

## Parallel Shift

## Introduction

The PARALLEL SHIFT JOB utility can permanently shift Command Positions in a parallel manner. The term "parallel" means the points are each shifted the same direction and distance. Motion steps programmed with position variables will not be shifted. Below are the steps to perform a parallel shift.

- 1. Select the job that contains the robot motion you want to parallel shift.
- 2. Press the "UTILITY" button on the top menu area.
- 3. Press the "PARALLEL SHIFT JOB"

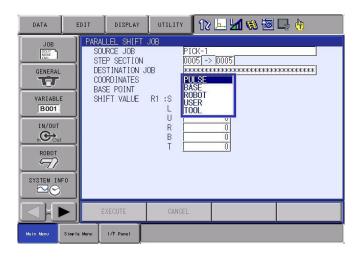
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Main Menu Simple Menu I/F Panel							



Shared Integration Experience

This document captures ideas, experiences, and informal recommendations from the Yaskawa Partner Support team. It is meant to augment – not supersede manuals or documentation from motoman.com. Please contact the Partner Support team at <a href="mailto:partnersupport@motoman.com">partnersupport@motoman.com</a> for updates or clarification.

- SOURCE JOB: this is the job name from which you want to parallel shift either the entire job or a point of robot motion in the job.
  - Current job you are in will be displayed and if it is the wrong job you want to shift then either cancel out and select the job you want then begin again or press the "SELECT" key with the cursor on this line to open the job list menu and select the job you want.
- **STEP SECTION**: this allows you to enter the range of steps in the job to shift whether you want to shift them all or a small range of points or just one point in the job.
  - With a job that has 30 steps/points for robot motion:
    - 0001 -> 0030 would set the range of shift for every step in the job
    - 0010 -> 0020 would set the range of shift for step 10 through step 20
    - 0025 -> 0025 would set the range of shift for step 25 only
- **DESTINATION JOB**: this allows you to type in a different job name if you wish to parallel shift points in a job but copy the job to a different name. If the area is left as all asterisks, then all shifting will take place in the source job and no copy will be made.
- **COORDINATES**: defines which coordinate system you want to parallel shift on.
  - Pulse pulse counts for each individual axis
  - Base X, Y, Z type frame
  - Robot X, Y, Z type frame
  - Tool X, Y, Z type frame





- **BASE POINT**: by pressing the "SELECT" key on base point you open up another screen that will allow you to have the robot at a programmed position you wish to parallel shift from by entering that point and then moving the robot's position to the new location and entering that position data and have the robot calculate the shift amount offsets for either pulse count data or X, Y, Z frame data.
  - Best practice is to have the robot at the source position from where you want to shift from before opening the parallel shift screen because once you leave the screen all data you input will be lost. \* **Pro Tip perform a split screen configuration to avoid losing data.** \*
  - To enter position data for either the Base Point (SRC) or Base Point (DEST) need to press "modify + enter" to record the position and then press "enter" key or the execute button once both the source and destination positions have been recorded to have the controller calculate the shift amounts for you.

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• SHIFT VALUE: shows how much each value will be shifted whether in pulse counts or in base, robot, tool. You can shift on multiple axis or directions at one time or leave all fields blank and only have a shift amount in the one field for shifting one direction or axis alone.

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4. Press "Execute" then the Overwrite screen will appear select "YES" to complete the parallel shift for the job or the robot motion step.

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