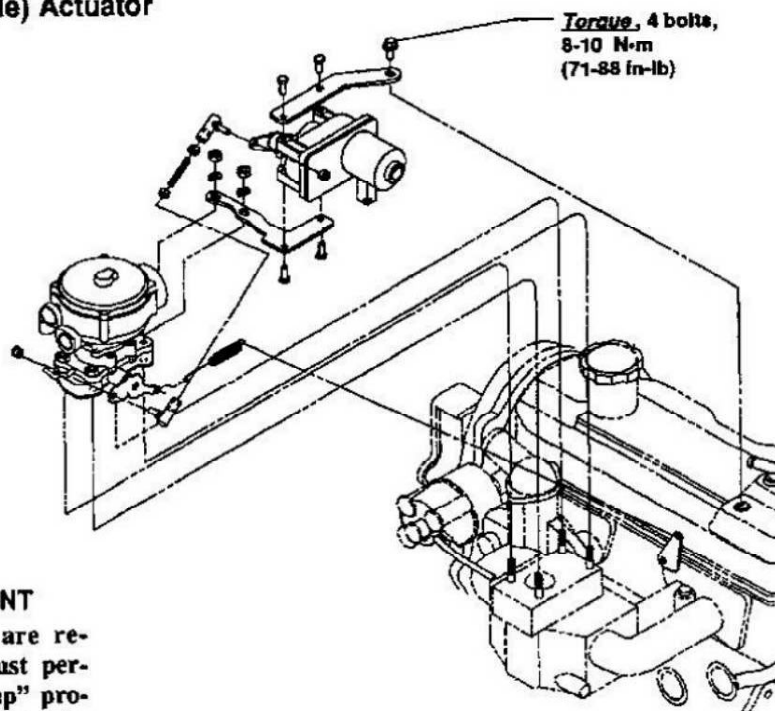
IMPORTANT

After the computer or sensors are replaced, you must perform the "set-up" procedures described in Section 2 of this Group.

Computer



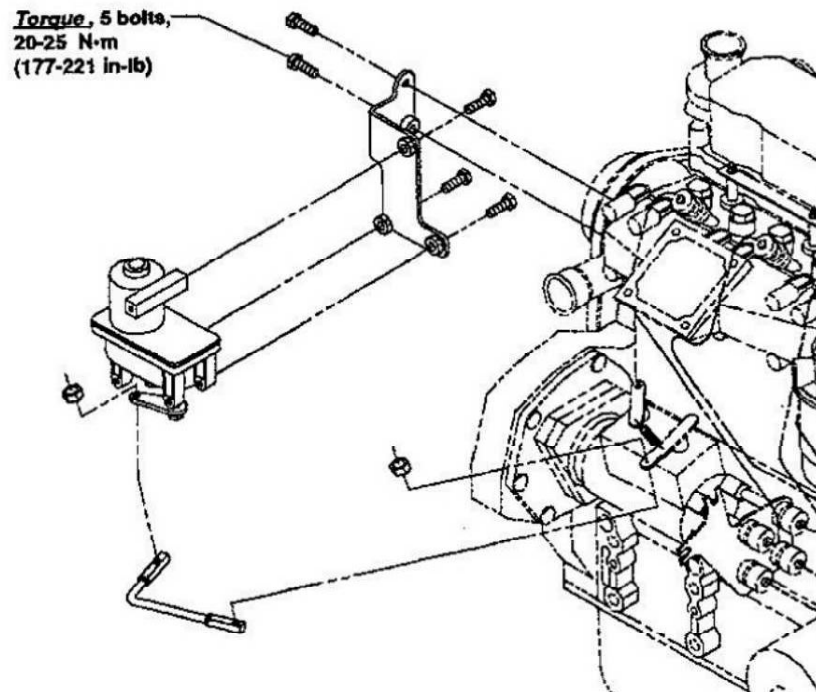
Engine (Throttle) Actuator



IMPORTANT

After sensors are replaced, you must perform the "set-up" procedures described in Section 2 of this Group.

Actuator for LPG Engine

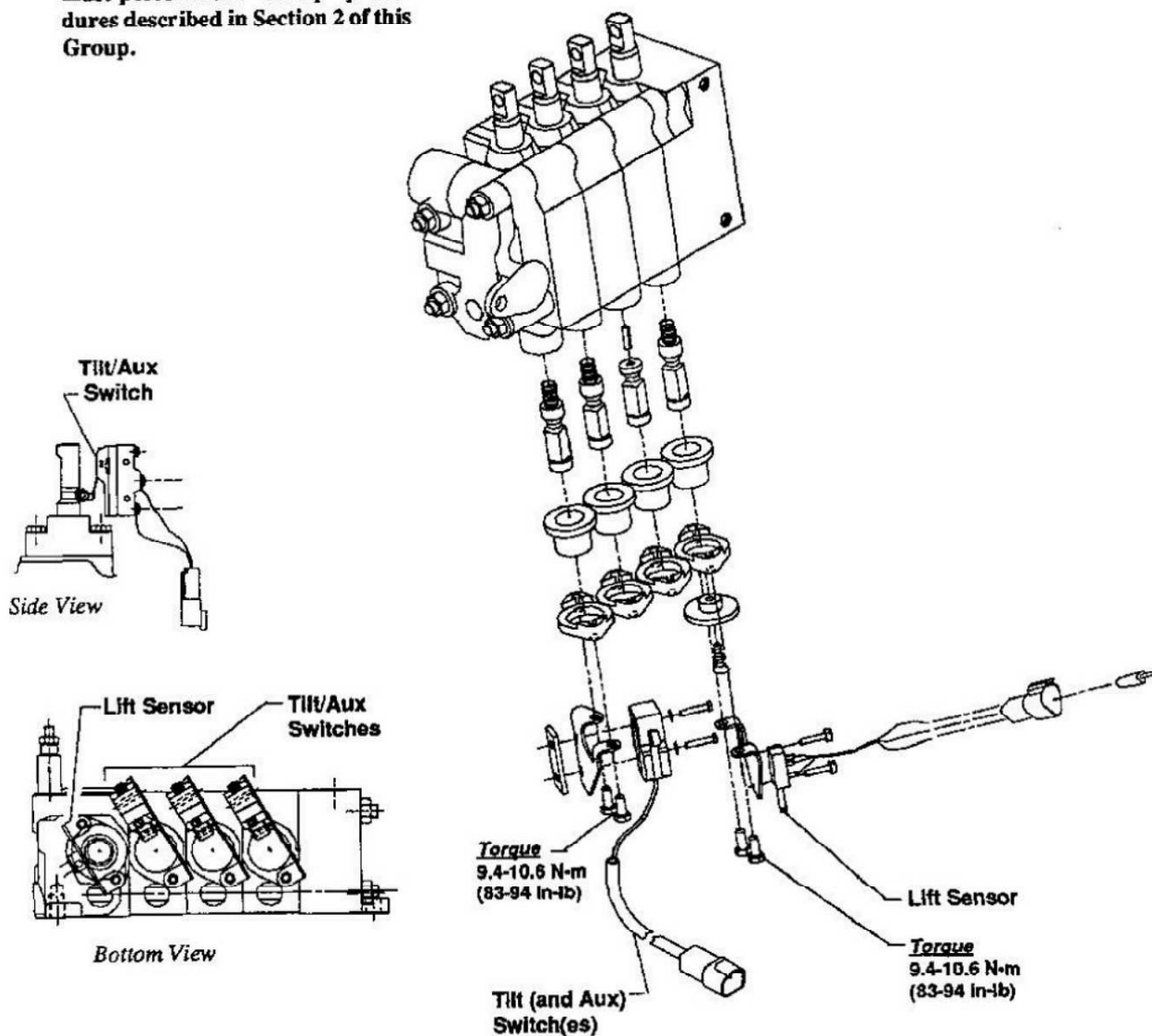


Actuator for Diesel Engine

Lift, Tilt, and Aux Control

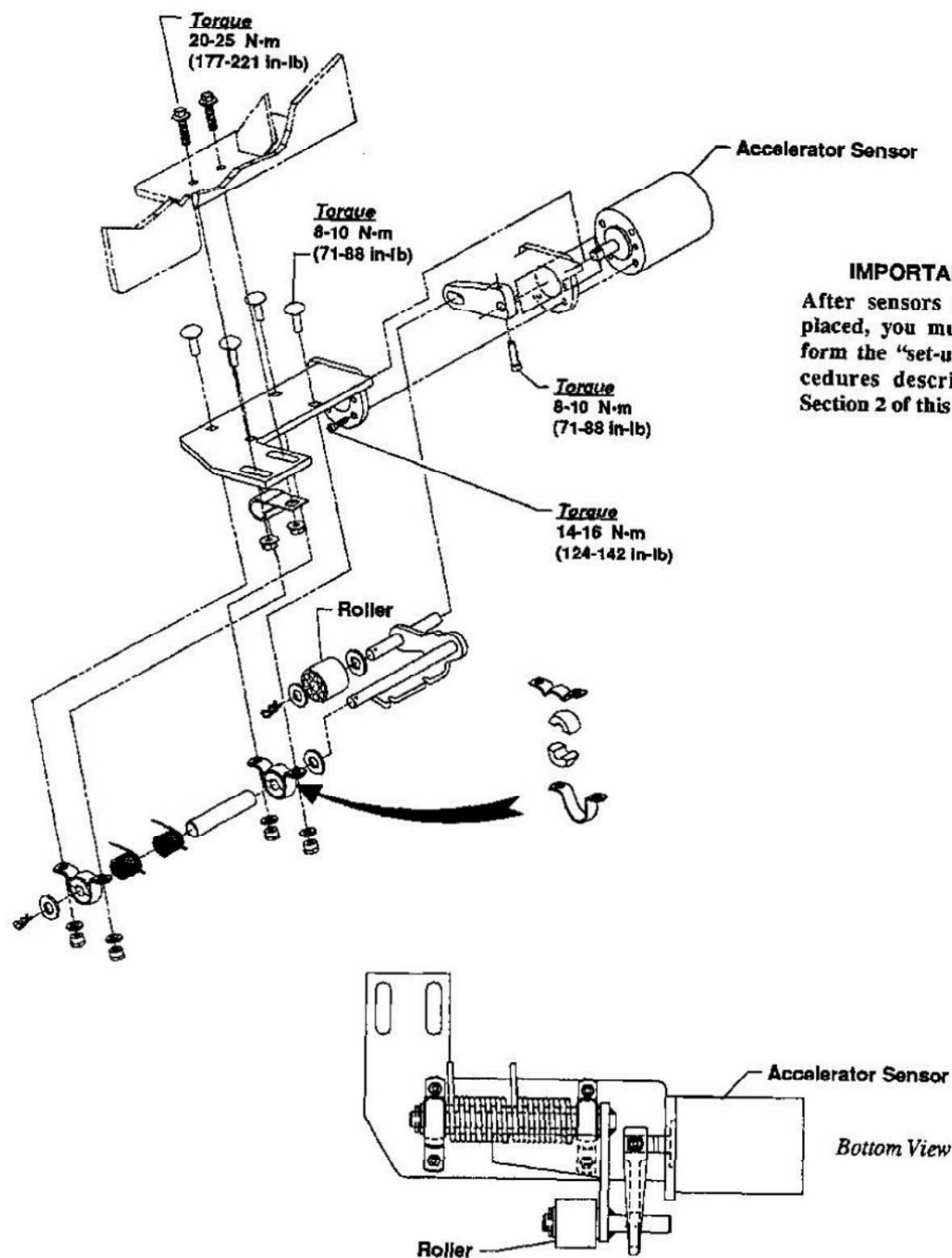
IMPORTANT

After sensors are replaced, you must perform the "set-up" procedures described in Section 2 of this Group.

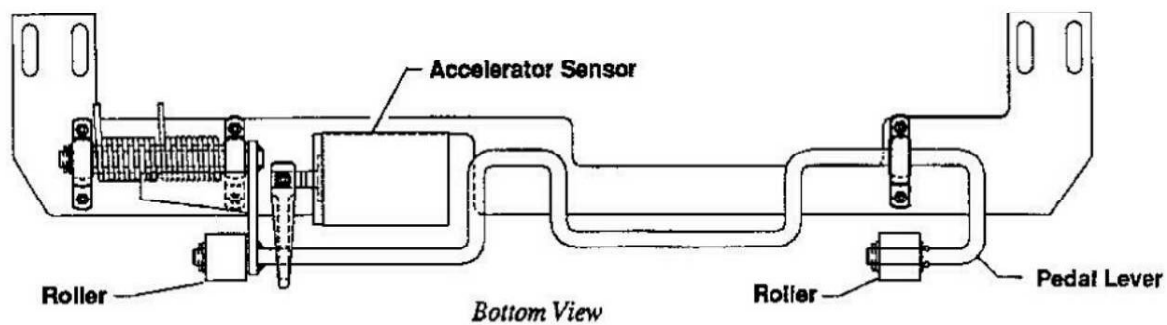
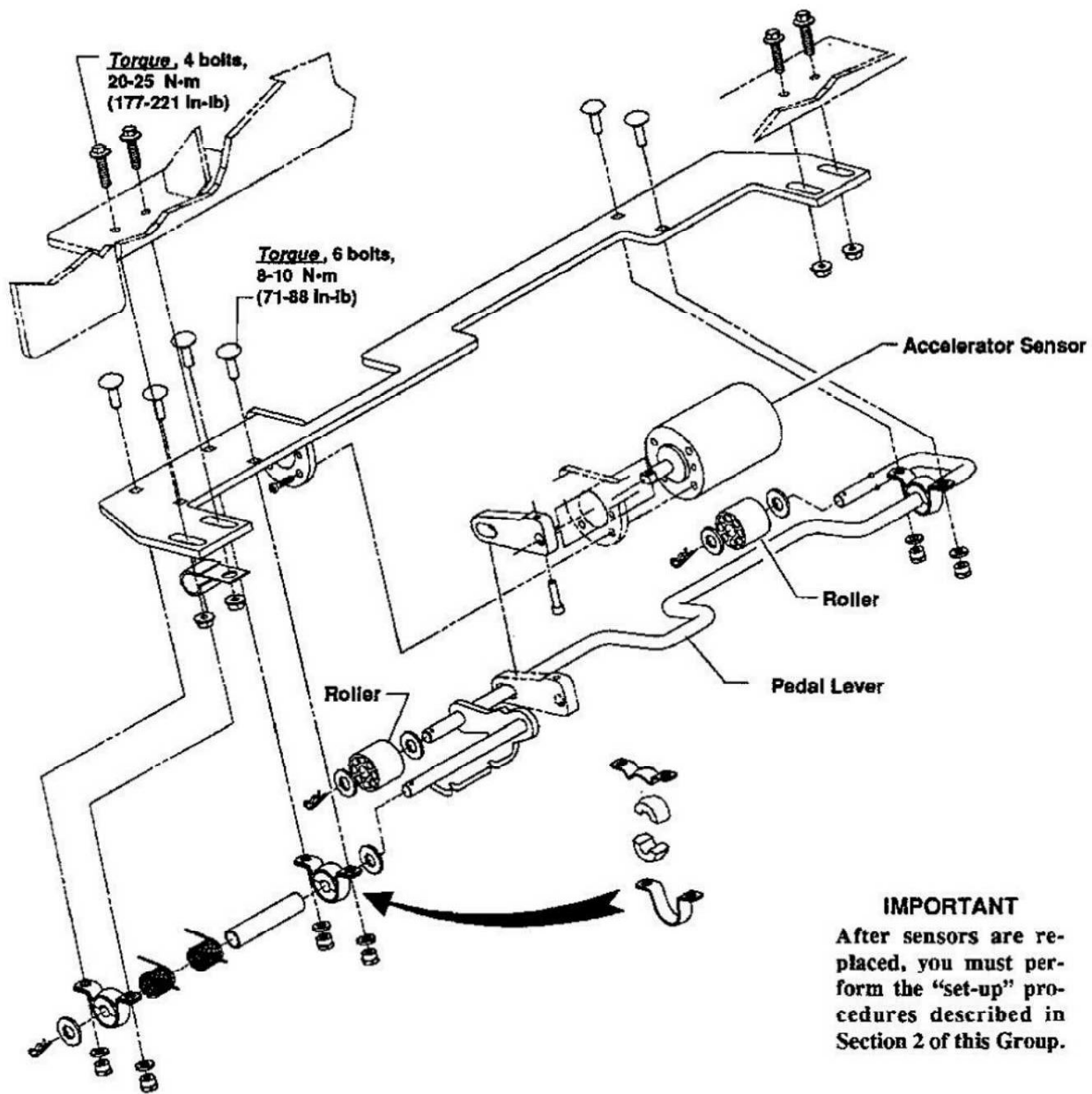


Accelerator Pedal(s)

Single-Accelerator Pedal System



Two-Pedal System—Pedal Lever and Sensor



Two-Pedal System—Pedals and Direction Switches

NOTE

The single-accelerator pedal hydrostatic truck uses the standard direction control lever and switch to provide a direction signal to the computer.

The two-pedal truck uses the two pedals and two switches shown here and on next page to control direction.

