



## ROBOSUIT™ INSTALLATION INSTRUCTIONS FOR THE ABB IRB-2400 SERIES

PRIOR TO INSTALLING THE ROBOSUIT™, CLEAN THE ROBOT SURFACE (PARTICULARLY IF THE ROBOT HAS BEEN IN OPERATION WITH ANY EFFECTIVE PROTECTION). DISCONNECT ANYTHING THAT WILL INTERFERE WITH INSTALLATION (BRACKETS, VALVE PACKS, CLAMPS, ETC.). NORMALLY, END-OF-ARM TOOLING WILL NOT INTERFERE.

IF YOU ORDERED A(N OPTIONAL) STATIONARY BASE COVER, INSTALL IT NOW. IF THE ROBOT IS INVERTED, THE BASE COVER HAS ADHESIVE BACKED VELCRO INSIDE THE BASE COVER. REMOVE THE BACKING TAPE, AND PRESS THE ADHESIVE TO THE BASE CASTING.

1. OPEN ALL ZIPPERS AND VELCRO SEAMS.
2. INSTALL THE UPPER ARM PIECE USING THE ZIPPER AND VELCRO FOLDS (FOLDS MAY BE LOCATED ON TOP OR BOTTOM OF THE UPPER ARM—(IT IS RECOMMENDED THAT THE SEAM AND ZIPPER (PORTION) OF THE COVER BE ORIENTED AWAY FROM THE MAJORITY OF THE CONTAMINENTS). POSITION THE TOOL FLANGE PERPENDICULAR TO THE UPPER ARM. THE UPPER ARM PIECE UNDERLAYS THE LOWER ARM USING EITHER CUFF-STYLE JOINTS OR PVC SLIP-RINGS. THE SUIT MUST BE CLAMPED APPROXIMATELY 4" IN FRONT OF (DISTAL TO) THE 4<sup>TH</sup> AXIS. MAKE CERTAIN THE CLAMP DOES NOT INTERFERE WITH JOINT-4 ROTATION. SNAP THE ZIPPER COVER CLOSED.
3. INSTALL THE LOWER ARM. ENSURE THAT THE BELLOWS (FOLDS IN THE SUIT) ARE POSITIONED PROPERLY, AND THAT THE J2 AND J3 SERVO MOTORS ARE POSITIONED IN THE SUIT POCKETS. LOOP THE MOTOR-POCKET BELTS AROUND EACH SERVO MOTOR AND SNAP THEM TIGHTLY IN PLACE. ENGAGE THE LOWER ARM TO THE UPPER ARM BY MATING EITHER THE CORRESPONDING CUFF OR SLIP-RING.
4. ZIPPER THE LOWER ARM CLOSED. SNUG EXTERIOR BELT ALONG THE LOWER PORTION OF THE ARM.
5. INSTALL THE FIBERGLASS RODS ON EACH SIDE OF THE LOWER ARM. INSERT THE GLASS RODS FROM THE BOTTOM (BENEATH THE LOWEST BELLOW—ABOVE THE SERVO MOTOR POCKETS), AND CONTINUE TO INSERT UNTIL THEY ENGAGE THE ROD-END-POCKETS.
6. ATTACH ALL TOOLING AND RECONNECT ANY ELECTRIC/PNEUMATIC LINES THAT WERE DISCONNECTED PRIOR TO SUITING THE ROBOT. VELCRO ACCESS PANELS ARE PROVIDED FOR YOU TO FACILITATE THESE CONNECTIONS. USING A SHARP UTILITY KNIFE OR RAZOR BLADE, CAREFULLY CUT AN "X" INTO THE PANEL(S) AS THEY CORRESPONDING TO THE LOCATION OF EACH CONNECTIONS YOU NEED TO MAKE.
7. CLEAR THE ROBOT WORK ENVELOPE OF ANY LADDERS, TOOLS OR EQUIPEMENT USED TO SUIT THE ROBOT. SLOWLY MOVE THE ROBOT, ONE AXIS AT A TIME BEGINNING WITH THE WRIST (J6), AND ENDING WITH THE BASE (J1). CHECK FOR ANY FIT PROBLEMS, BINDING OR SNAGS.

SHOULD YOU HAVE ANY QUESTIONS—PLEASE CALL ROBOWORLD.