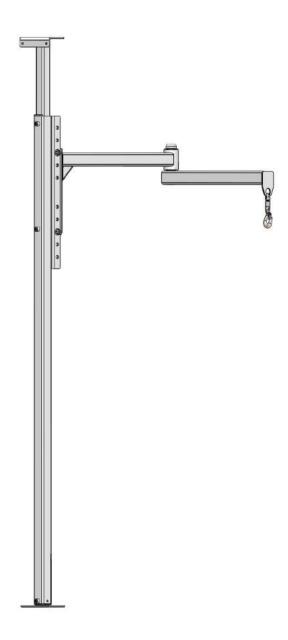
Assembly & User Manual

ORBIT® Patient Transfer Lift





SHOWN WITH OPTIONAL SWIVEL HOOK

Anchoring hardware is not included.



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INTRODUCTION

The ORBIT® Patient Transfer Lift, with its articulating arm and pivoting stanchion with brake, can be installed floor-to-ceiling or floor-to-wall. Models have a horizontal reach of up to 5' in all directions, as well as to accommodate ceiling heights of 7'-9' and 8'-12'. The ORBIT rotates a full 360-degrees at the stanchion as well as 360-degrees at the articulating arm. The ORBIT also rotates 360-degrees at the Swivel Hook, when that option is installed.

Throughout this manual, the ORBIT Patient Lift is also referred to as "ORBIT", "Patient Transfer Lift", or "lift".

SYMBOLS AND WARNINGS

- The **WARNING** symbol indicates a potentially hazardous condition/situation. The warnings throughout this document and on your equipment are for the protection of people and property. Failure to abide by warnings will result in a waiver of all liabilities, loss of your warranty, and could result in equipment damage and or failure, property damage, risk of serious bodily injury, and or death to operators, riders, and those nearby. The symbol may appear in various colors and in conjunction with other symbols.
- The **NOTE** symbol indicates important information. Failure to obey all notes could result in improper operation, less-than-optimum equipment performance, and at the sole discretion of the equipment manufacturer, may void your warranty. The symbol may appear in various colors and in conjunction with other symbols.

WARNINGS

- A Rated Load is 440 lbs.; never exceed the Rated Load.
- The Rated Load specified is for the ORBIT only and does NOT include ancillary equipment such as motor, sling, etc., which must all be added together to ensure the Rated Load will not be exceeded.
- A Prior to installation and use, read and follow all instructions, warnings, and labels. Correct installation, proper adjustment, use, and following all instructions and obeying all warnings before and during use is necessary for safe operation.
- ▲ Maintaining all labels and manuals in legible condition is required by the ORBIT owner and is essential for safe ORBIT operation. Do not remove ORBIT labels. For additional information or to obtain replacement copies of instructions or labels, call 1-800-451-1903.
- ▲ Do not use the ORBIT until installation is fully complete and always use caution throughout the installation/assembly process. Until the brake has been set/adjusted, the stanchion may rotate. Correspondingly, until articulating arm is correctly pitched and leveled, it may free-swing; use caution at all times.
- Before using ancillary equipment (motor, sling, etc.), refer to your ancillary equipment's owner guide for proper use; never exceed ancillary equipment's manufacturer recommendations.
- The ORBIT is NOT a transport device. Use only to transfer an individual from one resting spot to another (such as bed to wheelchair).
- ▲ Inspection of the ORBIT and anchoring/mounting hardware is vital; verify that the lift is undamaged and secure before each use.

- ▲ Do not attempt to repair or modify any part of the ORBIT, including damaged fasteners or components. Only qualified technicians may install/service the lift. Contact your dealer for additional information and to schedule maintenance, inspections, repairs, or service.
- ▲ Tampering or modifying any portion of the ORBIT will void the warranty and may result in a hazardous situation.
- Turn electronic devices used with the ORBIT "OFF" and activate the emergency stop before loading or unloading patients. Never operate equipment with the ORBIT that has damaged electrical wires, cords, or plugs.
- A Never install or use the ORBIT in a manner which pinches electrical cords or causes other safety concerns.
- Observe and avoid all pinch points.
- A Before and during ORBIT operation, ensure hair, jewelry, shirts, ties, shoelaces, and all other forms of clothing and personal ornamentation are not, and will not, catch on anything and create a hazard.
- Walls, floors, and ceiling construction must be structurally sound and hold the ORBIT anchors securely in place without failure; ensure all anchoring/mounting locations are substantial and of sound construction. The installer is responsible for ensuring the suitable structural integrity of all anchoring structures and best anchoring method for the ORBIT. The lift can be anchored to various materials, provided material is structurally sound and will remain structurally sound throughout the use of the ORBIT. Take into consideration patient loading and unloading points and rotational radius. Consult with a professional contractor if you need assistance or additional information.
 - The best time to determine equipment installation and attachment technique is during the on-site evaluation.
- The ORBIT must be properly installed and anchored before operation. Improper installation and or use of the ORBIT can be hazardous.
- Professional installation by a contractor is recommended.
- ▲ Installer must verify ORBIT Stanchion will be installed perpendicular to the ground/gravity plane.
- ▲ Installer must verify ORBIT installation will allow travel without interference, obstruction, or safety hazard to others.
- ▲ Do not play on or around the ORBIT.
- ▲ Do not use the ORBIT or its components for anything other than their intended purpose of lifting a single individual. Do not use to support, attach, or hang planters, lights, decorations, clothing, fabrics, or other furnishings.
- ▲ Use the ORBIT only with a qualified helper.
- The articulating arm swings freely; a qualified helper must always maintain control of patient.
- A Before each use, check the ORBIT for worn, loose, missing, unstable, or damaged parts. If you find any of these conditions, do not use. Consult with a professional contractor if you need assistance or additional information.

TOOLS TYPICALLY REQUIRED

- SOCKET WRENCH OR DRILL
- 3/4" SOCKET
- 3/4" BOX-END OR OPEN-END WRENCH
- TORQUE WRENCH (CAPABLE OF UP TO 55 FT./LBS.)
- 1/4" ALLEN WRENCH SOCKET (FOR TORQUE WRENCH)
- 1/4" ALLEN WRENCH
- 3' OR 4' LEVEL
- 9" TORPEDO LEVEL (OR SIMILAR)
- 5/32" ALLEN WRENCH (FOR OPTIONAL SWIVEL HOOK)
- CHOSEN ANCHORING HARDWARE
- TOOLS REQUIRED FOR USE WITH YOUR CHOSEN ANCHORING METHOD

1. **GETTING STARTED**

- 1.1. Read this instruction manual in its entirety before use and follow all instructions before and during use.
- 1.2. Confirm that all components are present and inspect the shipment for damaged or missing parts. If damaged or missing parts are noted, do not install, or use the ORBIT.
- 1.3. Before each use, check the ORBIT for worn, loose, missing, unstable, or damaged parts. If you find any of these conditions, do not use. Consult with a professional contractor if you need assistance or additional information.

2. **SYSTEM COMPONENTS**

Typical system components are shown below (not to scale); components may vary depending on configuration.

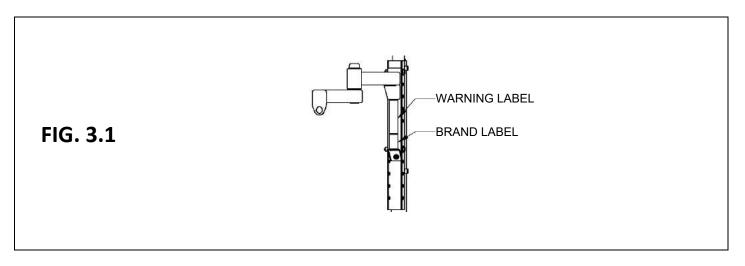
Anchoring hardware is not included.

QTY	DESCRIPTION	IMAGE
1	5' ARTICULATING ARM	
1	STANCHION & SLIP COLUMN	
2	CAP SCREW ZINC-PLATED 1/2"-13 X 3.5"	
4	FLAT WASHER 316 STAINLESS STEEL 1/2" (.531 ID/1.25 OD)	0
2	LOCKNUT STEEL W/NYLON INSERT 1/2"-13	
1	SWIVEL HOOK (OPTIONAL - SOLD SEPARATELY)	
1	INSTRUCTIONS	Security Line dental (COT - Mark Town 2)

3. LABELS

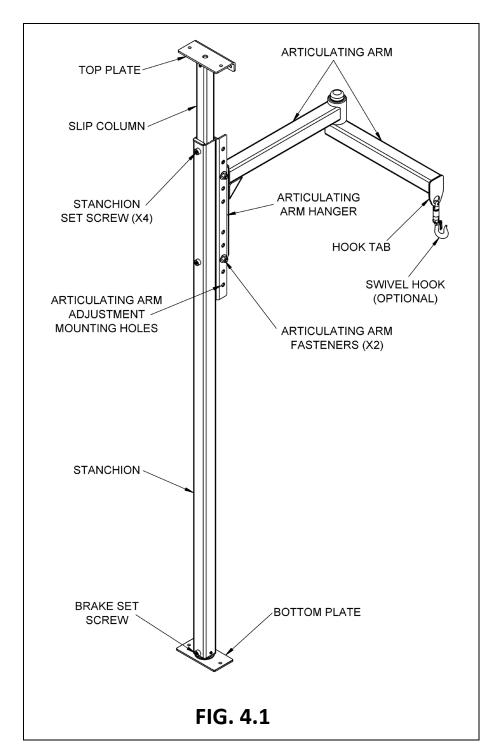
The ORBIT has warning and brand labels (FIG. 3.1). Labels may vary in placement, color, size, and written content.

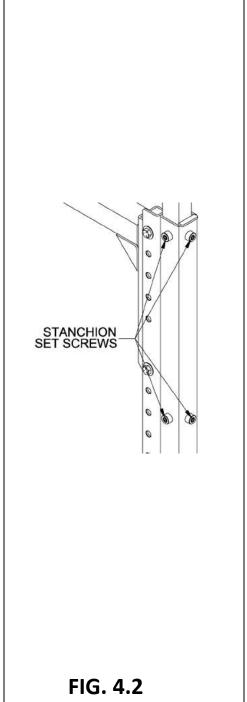
▲ Maintaining all labels in legible condition is required and is essential for safe operation. For replacement copies, call 1-800-451-1903.



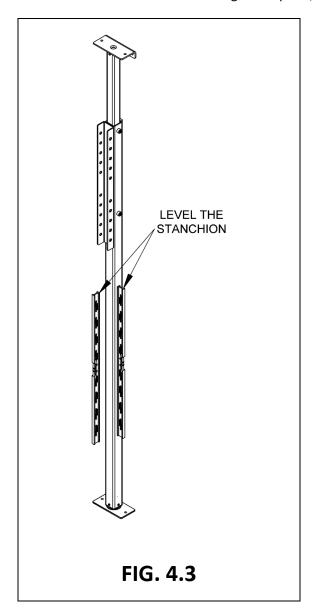
4. **INSTALLATION**

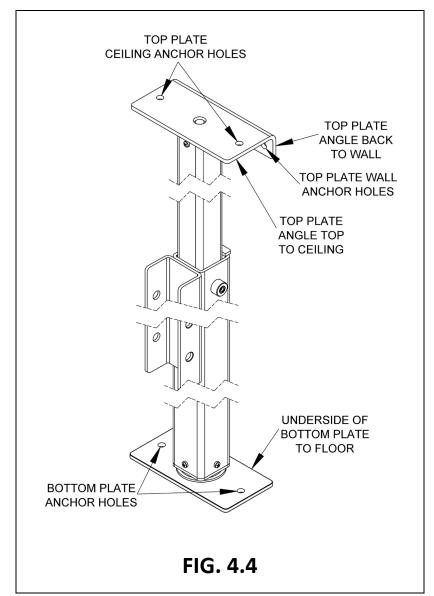
- 4.1. STANCHION
 - 4.1.1. For your convenience, FIG. 4.1 is provided to give an overall design familiarity with the lift. Depending on the model ordered, the ORBIT works on ceiling heights of 7'-9' or 8'-12'.
 - **A** Ensure that you have the correct size for your application.
 - 4.1.2. Carefully remove the stanchion with slip column from the shipping box.
 - 4.1.3. Place stanchion in anchoring location, then slide the slip column up to ceiling and or wall (FIG. 4.1).
 - 4.1.3.1. For ceiling/floor installation, slide the slip column up to the ceiling.
 - 4.1.3.2. For wall/floor installation, slide the slip column to a suitable location on the wall.
 - For all installations, the top and bottom plates must be properly anchored as described in this section. See TABLE 4.1 for anchor and structural information.
 - Walls, floors, and ceiling construction must be structurally sound and hold the ORBIT anchors securely in place without failure; ensure all anchoring/mounting locations are substantial and of sound construction. The installer is responsible for ensuring the suitable structural integrity of all anchoring structures and best anchoring method for the ORBIT. The lift can be anchored to various materials, provided material is structurally sound and will remain structurally sound throughout the use of the ORBIT. Take into consideration patient loading and unloading points and rotational radius. Consult with a professional contractor if you need assistance or additional information.
 - 4.1.4. Once the stanchion is in place, tighten 4-each stanchion set screws just enough to securely hold the slip column in place while the bottom plate is being anchored (FIG. 4.2).
 - ▲ Ensure set screws are tight enough to prevent slip column from unexpectedly moving during installation or a dangerous situation could result.
 - Stanchion set screws will be fully tightened in a later step.





- 4.1.5. Using a 3' or 4' level (or equivalent device), level and plumb the stanchion (FIG. 4.3).
- 4.1.6. Anchor the bottom plate using both pre-drilled anchor holes (FIG. 4.4).
- 4.1.7. Anchor the top plate using two of the four pre-drilled anchor holes (FIG. 4.4).
 - 4.1.7.1. When anchoring to the ceiling, use the anchor holes located on top of the plate.
 - 4.1.7.2. When anchoring to the wall, use the two wall anchor holes.
 - When anchoring to the wall, you will only be able to rotate the stanchion 180-degrees.
 - When anchoring to the wall, observe and avoid obstructions such as trim, base heat registers, pictures, etc.
- 4.1.8. Refer to TABLE 4.1 for anchor and structural information.
- 4.1.9. Once anchoring is complete, torque all 4 stanchion set screws (FIG 4.2) to 25 ft./lbs.





ANCHOR & STRUCTURAL INFORMATION (ANCHOR PULLOUT, SHEAR, AND TENSION DATA)

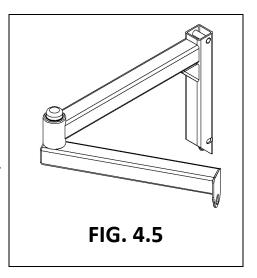
CONCRETE (WALLS, FLOORS, AND CEILINGS)	HARDWOOD FLOORS, WOOD STUD WALLS, AND CEILING JOISTS	CARPET & TILE FLOORS
 Red Head Trubolt®: Wedge Type, IBC Compliant, Expansion Anchors. WS-G Hot-Dipped Galvanized, or WW-304 S.S., or SWW-316 S.S., or equivalent. 3/8" Dia. X 3" imbed depth ⚠ Only install to structurally sound concrete. 	 Hex Lag Screws Stainless Steel: 18-8 stainless or equivalent. 3/8" Dia. X 2.5" imbed depth in floor joist (2" x 6" min.) and wall studs (2" x 4" min.). ⚠ Only install to structurally sound floor joists, ceiling joists, and wall studs. 	 Do not install over carpet or tile. Remove all carpet, pad, tile, and adhesives and install directly through flooring material into floor joists. Stainless Steel: 18-8 stainless, or equivalent. 3/8" Dia. X 2.5" imbed in floor joist depth. Only install to structurally sound floor joists, ceiling joists, and wall studs.

- **A** Each anchor must withstand 1,000 lb. pullout, 1,000 lb. shear, and 1,000 lb. tension.
- Always confirm equivalency with your anchor supplier or contractor.
- Anchoring construction must be structurally sound and hold ORBIT without failure.
- Professional installation by a contractor is recommended.
- An improperly anchored ORBIT can be an extreme hazard. The installer must decide which anchoring hardware and method is best for your circumstances.

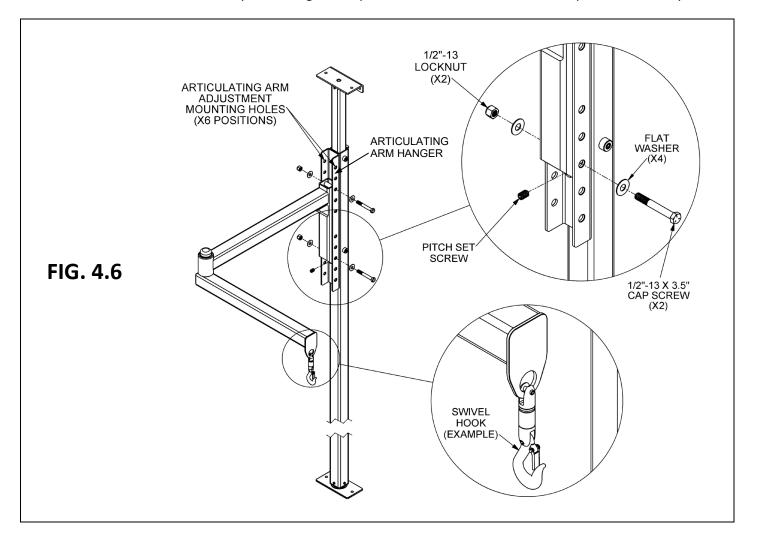
TABLE 4.1

4.2. ARTICULATING ARM

- 4.2.1. Carefully remove the articulating arm ('arm') (FIG. 4.5) from its shipping box.
- 4.2.2. Determine the working height for the arm.
 - The articulating arm hanger ('hanger') (FIG. 4.6) features 5 adjustable arm height positions, allowing the flexibility to set vertical clearance as needed.
 - A Before using any ancillary equipment (motor, sling, etc.) with the ORBIT, refer to your ancillary equipment's owner's guide for proper use; never exceed ancillary equipment's manufacturer recommendations.
 - Do not exceed the ORBIT Rated Load of 440 lbs.

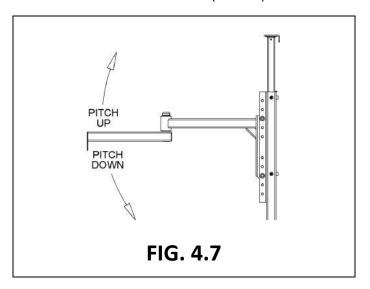


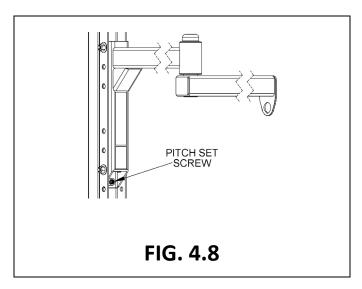
- 4.2.3. The arm fits inside of the hanger (FIG. 4.6) and is bolted in place. After determining the working height of the arm, secure it into 2 of the pre-drilled anchor holes using 2-each 1/2"-13 X 3.5" cap screws, 2-each 1/2"-13 locknuts, and 4-each 1/2" washers (1 under each cap screw and 1 under each nut).
- 4.2.4. Torque each locknut to 15 ft./lbs.
 - The next steps explain pitch adjustment for the arm. Until pitch is set and level, the arm may free-swing; it is important to use caution and level the pitch immediately.



4.3. SET & ADJUST PITCH

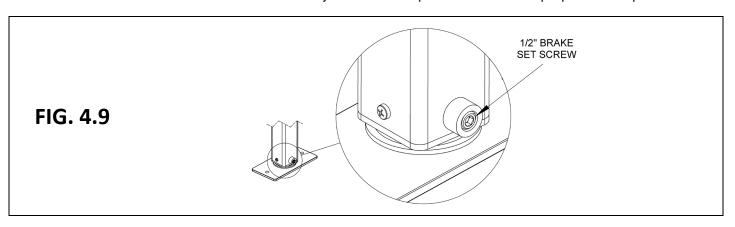
- 4.3.1. Pitch is the up and down movement of the arm (FIG. 4.7). After determining the total weight load (the combined weight of your ancillary equipment plus the individual), you may need to adjust the pitch.
 - A Pitch adjustment is required for smooth ORBIT operation and may need to be adjusted for each individual load.
- 4.3.2. Using a Torpedo level, level the arm by adjusting the 1/2" pitch set screw (FIG. 4.6, FIG. 4.7, and FIG. 4.8).
 - An unleveled pitch may result in the arm being able to free-swing; use caution and ensure that the pitch is always level.
 - 4.3.2.1. Pitch up (raise) (FIG. 4.7) the arm's lifting end by turning the 1/2" pitch set screw (FIG. 4.8) clockwise.
 - 4.3.2.2. Pitch down (lower) (FIG. 4.7) the arm's lifting end by turning the 1/2" pitch set screw (FIG. 4.8) counter-clockwise.





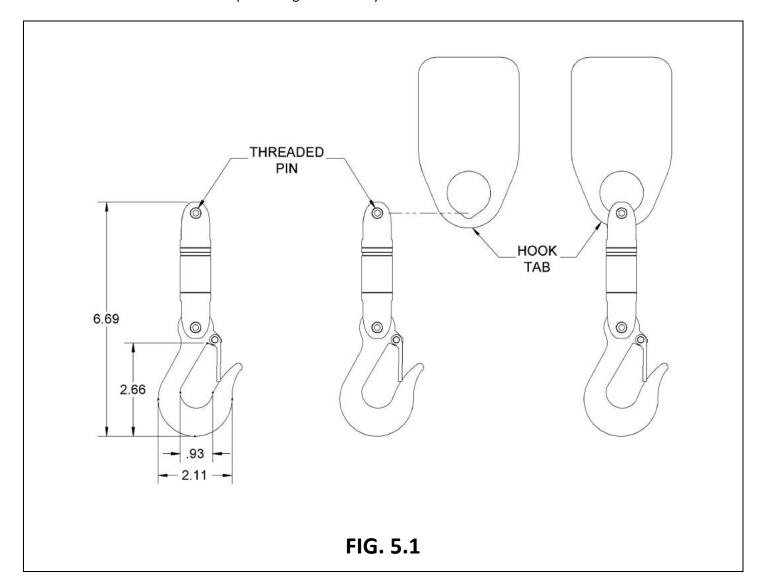
4.4. SET & ADJUST BRAKE

- 4.4.1. The 1/2" brake set screw (FIG 4.1 and FIG. 4.9) increases/decreases the stanchion's rotational drag (the resistance of the stanchion to the pushing and pulling of the ORBIT operator). Drag is used to provide the operator more control over stanchion rotation; the stanchion rotation will follow the articulating arm's lead.
- 4.4.2. To increase stanchion drag, turn the 1/2" brake set screw (FIG. 4.9) clockwise (inward).
- 4.4.3. To reduce stanchion drag, turn the 1/2" brake set screw (FIG. 4.9) counter-clockwise (outward).
 - A The user is moved by pushing/pulling the motor or sling; do not allow user or operator to physically touch the stanchion or the arm during operation.
 - The key to easy ORBIT use is to lead with the outside articulating arm and drag the stanchion with your motion.
 - A Practice and accurate adjustment are important for safe and proper ORBIT operation.



5. SWIVEL HOOK (OPTIONAL)

- 5.1. The swivel hook (FIG 5.1) is an option that is sold separately.
- 5.2. Using a 5/32" allen wrench, remove the threaded pin.
- 5.3. Slide the swivel hook over the hook tab (FIG. 4.1, FIG. 4.6, and FIG. 5.1).
- 5.4. Resintall the threaded pin and tighten securely.



6. **FINAL CHECKS & MAINTENANCE**

- 6.1. Test the full range of ORBIT motion and ensure that no potentially dangerous conditions exist.
- 6.2. Ensure that all fasteners are in place and secure.
- 6.3. Before performing any transfer, ensure that clear space is maintained around the ORBIT (remove all furniture and other obstructions).
- 6.4. Clean using a damp cloth or soft brush with soap and water. Avoid caustic, high alkaline detergents and solutions.