

- Blinking: indicates that either the Field Management System is preset for the MATCH or it's during a MATCH and the corresponding ROBOT has lost connectivity.
- Off: indicates that the MATCH has not started yet, but the ROBOT is linked and disabled. – If the amber LED is on, the E-stop button has been pressed.
- One Timer (in the PORTAL adjacent to PLAYER STATION 1): displays the official time remaining in AUTO, TELEOP, and TIMEOUTS and marked with white tape along the bottom edge.
- Field Management System hardware and wiring: mostly located below the center PLAYER STATION shelf.

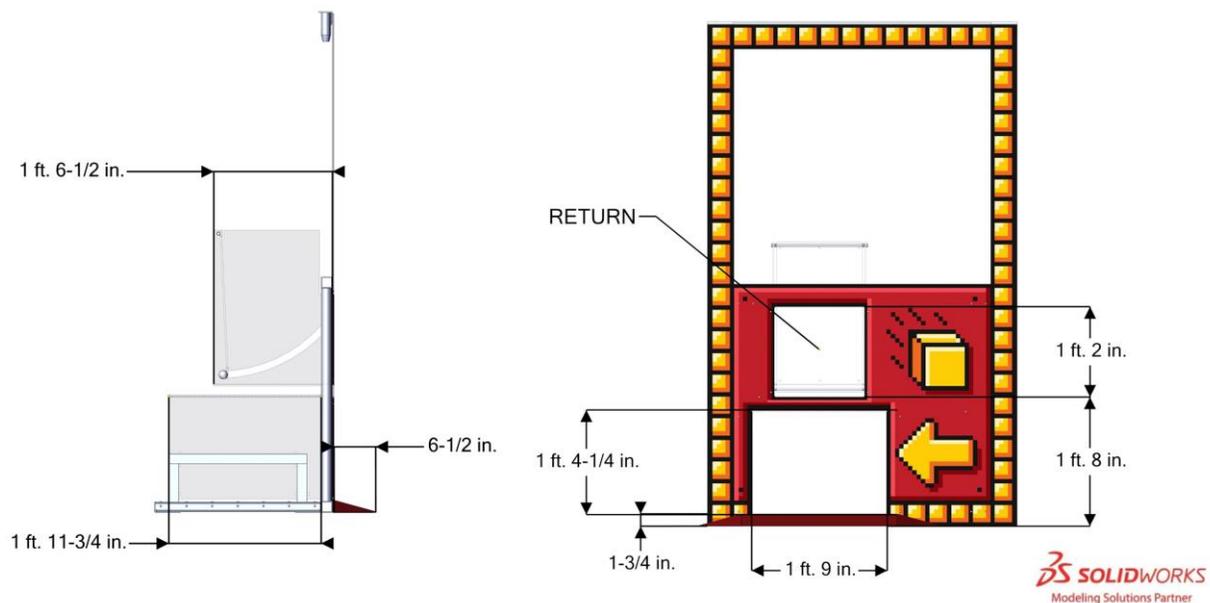
3.6.2 EXCHANGE

An EXCHANGE is a polycarbonate wall 6 ft. 5 ¾ in. (~197 cm) tall by 4 ft. (~122 cm) wide located between PLAYER STATION 1 and PLAYER STATION 2 and used by ROBOTS to deliver POWER CUBES to HUMAN PLAYERS. HUMAN PLAYERS can then either place POWER CUBES in the VAULT or feed them back to the ROBOT through the RETURN.

Each EXCHANGE has a lower opening 1 ft. 4 ¼ in. (~41 cm) tall and is 1 ft. 9 in. (~53 cm) wide used to deliver POWER CUBES to the HUMAN PLAYER. A small ramp, 1 ¾ in. (~4 cm) tall by 6 ½ in. (~17 cm) deep, leads to a series of conveyor rollers. The conveyor rollers are spun by the HUMAN PLAYER to move the POWER CUBE through a polycarbonate tunnel that is 1 ft. 11 ¾ in. (~60 cm) deep.

Each EXCHANGE also features a RETURN used to deliver POWER CUBES to ROBOTS. The RETURN opening is a 1ft. 2 in. (~36 cm) square, centered above the lower opening and is located 1 ft. 8 in. (~51 cm) above the carpet. Behind the RETURN opening is a 1 ft. 6 ½ in. (~47 cm) deep polycarbonate chute. The chute features a swinging wall designed to push the POWER CUBE onto the FIELD.

Figure 3-18: EXCHANGE



3.6.3 VAULT

The VAULT is an aluminum and plastic structure used by HUMAN PLAYERS to turn POWER CUBES in to POWER UPS. There are three (3) columns within the VAULT. Each column is 1 ft. 1-1/2 in. (~34 cm) wide by 3 ft. 3-1/4 in. (~100 cm) tall with the bottom located 1 ft. 3-1/2 in. (~39 cm) above the carpet. Each of the three (3) columns in the VAULT correspond to a POWER UP. When standing in the