



Priority Level: Low — Useful Information

Attention:	All Service Personnel	Bulletin: SB-035 Date: 7/17/2007
Products:	All GLOBAL VR® Driving Games	
Issue:	New Immersion Force Feedback PCB provides high reliability, plug-and-play compatibility, and reduced cost.	

Introduction

GLOBAL VR is now using a newly designed force-feedback steering PCB from Immersion® Corporation, a leading developer and licensor of touch feedback technology. The new RoHS-compliant PCB has been designed to meet the high level of reliability demanded by the coin-op market.

The updated PCB is completely plug-and-play compatible with all *Need for Speed*™ cabinets. It will also be installed in the upcoming, highly anticipated release of EA SPORTS™ NASCAR Racing.

GLOBAL VR will provide an extended one-year warranty on this part.

Upgrading Existing PCBs

The new PCB is completely plug-and-play compatible with all *Need for Speed*™ cabinets and requires no setup or configuration. The connectors are in the same positions as on the previous PCB. The older dual-PCB system is shown for reference in Figure 2.

Refer to pictures on page 2 and perform the steps below.



CAUTION: To prevent electrostatic discharge (ESD) damage, handle PCBs by the edges only and use a grounding wrist strap or similar precaution.

1. Disconnect the cabinet from AC Power.
2. Disconnect all cables from the existing PCB(s). (For dual-PCB systems, you can leave the ribbon cable attached and remove it with the two PCBs.)
3. Remove the screws that secure the mounting feet to the cabinet, and remove the PCB(s).
4. Install the mounting feet shipped with the new PCB, and use them to secure the PCB to the cabinet where you removed the old PCB(s).

Note: The mounting feet shipped with the PCB are tall enough to provide clearance for the components on the back of the PCB. Smaller mounting feet should not be used.

5. Connect all cables.
6. Reboot the game. The steering will automatically calibrate.
7. Play a game to verify proper operation.

Which PCB do I Have?

You can easily recognize the new PCB by the bare copper area on the board surface, as shown in the picture below. The older PCB does not have this feature.

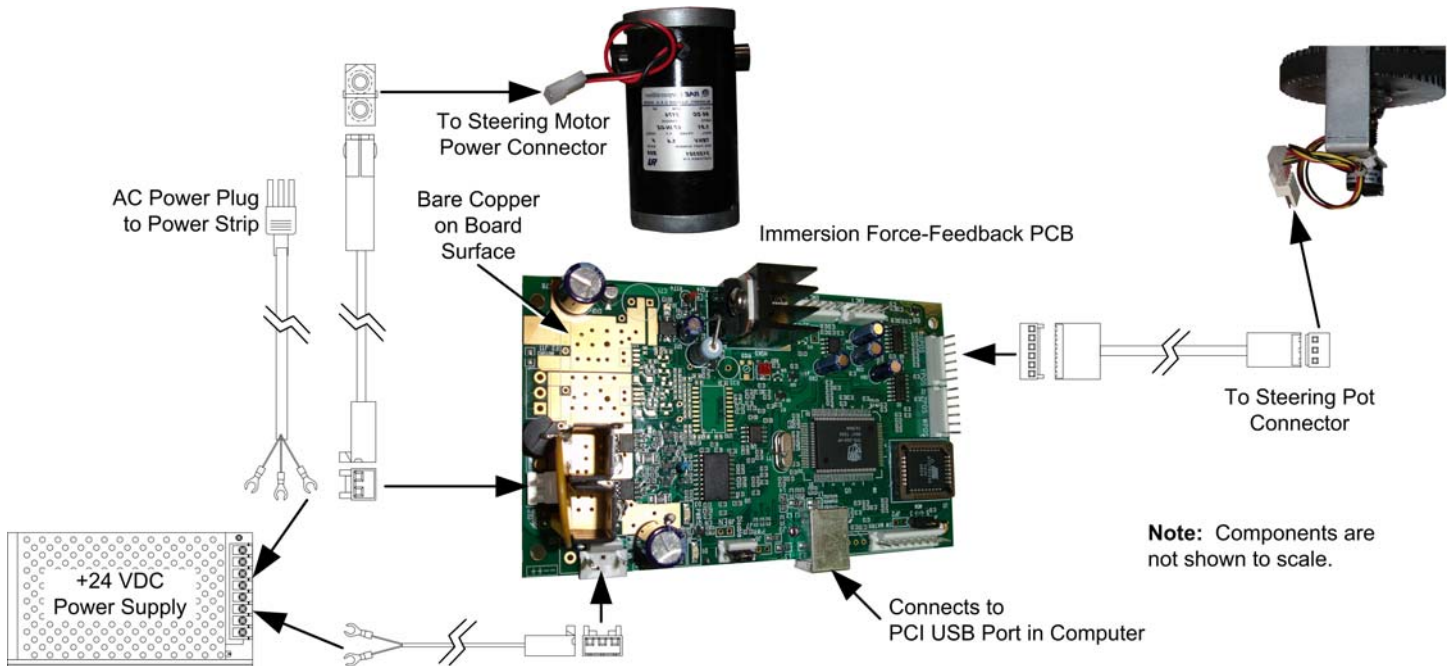


Figure 1. New Force-Feedback Steering PCB with Connections

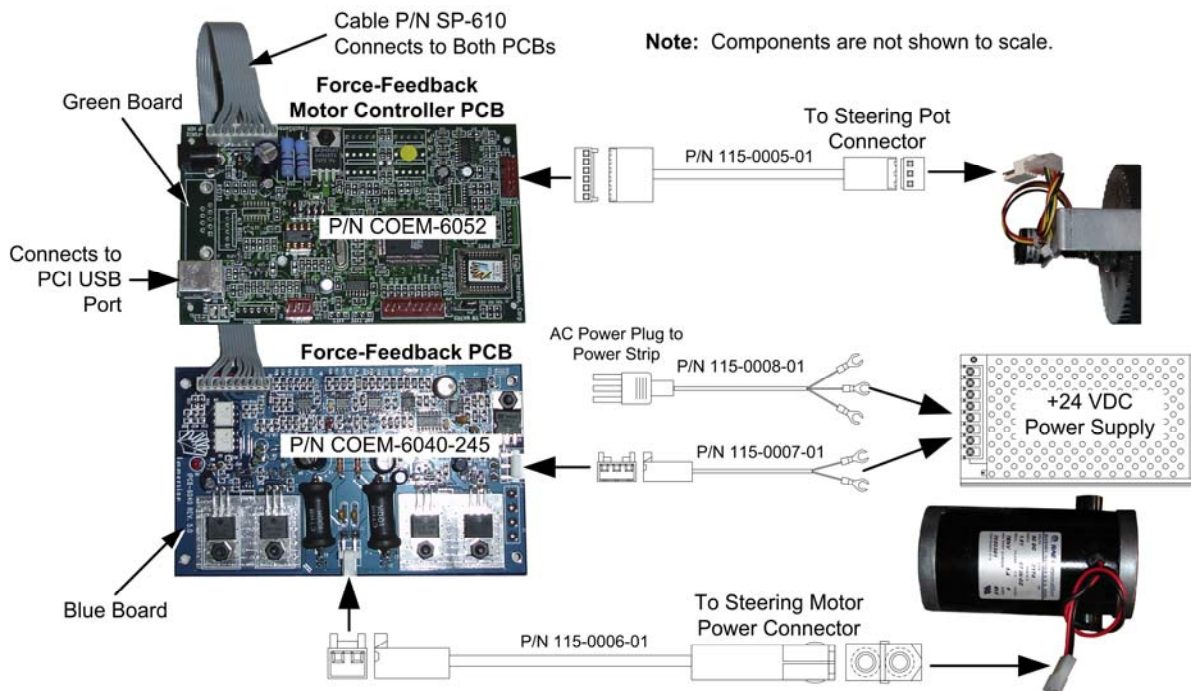


Figure 2. Old Dual-PCB System with Connections