

15. Motherboard Replacement



Prior to beginning ensure you have a clean and dry workspace. Lay out required tools from spares kit and have paper towels available. It is a good idea to have a container to keep fasteners in as they are removed. Read through the instructions fully prior to beginning and make sure you understand what they are asking you to do.

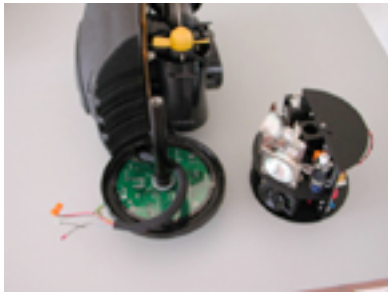
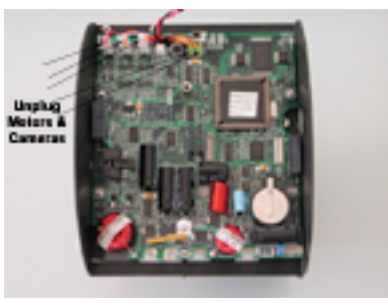
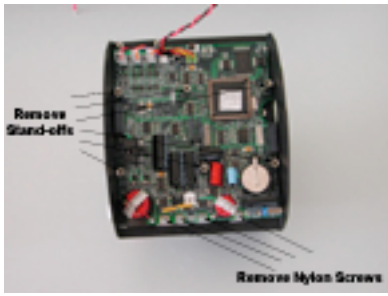
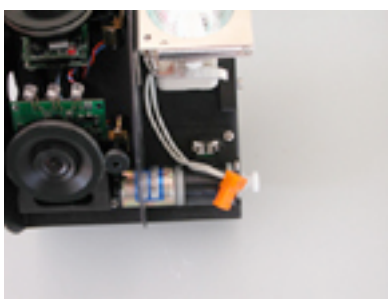
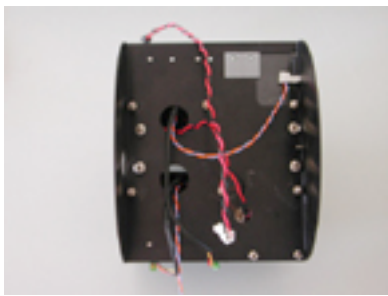
Tools Required	Time to complete	Level of Difficulty
<ul style="list-style-type: none"> • 3/16th Socket Driver • Small Straight Blade Screwdriver • 1.5mm Hex Ball Driver 	<ul style="list-style-type: none"> • 30 minutes 	<ul style="list-style-type: none"> • Moderate • Electronics Care Required




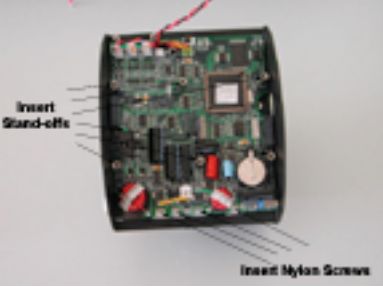
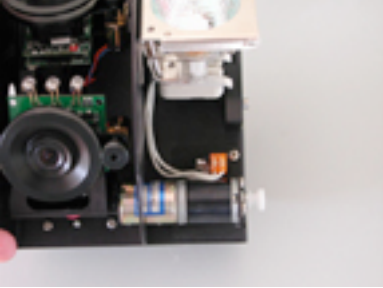

Prior to working on LBV make sure the power is off and the umbilical is DISCONNECTED.

Removal

<p>NOTE</p>	<p>Follow instructions to remove RF board, video overlay board, view port, shell, ballast tray and protective bumper frame prior to continuing.</p> <ol style="list-style-type: none"> 1. Bumper Frame Replacement 2. Ballast Tray Replacement 3. Shell Replacement 9. View Port Replacement 13. Video Overlay Replacement 14. RF Replacement
	<p><u>Step 1</u></p> <p>Place LBV with electronics facing you.</p>
	<p><u>Step 2</u></p> <p>Carefully unplug power connector, and two small green JST connectors from motherboard.</p>

	<p><u>Step 3</u></p> <p>Remove camera chassis from center rod feeding service loop through hole in camera chassis.</p>
	<p><u>Step 4</u></p> <p>Unplug motors and camera connectors.</p>
	<p><u>Step 5</u></p> <p>Remove 4 white nylon screws securing motherboard and 6 standoffs.</p>
	<p><u>Step 6</u></p> <p>Unplug light from motherboard.</p>
	<p><u>Step 7</u></p> <p>Carefully remove motherboard.</p>

Installation

 <p>Connect Wires</p>	<p><u>Step 1</u></p> <p>Carefully fit new motherboard. Feed motor and camera wires into cut out on motherboard in this order and connect.</p> <ol style="list-style-type: none"> 1. Tilt motor 2. Focus motor camera 1 3. Focus motor camera 2 4. Camera 1 5. Camera 2
 <p>Insert Stand-offs</p> <p>Insert Nylon Screws</p>	<p><u>Step 2</u></p> <p>Insert and tighten 4 nylon screws and 6 standoffs. Careful not to over tighten nylon screws and pinch any wires.</p>
	<p><u>Step 3</u></p> <p>Connect light to outside connector for camera one.</p>
	<p><u>Step 4</u></p> <p>Reconnect power connector and two small green JST connectors. One green connector is for motor control and the other is for the sensor board. They are a different number of pins.</p>
<p>TEST & Calibrate</p>	<p>Test motherboard prior to installing view port. Calibrate camera angle indicator prior to installing camera housing end cap.</p>

<p>NOTE</p>	<p>Follow instructions to install RF board, video overlay board, view port, shell, ballast tray and protective bumper frame.</p> <ol style="list-style-type: none">1. Bumper Frame Replacement2. Ballast Tray Replacement3. Shell Replacement9. View Port Replacement13. Video Overlay Replacement14. RF Replacement
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