

Robot Replacement in Existing MotoSim Cell

Introduction

This procedure will describe changing the robot model on the Controller. It will detail the steps necessary to change the Control group in the Controller as well as the robot model.

For this procedure, the robot that exists in the current Standard AWIV-6000SL-755_2M_AR1440 will be changed to an AR2010.

Procedure:

1. Open your cell





2. On the Controller tab, Select Maintenance Mode



3. Select System – Setup

PP_YRC1000 AW6000-755 2M AR1440_YRC1000					
PLAY	START HO	DLD SERVO ON ESTOP SYNC. 💋 🖀			
		Υ			
SYSTEM	INITIALIZE	n Menu.			
FILE	SETUP				
EX. MEMORY	VERSION				
TOOL	CONTROLLER INFORMATION				
DISPLAY SETUP	ALARM HISTORY				
Aa	SD ACCESS				
	SECURITY				
Main Menu Simple I	denu I/F Panel	Maintenance mode			



4. Select Control Group

E VPP_YRC1000 AW6000-755 2M AR1440_YRC1000						
PLAY	START	HOLD	SERVO ON	E.STOP	SYNC.	
				Υ		
SYSTEM SYSTEM FILE EX. MEMORY SD TOOL DISPLAY SETUP Main Anno 2000 DISPLAY SETUP	SETUP	JP D				
Main Menu Simple	Menu I/F Panel	Maintena	ince mode			



5. Cursor to the Robot and select Detail and Modify

PP_YRC1000 AW6000-755 2M AR1440_YRC1000						
PLAY TEACH	START HOLD	SERVO ON E.STOP SYNC.				
		Y				
SYSTEM	CONTROL GROUP					
FILE EX. MEMORY SD TOOL DISPLAY SETUP TOSLAY	CONNECT : R1 : 1-06VXH12-A0* B1 : NONE R2 : NONE S1 : TURN-1 S2 : TURN-1 S3 : TURN-1 S4 : NONE	DETAIL INIT KODIFY DETAIL DETAIL DETAIL DETAIL DETAIL DETAIL				
Main Menu Simple	Menu I/F Panel Mainten	ance mode				



6. In the Machine List, cursor to the robot type needed

E VPP_YRC1000 AW6000-755 2M AR1440_YRC1000						
PLAY TEACH	START	HOLD SER	VO ON E.STOP	SYNC. 💋 🞬		
			Y			
SYSTEM FILE FILE EX. MEMORY SD TOOL MA DISPLAY SETUP A A	MACHINE LIST 1-06VX1200-J0* 1-06VX110-A0* 1-06VX180-A0* 1-06VX225-A0* 1-06VX400-A0* 1-06VX50-F0* 1-06VX600-F0* 1-06VX8-F0* 1-06VX8-F0* 1-06VXH12-F0* 1-06VXH25-A1* 1-06VXH25-F0*	1-06VRY200-K0 1-06VX140-A0* 1-06VX180-F0* 1-06VX250-A0* 1-06VX50-A0* 1-06VX600-A0* 1-06VX7-A0* 1-06VX88-A0* 1-06VXH12-A0* 1-06VXH12-A0* 1-06VXH225-A1* 1-06VXH25-A5* 1-06VXH25-F4*)* 1-06VRY200- 1-06VX180-1 1-06VX2180-1 1-06VX200-A 1-06VX50-00 1-06VX50-00 1-06VX8-A0* 1-06VX8-A0* 1-06VXF130- 1-06VXH12-C 1-06VXH12-C 1-06VXH25-A 1-06VXH25-C 1-06VXH210-	L0* 20-A0 0* 0* * 0* A0* 0* A1* 0* 0* A0*		
	1-06VXL35-A0*	1-06VX8200-A0	* 1-06VXHL20-)* 1-07VXB110-	AU* AO*		
Main Menu Simple	Menu I/F Panel	Maintenance m	iode			



7. Select the Required Robot





8. Confirm Connect by pressing enter





9. Select Yes for Modify R1 Control Group Connect



10.Select Yes for the Initialize Related Files, PM (Hardware) File



11. Select Yes for the Initialize Related Files, Functional Safety Related Files (If prompted).A. If set, Functional Safety settings will need to be changed for the new robot.





12. Select End for the VRC Maintenance Mode

VRC Maint	enance Mode	• ×
VRC.BIN Pa	ith	
755 2M AR	1440\YRC100	0\VRC.bir
	Start	End

13. After the Controller has rebooted, Select Controller –Model Setting.





14. In the Robot Settings dialog, Highlight the R01 group and select the Browse button

Group	Name	Туре	Model
R01 S01 S02 S03	YRC1000-R YRC1000-S01 YRC1000-S02 YRC1000-S03	1-06VXH12 TURN-1 TURN-1 TURN-1 TURN-1	C:\Users\ad
<			>
rRC1000	ne R01 del File		
CALLsers\	adkinmi\OneDrive -	Yaskav	Another Tune

15. Browse to:

<u>C:\Program Files\MOTOMAN\MotoSimEG-VRC 2019SP3\Robots\YRC1000\AR-Family\AR2010#1-06VXH25-A11</u>

This	PC > Main Drive (C:) > Program Files	> MOTOMAN > MotoSimEG-	VRC 2019SP3 → Ro	bots > YRC1000 > AR-F	amily > AR2010#1-06VXH
olde	t.				
^	Name	Date modified	Туре	Size	
ь.	AR2010#1-06VXH25-A11.mdl	10/18/2017 5:38 PM	MDL File	1 KB	
	📔 robotinf.dat	3/19/2018 6:00 PM	DAT File	4 KB	



16. Select OK

Group	Name	Туре	Model
R01 501 502 503	YRC1000-R YRC1000-S01 YRC1000-S02 YRC1000-S03	1-06VXH12 TURN-1 TURN-1 TURN-1 TURN-1	C:\Program
<	ne -		>
/RC1000-	R01		
C:\Program	m Files\MOTOMAN	\MotoSi	Another Type
		OK	Consel



17. The robot model has been replaced at this point but is not assembled correctly, as shown in the following.





18. Save the cell



Click OK if prompted to save in the <u>current version</u>.
Exit from MotoSimEG-VRC

• Run VRCdelete.bat at this time if desired



21.Open MotoSimEG-VRC again and open the recently modified cell. The robot will be displayed correctly.



- 22. If the wire feeder was present, the Wire feeder should be deleted and the proper one for the AR2010 robot should be added from the model Library. Also depends on welding system you are using for wire feeder model.
 - •See Section 8.17 of the MotoSimEG-VRC Operator's Manual for use of the Model Library.
 - •If the model is not in the model library, it could be found at,

https://www.motoman.com/en-us/products/software/simulation/motosim-eg-vrc-model-library



23.Add the correct wire feeder to the model, on this link of the robot.





- 24. The Offset Value of the AR2010 is larger than the AR1440 that it replaced. It must be raised up 55mm.
 - See Section 15.8 of the MotoSimEG-VRC Operator's Manual for the Manipulator Offset Values.





The process is now complete

	YRC1000 AW6000-755 2M AR1440.vd - MotoSimEG-VRC	- 🗆 ×
Hon	e Controller Simulation Tool Online Function Option Function	📳 YRC1000 🔷 Style - 🔞
Undo Redo	Image: Construction of Panel Browser Function OLP Job Browser Function Teaching Image: Construction of the construction	BASE AXIS * Handle Display (*) Synchronized Bigliay Settings Operation Handle