# TBM 1: Prepare Assembly Aid Tray for Force Fitting

**Team name:** _____

**Referee I:** _____, **Referee II:** _____

**Date and time:** _____

## Achievements

|                                                                          | yes | no |
|--------------------------------------------------------------------------|:---:|:--:|
| The robot correctly grasp the assembly aid tray:                         | ☐   | ☐  |
| Comment: _____                 |     |    |
| The robot correctly grasp the first bearing box:                         | ☐   | ☐  |
| Comment: _____                 |     |    |
| The robot correctly grasp the second bearing box:                        | ☐   | ☐  |
| Comment: _____                 |     |    |
| The robot insert the first bearing box into the aid tray:                | ☐   | ☐  |
| Comment: _____                 |     |    |
| The robot insert the second bearing box into the aid tray:               | ☐   | ☐  |
| Comment: _____                 |     |    |
| The robot correctly deliver the tray to the force fitting station:       | ☐   | ☐  |
| Comment: _____                 |     |    |

~~The robot correctly executes the force fitting operation:~~

## Penalized Behaviors

The robot bumps into obstacles in the test bed:        ☐ ☐ ☐ ☐ ☐

The robot drops an object (the object touches the ground):   ☐ ☐ ☐ ☐ ☐

The robot stops working:        ☐

## Disqualifying Behaviors

The robot damages or destroys the objects requested to manipulate:   ☐

The The robot damages the test bed:        ☐

**Benchmarking data delivered appropriately:** ☐ yes / ☐ no

**Team leader signature:** _____

**Referee signature:** _____

# TBM 2: Plate Drilling

**Team name:** _____

**Referee I:** _____, **Referee II:** _____

**Date and time:** _____

## Achievements

|  | yes | no |
|---|---|---|
| ~~The robot correctly identifies perfect plates and sorts them in the corresponding card file box:~~ | | |
| The robot collect the cover plate box from the shelves<br>Comment: _____ | ☐ | ☐ |
| The robot place the cover plate box to the correct workspace<br>Comment: _____ | ☐ | ☐ |
| The robot correctly grasp the plates<br>Comment: _____ | ☐ | ☐ |
| The robot correctly sort the plates<br>Comment: _____ | ☐ | ☐ |
| The robot perform the drilling process for faulty plates<br>Comment: _____ | ☐ | ☐ |

## Penalized Behaviors

The robot bumps into obstacles in the test bed:   ☐ ☐ ☐ ☐ ☐

The robot drops a plate:   ☐ ☐ ☐ ☐ ☐

~~The robot misses a report:~~

The robot stops working:   ☐

## Disqualifying Behaviors

The robot damages or destroys the objects requested to manipulate:  ☐

The robot damages the test bed:   ☐

**Benchmarking data delivered appropriately:** ☐ yes / ☐ no

**Team leader signature:** _____

**Referee signature:** _____

# TBM 3: Fill a Box with Parts for Manual Assembly

**Team name:** _____

**Referee I:** _____, **Referee II:** _____

**Date and time:** _____

## Achievements

|  | part 1 | part 2 | part 3 | part 4 | part 5 |
|---|:---:|:---:|:---:|:---:|:---:|
| The robot correctly grasp object: | ☐ | ☐ | ☐ | ☐ | ☐ |
| The robot place object in the container: | ☐ | ☐ | ☐ | ☐ | ☐ |

Comment: _____

|  | yes | no |
|---|:---:|:---:|
| The robot correctly grasp the container | ☐ | ☐ |
| The robot correctly place the container (complete with all parts) | ☐ | ☐ |

Comment: _____

## Penalized Behaviors

The robot bumps into obstacles in the test bed:  ☐ ☐ ☐ ☐ ☐

The robot drops an object:  ☐ ☐ ☐ ☐ ☐

The robot stops working:  ☐

## Disqualifying Behaviors

The robot damages or destroys the objects requested to manipulate:  ☐

The robot damages the test bed:  ☐

**Benchmarking data delivered appropriately:** ☐ yes / ☐ no

**Team leader signature:** _____

**Referee signature:** _____