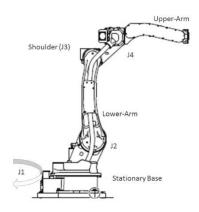


ROBOSUIT® INSTALLATION INSTRUCTIONS FOR THE MOTOMAN MH24/GP25

Prior to installing the Robosuit®, clean the robot surface, particularly if the robot has been in operation without any effective protection. This suit is designed to fit over a bare OE casting only. Disconnect any custom brackets/valve-packs (etc.) that will interfere with installation—these may be reattached after suiting the robot.

Read through this entire set of instructions and familiarize yourself with these procedures. If you have questions, call Roboworld at any of the phone numbers provided at the bottom of pages 1-4.

1. Move the robot to its home position.



Motoman MH24/GP25 "Home Position"

PREPARATIONS FOR SUITING ROBOT:

- 2. Remove shipping lugs (eye-bolts) and any fork-lift pockets. Confirm you have removed all custombracketry, valve-packs, etc.
- 3. You MUST remove both sections of aluminum-plate synch markers (S-axis, L-axis, and U-axis) prior to installing the suit. Failure to do so will result in non-warranted damage to the Robosuit®.

Note: All photos shown depict a blue, prototyping vinyl suit. Your production suit will differ in appearance, but installation is similar.

INSTALLING THE ROBOSUIT®:

- 4. Suit coverage is depicted in photo-1.
- 5. The name of each piece of the MH24/GP25 suit is marked on a production tag sewn to the inside of each cover. Installation will begin at the base/floor. Identify the stationary base cover (photo-2).
- 6. Remove both sections of the s-axis synch markers and apply Velcro HOOK tape along the rear section of stationary base (photo-3).
- 7. Open the Velcro seam (located on the right-side of the stationary base cover). Wrap the stationary base cover around the casting of the robot and orient the gum-rubber panel along the bump-out on the top/rear of the base facing the robot (photo-4)
- 8. Align (and affix) the mating section of Velcro LOOP (sewn to the inside of the stationary base cover) to the Velcro HOOK tape applied in step-6.
- 9. Close the (vertical) seam along the right-side of the stationary base cover (photo-5).
- 10. Locate the lower-arm cover. This is most easily identified by the large Velcro-seamed bellowed convolutions at J2 (depicted in photo-6). Open all seams/snaps. The plastic ring faces "up."
- 11. Wrap the lower-arm cover around the robot. Orient the seam toward the rear of the robot (photo-7). Disconnect the Velcro from the plastic ring, and loosely fit the plastic ring in the gap at the u-axis to temporarily hold the lower-arm cover in position (photo-8).
- 12. Position the internal belt of the lower-arm cover around/underneath the J2 motor housing (photo-9).
- 13. Reattach both sections of the u-axis plastic rings and begin closing the Velcro seams/zippers working your way down the cover to the bellowed convolutions. Wrap gray OEM cable and close Velcro seams. Take your time to align/mate each sections of Velcro throughout the J2 bellow stack (again reference photo-6). Overlap the stationary base cover at/around the s-axis.
- 14. Identify the upper arm cover and open all Velcro/zippered seems (including the plastic rings). Arrange the cover so that the plastic ring is positioned over the r-axis (photo-10). Close Velcro/zippered seams and r-axis ring. Orient the upper arm cover so that the seam faces the floor.
- 15. Open all seams/rings on shoulder cover. Note the larger u-axis ring and smaller r-axis rings. The shoulder rings will overlap the u-axis ring on the lower arm cover and will overlap the r-axis ring on the upper arm cover. Begin closing seams/rings. Wrap gray OEM cable sleeve around bundle and mate to the lower arm section at Velcro junction (photos 11 and 12).
- 16. Return to upper arm. Ensure seam is facing down. Install clamp at t-axis (photo-13).

CONFIRM FIT/FUNCTION:

- 17. Remove all tools, ladders, and unnecessary materials from the cell.
- 18. Power up the robot, and slowly jog each axis to the limit of its range, both positive/negative (start at b-axis, and finish at s-axis). This will allow the suit to properly "seat" along each joint.
- 19. Once you have confirmed no interference, run your robot program. Adjust any clamps as required.
- 20. Reattach any brackets/cable connections/valve-packs (etc.) through the suit.



Photo-1, MH24 suit coverage



Photo-2, Stationary base cover

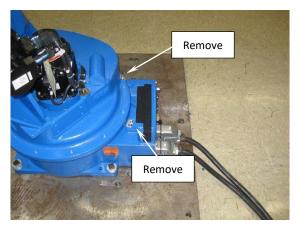


Photo-3, Remove Synch placards and Apply Velcro Tape



Photo-4, Orient Stationary base so gum-rubber faces robot

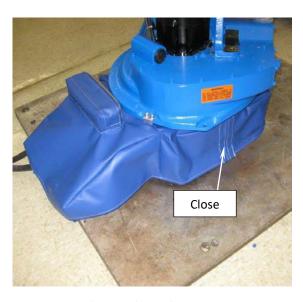


Photo-5, Close Velcro Seam



Photo-6, Lower-Arm Cover



Photo-7, Orient Seam to the rear of arm



Photo-8, locate the ring in the gap shown.











10. If you have any questions or issues installing your suit, please contact Roboworld at any of the phone numbers below, and we will be happy to assist you.

US-Northeast & International Office (Mike Tur): +1 (216) 798-5839

WI, IL, and states WEST of the Mississippi River (Gary Kind): (414) 213-8304

Ohio valley and South (Chris Tur): (513) 633-2585

© 2014 ROBOWORLD all rights reserved