

# Golf Control Panel Conversion Instructions

Document Part #: 040-0079-01

This document describes the steps for upgrading the control panel on an old golf cabinet for use with an EA SPORTS™ PGA TOUR® Golf Conversion Kit. This document assumes that you are also performing the conversion procedures described in the *Conversion Kit Instructions* document, Part # 040-0012-02.

## Control Panel Upgrade Components

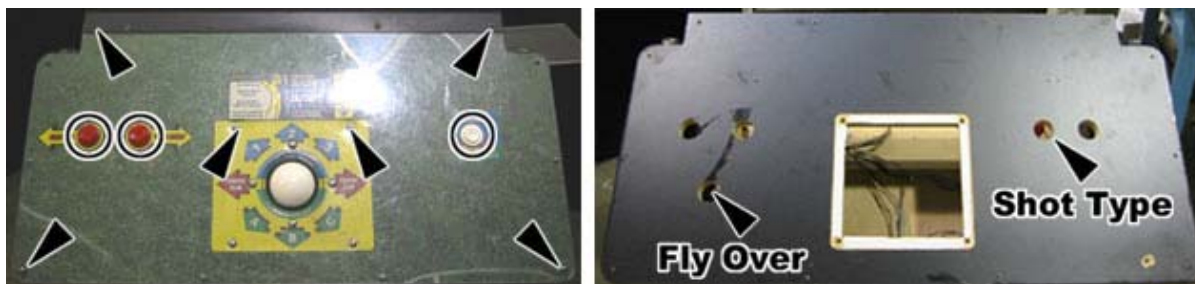
Description	Qty	Part Number	Description	Qty	Part Number
3" Trackball with Mounting Plate	1	56-0100-HLWB	Red Push Button with Micro Switch	1	58-9100-LG
White Push Button with Micro Switch	4	58-9111-LG	Trackball Tape	1	PGAK-AW-21
<b>Artwork:</b>					
Control Panel Decal	1	PGAK-AW-01	Shot Type Decal 2.5"x2.5"	1	PGAK-AW-12
Shot Shaping Decal	1	PGAK-AW-02	Fly Over Decal 2.75"x3.5"	1	PGAK-AW-13
Forward Swing Decal	1	PGAK-AW-03	Start Options Decal	1	PGAK-AW-14
Swing Basics Decal	1	PGAK-AW-04	Rotate Golfer Decal 3"x2"	1	PGAK-AW-15
Circle Decal 2.25" dia	1	PGAK-AW-05	Real Golfers Decal	1	PGAK-AW-09
GVR Logo Label	1	PGAK-AW-06	Left Turn Decal	1	PGAK-AW-10
Warning Label 1.5"x5"	1	PGAK-AW-07	Right Turn Decal	1	PGAK-AW-11
Real Courses Decal	1	PGAK-AW-08	Real Golf Decal	1	PGAK-AW-23

## Tools Required

- Screwdriver with assorted Torx® Security and Phillips bits
- Assorted nutdrivers or wrenches
- Exacto® knife
- Accurate Ruler or Measuring Tape
- Drill (Optional)
- 1 1/8" hole saw or spade drill bit (Optional)
- Router (Optional for modifying wood control panel)

## Upgrade Steps

Perform the steps in this section to upgrade an old control panel with the new trackball, buttons, and graphics from the kit.



1. Remove the screws that hold the plastic cover to the control panel surface.
2. Remove any carriage bolts that secure the existing trackball assembly to the control panel, as shown by the arrows in the picture above.

3. Disconnect the wires from the buttons. Be sure to label each pair of wires with which button they were connected to.
4. Remove the buttons from the control panel.
5. Depending on your cabinet, it may be necessary to drill new holes in the control panel for the Fly Over and the Shot Type buttons. If you need to drill new holes, refer to the picture of the finished control panel on page 5 to determine where to drill the holes. Use a 1-1/8" Spade Drill bit or hole saw to drill the new button holes in the control panel.

**Caution: Avoid getting drill chips in the electronic components.**



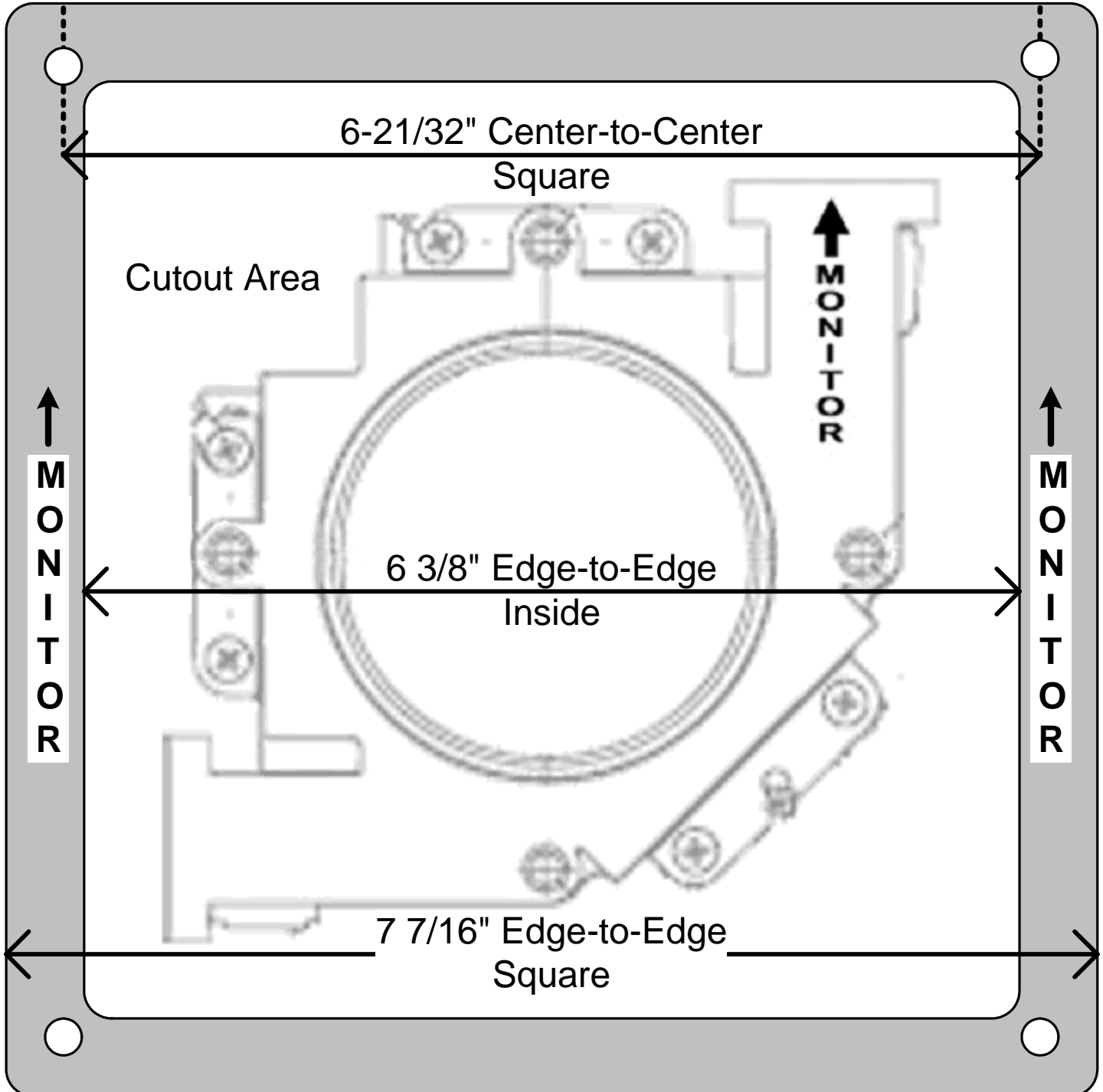
6. Once you have the holes drilled for all 5 buttons, install the new trackball. If your control panel has an existing trackball, you may need to use the existing frame with the new trackball. If so, remove and discard the metal frame from the new trackball.
7. Keep the existing trackball wiring harness with the 6-pin Molex<sup>®</sup> connector to connect the trackball to the Jamma Conversion board later.
8. If your control panel does not have the proper holes to mount a trackball, you will need to cut the holes. The templates on next two pages are provided as a general guide to prepare the control panel surface to install the trackball. Please use accurate measurements as the exact size of the templates may vary in printing.

## Trackball Mounting for Wood Control Panels

The Trackball is pre-installed in a metal frame mounting plate so it can be easily mounted to most wooden control panels.

Use the template below as a guide to cut and route the control panel for the trackball. Be sure the arrow with the word **MONITOR** is pointing towards the monitor in the cabinet when referring to the template.

Template drawing may not be to scale. Use accurate measurements.

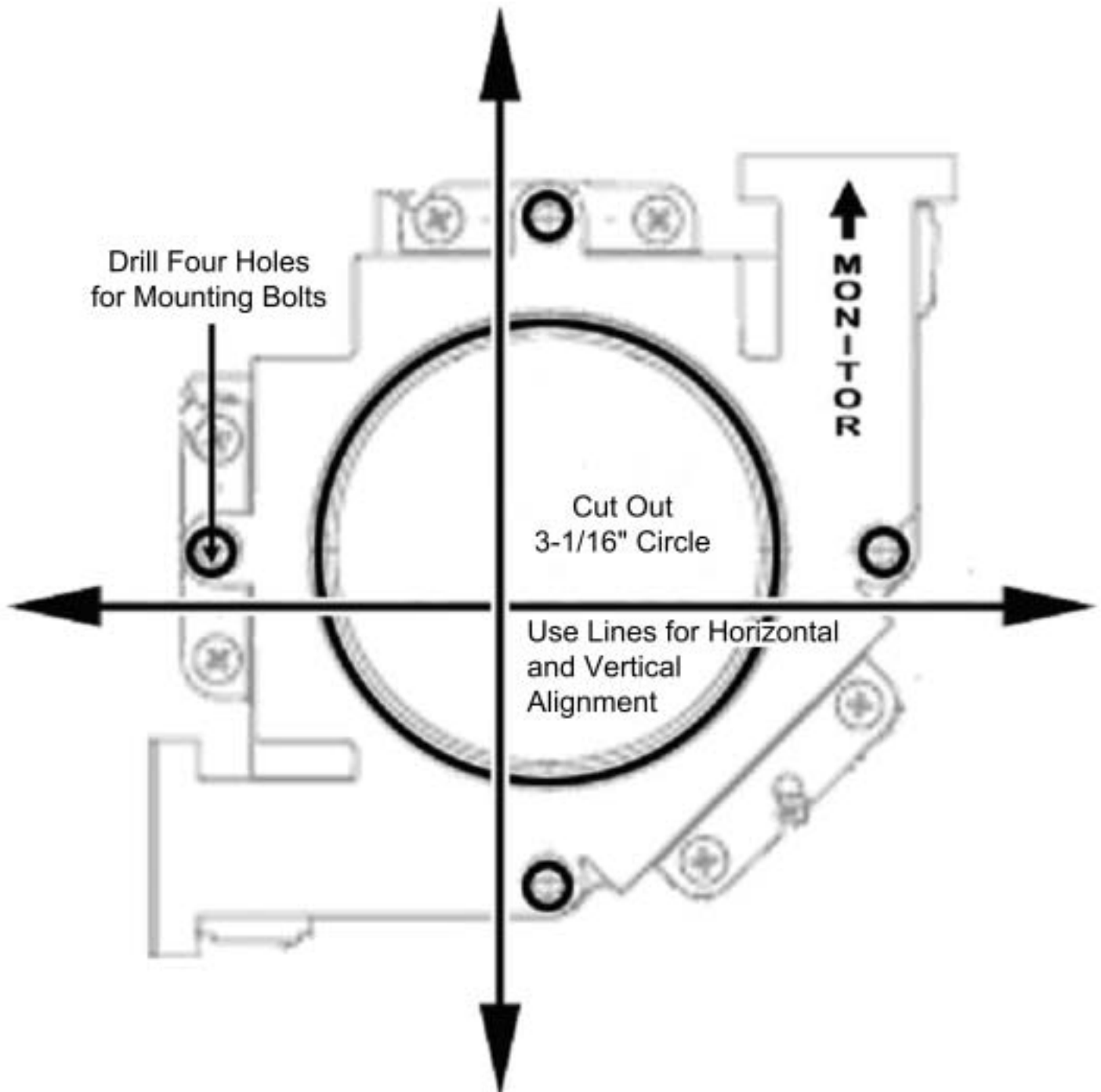


## Trackball Mounting for Metal Control Panels

To mount on a metal control panel, remove the Trackball from the metal frame (this is used only for wood control panels). Use four (4) 10/32 x 3" carriage bolts with washers and nuts to mount the Trackball to the Metal control panel.

Use the drawing below as a guide to cut the control panel for the trackball. Be sure the arrow with the word **MONITOR** is pointing towards the monitor in the cabinet when referring to the drawing. Square bolt holes are recommended to prevent the carriage bolts from turning.

Template drawing may not be to scale. Use accurate measurements.



## Apply the Control Panel Graphics

Confirm that all pre-existing artwork is removed and the control panel surfaces are clean.

You must follow the Control Panel and Graphics setup exactly as it is detailed in this document to comply with the Conversion Kit Agreement. You will fail to comply with the Conversion Kit Agreement if you place the EA SPORTS™ logos, GLOBAL VR® logos, or any other cabinet graphics in a wrong position. You must also remove all pre-existing artwork that does not belong with the Conversion Kit.

Refer to the picture below as you place the graphic stickers on the control panel. The exact position of each sticker will depend on the size and shape of your control panel. In order to comply with the Conversion Kit Agreement, the finished control panel should look like the picture below:



Figure 1. Finished Control Panel

1. Cut a 3-1/16 inch hole in the control panel background graphic for the trackball. You can use the double-sided trackball tape as a template to cut the hole in the graphic. Position the hole 14-15/16 inch from the side, and 5-1/4 inch from the bottom edge of the graphic to the edge of the trackball hole, as shown in the picture that follows.
2. Place the control panel background graphic over the control panel. Line up the small lines in the graphic with the top and bottom edge of the control panel. Once you have the graphic lined up correctly, peel off the backing and apply the graphic.
3. Using a new Exacto® knife, use the outside edge of the control panel as a guide to cut off the excess control panel background graphic material.

- Cut the graphic material from the five (5) button holes shown by the arrows below.



- Place the Trackball sticker over the trackball. Use the yellow arrows on the trackball sticker and the white lines in the control panel background graphic to align the sticker.
- Center the **Shot Shaping** sticker 3 white lines below the top edge of the control panel. Once the sticker is aligned correctly, peel off the backing and apply the sticker.



- Refer to the figure below for button graphic placement.

**Note:** The button graphic stickers in the figure below are shown with white backgrounds to clearly indicate where the graphics are placed on the control panel. Your kit will contain button stickers with clear backgrounds.



- Place the **Real Courses**, **Real Golf**, and **Real Golfers** graphic stickers across the bottom edge of the control panel as follows:
  - Place the Real Golf sticker directly under the Trackball sticker.
  - Place the Real Courses sticker on the bottom left, and the Real Golfers sticker on the bottom right, equally spaced from the Real Golf sticker.
  - Once the graphics are lined up correctly, peel off the backing and apply each sticker.
- Place the **Turn Left**, **Turn Right**, **Fly Over**, and **Rotate Golfer** graphic stickers on the left-hand side of the control panel as shown in part 7 of the picture above, using the white lines in the control panel background graphic to align each sticker correctly.
- Place the **Shot Type** and **Start** graphics stickers on the right-hand side of the control panel as shown in part 8 of the picture above, using the white lines in the control panel background graphic to align each sticker correctly.



11. Place the **Swing Basics** sticker on the right-hand side of the control panel, above the **Real Golfers** Sticker, and aligned with the edge of the **Shot Type** sticker, as shown by the arrow in part 9 of the picture above.
12. Place the **Warning Sticker** on the right-hand side of the control panel, one white line below the Shot Shaping Sticker, as shown by the arrows in step 10 of the picture above.



13. Place the **EA SPORTS™** logo on the left-hand side of the control panel, aligned with the **Shot Shaping** sticker.
14. Place the **GLOBAL VR®** logo on the right-hand side of the control panel, aligned with the **Shot Shaping** sticker.
15. Once all of the control panel graphics have been applied, re-install the clear plastic control panel cover. Install the trackball carriage bolts first, if used, and then install the outside screws to ensure there are no warps or bubbling in the plastic cover.
16. Install the buttons on the control panel. The **red** button is the **Start** button.
17. Refer to the labels you put on the button wires earlier and connect them to the appropriate buttons. If your cabinet had five buttons on the control panel before the conversion, you can use all of the old wires to connect the new buttons to the Jamma harness.
18. If your cabinet **did not** have five buttons on the control panel before the conversion, connect the 2-Button wire harness (part number 115-0019-01) from the Button input, **J6** on the Jamma Conversion board to the **Fly Over** and **Shot Type** buttons on the Control Panel. Each connector on the harness is labeled with which button it connects to.
19. Connect the trackball Molex® connector to the trackball harness from Trackball In, **J5**, on the Jamma Conversion Board in the cabinet service tray.
20. Use wire ties to secure the wires so that they won't get pulled or pinched when the control panel and service tray are opened or closed.
21. Complete the conversion procedures as described in the *Conversion Kit Instructions* document, Part # 040-0012-02.