Large Equipment Set Handbook

Event Overview

Overview

HD Supply's Top Tech Challenge is a maintenance appreciation program for the maintenance professional.

Games

The event consists of five skill-based games derived from common maintenance activities, and a race car competition. All games are timed to determine the HD Supply Top Tech. The games are: Toilet Repair, Light Bulb Installation, Electrical Outlet Installation, Shower Head Replacement, Pipe Fitting Installation, Race Car Competition.

Equipment

The event requires the following minimum equipment: one laptop computer with MS Excel (scorekeeping), 6 tables (size of 8ft long x 30" wide), and one electrical outlet for the race track timer. Additional tables and equipment may be needed for scorekeeping, registration and other activities.

Staffing

Each of the five games can accommodate two players competing at the same time. It is flexible on how many game stations can be used depending on the size of the event.

Depending on the volume of competitors, the following staffing levels are recommended.

Event Size of 50 Competitors or Less:

Role	Total
Game Judges (1 per station)	5
Racecar Judges	2 (one per lane)
Racecar check in	1
Scorekeeping	1
Score Runners	1-2

Event Size of Over 50 Competitors:

Role	Total
Game Judges (2 per station)	10
Racecar Judges	2 (one per lane)
Racecar check in	1-2
Scorekeeping	1-2
Score Runners	1-2

Note: Most often the racecar event is held after the games are completed. If that is the case, game judges can be moved to be racecar judges. For events with a high volume of competitors, it is recommended that the racecar competition be run at the same time as the game stations in order to finish the event and enter the scores in a timely manner.

Venue Requirements and Set Up

The Top Tech Challenge equipment all ships inside one large equipment case. The case is about 48" x 48" x 81", is on wheels, and is close to 900 lbs. The case must ship via a freight carrier. Here a couple items to keep in mind with venue selection:

- Does the venue have a loading dock, or will the truck need a lift gate for pickup and delivery? A lift gate can be requested in the event there is not a dock available.

- Will the venue hold the case before and after the time of the event? Typically, the case will be scheduled to deliver the business day prior to the event between 9AM – 4PM and pick up the next business day after the event between 9AM – 4PM.

- Ensure there is a doorway that is accessible to bring the case inside with a flat surface. Although the case is on wheels and can be rolled by 1-2 people, it is very heavy and cannot be pushed over curbs or uneven surfaces.

Specific shipping logistics will be reviewed on the planning call prior to the event

Total Recommended Room Size 2500 sq. ft.
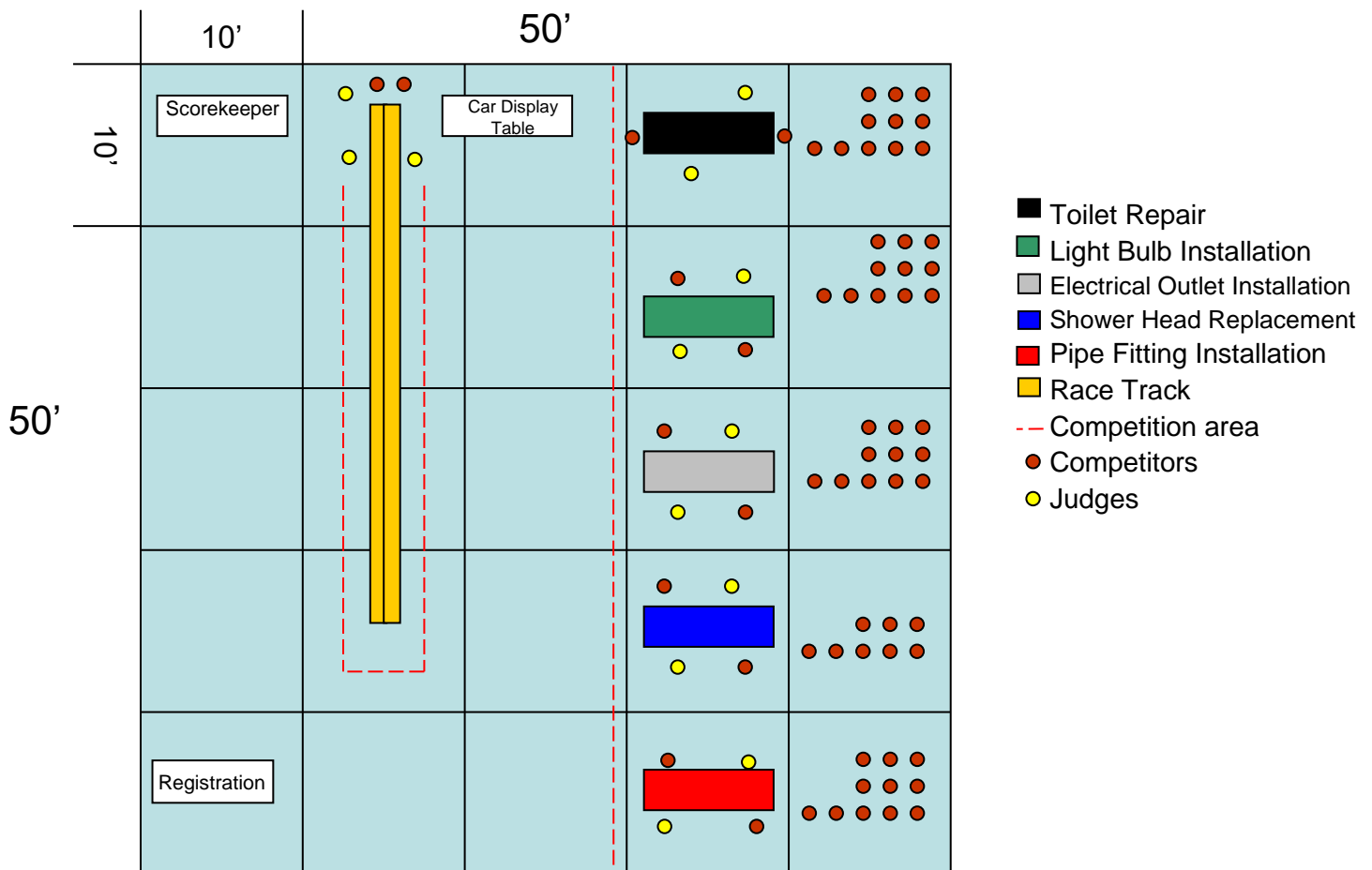
These are the suggested space requirements to allow for ample room and game set up.

Site adjustments may be made as necessary.

Scorekeeping

Supplies

- Competitor score cards – Print one per competitor
- Judge score card sheets – Print multiple copies per judge/game station depending on number of competitors going through each game
- Scorekeeping excel template saved on a laptop

Note:
- Battery operated hand pad timers are used to register scores at each game station. A finish line timer is also supplied for the racetrack and plugs into one standard outlet.
- Each participant will need to be assigned a competitor number on the excel scorekeeping spreadsheet, and they will need to be given the same number on their scorecard at check in.

Scorekeeping Process

1. Before a competitor begins a game, the competitor must inform the judge of their competitor number. Judge will record the competitor's number on the next open box on their judge score card.

2. Once the participant has completed the game's requirements, the judge will record their time from the hand pad timer on the Initial Time row on the participant's card as well as the judge's score card. If the participant had a penalty time, the judge will record their time in the Penalty Time row. The judge then adds the two times together to obtain the Total Time.

3. Official times recorded on the cards may not be disputed. The same time will need to be recorded on both the competitor and judge score card for each run.

4. The judge will retain the judge score card sheet and the competitor will move on the next game with their competitor score card.

5. The score runner(s) will periodically go to each game and pick up the completed judge score cards and hand them to the scorekeeper to enter the data into the master scorekeeping excel sheet.

6. Once the scorekeeper has entered a card's time, the card will need to be marked off as entered in the score sheet file and set it aside until the end of the event.

Competitor Score Card

Judge Score Card

Tallying the Score

Times must be entered into the score sheet excel file in the following format:

Minutes: Seconds. Hundredths of Seconds
0:00.00

Once all of the times have been entered, the scorekeeper should check the worksheet for data errors:

- If any participant has a "DQ" in the Grand Total column, the scorekeeper should double check the judge score cards to make sure the time was not missed upon entry. If there is no time found, it is recommended that the scorekeeper notify the MC to make an announcement to have the competitor come to the scorekeeping table to verify their scorecard.

- If the participant did not finish or compete in a game, they are ineligible to win the overall event, and the score sheet will automatically enter "DQ" in the Grand Total column. The score sheet will not calculate an overall time unless all games have been completed.

- Once all of the participants' times have been entered in the score sheet, review the Winners' Summary where the winners for each award level will be displayed.

- Should there be a tie in any category, the message "TIE — REVIEW SCORES FOR WINNERS" will be displayed in the "Winners' Summary" sheet. To determine who the tied winners are, note the time displayed for that game and place and return to the score sheet to match up the time with participants.

  In the event a tie occurs at any award level, it is up to the discretion of the event host to determine if both competitors will receive an award or if a tie breaker will need to take place. A tie breaker could be as simple as repeating the game both competitors tied in for a "play off."

Toilet Repair Game

Objective: Replace the "old" fill valve and flapper with a "new" fill valve and flapper in the fastest time.

Inventory

2 Hand Pad Timers
2 Timer Display Boxes
2 Game Displays
1 Table Cloth
2 Black Flappers
2 Adjustable, Red Flappers
2 Flush Valve
4 Fill Valve
2 Tank Lever
2 ClickSeal Connectors with Copper Adapter (3/8" x ½")

Game Setup

1. Place the display for the game at the end of the table.

2. Open timer display box; remove hand pad timer and cord. Connect hand pad timer and timer display. Ensure that the blue "L" shaped connection is inserted into the hand pad timer.

3. Place timer display box and hand pad where indicated on table cover.

4. Place 1 fill valve and the red adjustable flapper in front of the start position by the hand pad timer on table.

Competition Instructions

1. Place both hands on timer hand pad until green light comes on.

2. Remove both hands to start the timer and begin the competition.

3. Take the new the fill valve and red flapper to the game display area for assembly.

4. Complete the following in any sequence:

- Unthread the toilet connector from the fill valve shank under the tank.
- Unscrew the locknut under the tank to remove the fill valve.
- Install the fill valve by placing the unit in the tank and threading locknut far enough to keep unit upright.
- Reconnect Click Seal toilet connector to fill valve shank.
- Remove the old, black flapper.
- Install new red flapper on the flush valve.
- Attach flapper chain to any one of the three holes on the tank lever.

5. Place both hands on timer to stop time.

Judge Reset Instructions

1. Remove the red adjustable flapper and replace with the black flapper.

2. Place the red flapper and 1 fill valve at the start position near the hand pad timer on the table.

Light Bulb Installation Game

Objective: to replace 4 old light bulbs with 4 new light bulbs in the least time possible.

Inventory

2 Hand Pad Timers
2 Timer Display Boxes
1 Table Cloth
2 Light Strip Fixtures
16 Light bulbs

Game Setup

1. Place each strip fixture on opposite sides of the table.

2. Screw on 4 light bulbs. Screw in fully then loosen a quarter turn.

3. Place the "new" light bulbs in front of each socket.

4. Open timer display box; remove hand pad timer and cord. Connect hand pad timer and timer display. Ensure that the blue "L" shaped connection is inserted into the hand pad timer.

5. Place timer display box and hand pad where indicated on table cover.

Competition Instructions

1. Place both hands on timer hand pad until light turns to green.

2. Remove both hands to start the timer and begin the competition.

3. Unscrew first light bulb and place it on table next to new light bulb.

4. Take new light bulb from table and screw in only enough so that it is engaged with the light strip socket.

5. Repeat steps 2 and 3 three more times for remaining bulbs.

6. Return to starting position.

7. Place both hands on timer to stop time.

Judge Reset Instructions

Before each competition the Judge must screw all bulbs in fully then loosen each bulb a quarter turn. The "new" light bulbs will need to be reset on the table in front of each socket

Electrical Outlet Installation Game

Objective: to replace 1 old electrical outlet with 1 new USB electrical outlet in the fastest time possible.

Inventory

2 Hand Pad Timers
2 Timer Display Boxes
1 Table Cloth
2 Game Displays
1 Standard 15-amp outlet
1 USB 15-amp outlet
2 Screwdrivers

Game Setup

1. Place each display on opposite sides of the table.

3.Open timer display box; remove hand pad timer and cord. Connect hand pad timer and timer display. Ensure that the blue "L" shaped connection is inserted into the hand pad timer.

4.Place timer display box and hand pad where indicated on table cover.

5. Screw on 1 old electrical outlet securely to each display.

6. Place the new USB electrical outlet in front of each display.

Competition Instructions

1. Place both hands on timer hand pad until light turns to green.

2. Remove both hands to start the timer and begin the competition.

3. Unscrew the old electrical outlet and place it on table next to new USB electrical outlet.

4. Take new USB electrical outlet from table and screw it in to the display.

5. Return to starting position.

6. Place both hands on timer to stop time.

Judge Reset Instructions

Before each competition the Judge must remove the new USB outlets and attach all standard electrical outlets. The "new" electrical outlets will need to be reset on the table in front of each display.

For the degree to which an item needs to be screwed on to the display – The general rule of thumb is that all pieces need to be "engaged" so that they stay intact during the duration of the game. There are not specific guidelines regarding the number of turns it needs to be tightened.

Shower Head Installation Game

Objective: to replace 1 old shower head with 1 new shower head in the least time possible.

Inventory

2 Hand Pad Timers
2 Timer Display Boxes
1 Table Cloth
2 Game Displays with Shower Arms
2 Old Showerheads
2 New Seasons® Showerheads

Game Setup

1. Place each display on opposite sides of the table.

2. Open timer display box; remove hand pad timer and cord. Connect hand pad timer and timer display. Ensure that the blue "L" shaped connection is inserted into the hand pad timer.

3. Place timer display box and hand pad where indicated on table cover.

4. Screw on 1 old shower head on each game display securely.

5. Place the new Season® shower head in front of each display.

Competition Instructions

1. Place both hands on timer hand pad until light turns to green.

2. Remove both hands to start the timer and begin the competition.

3. Unscrew the old shower head and place it on table next to new Season® shower head.

4. Take new shower head from table and screw it in to the display.

5. Return to starting position.

6. Place both hands on timer to stop time.

Judge Reset Instructions

To reset the game, the "new" showerhead must be removed, and the "old" showerhead must be reattached. The "new" shower heads will need to be reset on the table in front of each display.

For the degree to which an item needs to be screwed on to the display – The general rule of thumb is that all pieces need to be "engaged" so that they stay intact during the duration of the game. There are not specific guidelines regarding the number of turns it needs to be tightened.

Pipe Fitting Installation

Objective: to assemble the letter "H" with pipe fittings in the fastest time possible

Inventory

2 Hand Pad Timers
2 Timer Display Boxes
1 Table Cloth
2 Straight copper tube sections
4 Straight PVC tube sections
4 Straight CVPC tube sections
4 Tee Pipe Push Fittings

Game Setup

1. Place pipe fittings and tube sections unassembled over the markings on the table cover.

2. Open timer display box; remove hand pad timer and cord. Connect hand pad timer and timer display. Ensure that the blue "L" shaped connection is inserted into the hand pad timer.

3. Place timer display box and hand pad where indicated on table cover.

Competition Instructions

1. Place both hands on timer hand pad until green light comes on.

2. Remove both hands to start the timer and begin the competition.

3. Assemble both connection fittings and tubing to form an "H" as pictured below.

5. Place both hands on timer to stop time.

Judge Reset Instructions

Each Judge must disassemble the connection fittings and place with the tubing sections on the tablecloth in the starting position.
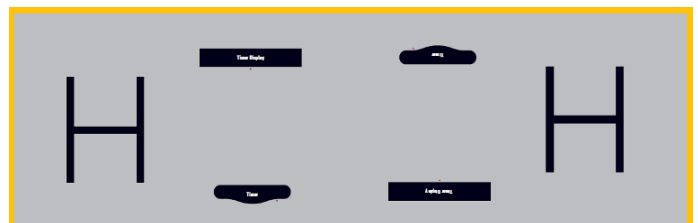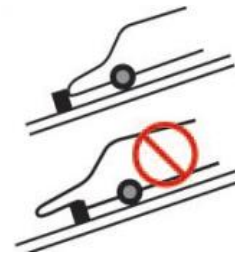
Race Car Competition

Objective: build and race a car made out of maintenance supplies.

Note: Refer to racetrack install and dismantle procedure document for instructions on game set up and inventory.

Car Requirements

1. Each competitor must build his or her own race car.
2. All cars must conform to the following specifications:
   - Length – maximum 18". Cars cannot extend beyond, over, or above the start gate pin (pin is 1-1/2" high). A 1/2" wide bumper in the center of the car both on the front and the back is required to make contact with the pin. See illustration.
   - Width – maximum 6"
   - Height – maximum 6"
   - Weight – maximum 1 lb. 8 oz.
   - Race cars can only be gravity powered.
   - Race cars must use at least three maintenance supply parts (wood does not count).
   - Glass may not be used on race cars.
   - Approved competition wheels provided must be used and may not be altered or modified (2 large and 2 small).
3. Participants who do not enter a car cannot win the overall event.

Competition Instructions

1. Test the car on the track to make final adjustments before check-in.
2. Check your car in with a race judge (it will be weighed and measured).
3. Race cars that pass the check-in process are placed in quarantine and can no longer be tested or modified.
4. Race cars that fail the check-in process receive a total time of 20 seconds for the race car competition. A race judge will mark the time on your scorecard and in the scorekeeping system. Your car will not be allowed to race.
5. Participants will be called to the racetrack by their competitor number.
6. Cars are raced twice, once down each lane.
7. In the event the car does not cross the finish line under its own power, a time of 10 seconds will be marked for each incomplete run.
8. If, during a race on either lane, a part on a car, including a wheel, falls off, a time of 10 seconds will be marked for the incomplete run.
9. Total competition time is the sum of the two runs.