Air pressure to be installed from the top - during install verify pigtail loop does not catch on manipulator or the build during full rotation.

480/60/3 power to be installed from the top - during install verify pigtail loop does not catch on manipulator or the building during full rotation.

Detail A
Scale 1:8

- 1 1/2 hex on anchor bolt nut (1-8 thread)
- 2 1/4 hex on leveling jack (2-12 thread)
- 3 hex on leveling jack jam nut (2-12 thread)

Detail B
Scale 1:8

- 5/8 Allen hex on brake plug may be turned tight for shipping
- 3/8 Allen hex on leveling screws (1/2 set screws)
- 5/16 Allen hex on set screw

Detail C
Scale 1:8

- 9/16 Allen hex on brake plug may be turned tight for shipping
- 3/4 hex on rotation stop shield bolt & nut (1/2-13 thread)
- 3/4 hex on rotation stop shield bolt & nut (1/2-13 thread)

Detail D
Scale 1:8

- 5/16 Allen hex on stop bolts (5/4 shcs)

Detail E
Scale 1:8

- 5/8 Allen hex on tool mounting bolts (3/4 shcs)
- 3/8 Allen hex on leveling screws (1/2 set screws)
- 9/16 Allen hex on brake plug may be turned tight for shipping

Detail F
Scale 1:8

- 3/4 hex on rotation stop shield bolt & nut (1/2-13 thread)

Detail G
Scale 1:12

- 5/16 Allen hex on stop bolts (3/4 shcs)
- 3/8 Allen hex on leveling screws (1/2 set screws)
- 9/16 Allen hex on brake plug may be turned tight for shipping

Detail H
Scale 1:8

- 5/8 Allen hex on tool mounting bolts (3/4 shcs)
- 3/8 Allen hex on leveling screws (1/2 set screws)
- 9/16 Allen hex on brake plug may be turned tight for shipping

Detail I
Scale 1:8

- 3/4 hex on rotation stop shield bolt & nut (1/2-13 thread)

The following is a non-comprehensive list of items suggested for installing the TPA 15. It is the installer's responsibility to understand the installation process and the tools required prior to performing the work.

3" hex wrench  Machinist level & bubble level  Chalk to mark pedestal location
2 1/4" hex wrench  Hammer drill  Drill
1 1/2" hex wrench  1" concrete bit  Banding shear for pallet disassembly
15/16" hex wrench  Vacuum to clear anchor bolt holes  Fish tape for routing hoses
3/4" hex wrench  Extension cords  5/8" x 3" L - eye bolts for lifting pedestal
5/8" Allen hex  Ladders  Slings
9/16" Allen hex  Man lift  Personal protective equipment
3/8" Allen hex  Plumbing tools  Electrical tools / hole punch
5/16" Allen hex  Wilton 65168 c-clamps  Recommended 4,000 lb forklift or crane to lift the TPA 15 into position (no tool)
Torque wrench  Layout print & tape measure

All specified notes and requirements are typical. Refer to each project profile drawing for and custom features.

TPA 15 - Installation Instructions

All design, sketches, and drawings are the property of Positech Corporation. Letting, or allowing to be let, the knowledge for design and/or fabrication by said design, sketches or drawings without the written consent of Positech Corporation is expressly forbidden.
APPROXIMATE CENTER OF GRAVITY

ARMS MUST BE LEVEL BEFORE LIFTING

APPROXIMATE WEIGHT TO BE LIFTED IS 2,500 LBS

TIE ARM WITH STRAP TO HOLD THE 2ND ARM FOLDED BACK

NO GROUTING IS NEEDED TO INSTALL THIS PEDESTAL:
1. BE SURE TO PLACE THE WASHERS UNDER THE JACKS - ON THE CONCRETE.
2. SEAT THE ANCHOR BOLTS BEFORE LEVELING.
3. LEVEL THE PEDESTAL BEFORE INSTALLING THE MANIPULATOR.
4. PLACE A LEVEL ON THE BEARING MOUNTING SURFACE TO LEVEL TO PEDESTAL.

SEAT BOLTS AT 250-350 FT-LBS (340-476 N-M)
LOosen AND THEN TORQUE TO 250 FT-LBS (340 N-M)
RECHECK AFTER ONE WEEK OF SERVICE
CHECK EVERY PERIODIC EVALUATION

SECTION C-C
PLACE A 2 X 6 OVER ARM TO PROTECT PAINT

PLACE CARDBOARD ON FORK TO PROTECT PAINT

CLAMP ARMS TO FORK

CLAMP TUBE TO FORK

CLAMP OPENING 5.2

CLAMP OPENING 5.5
APPROXIMATE CENTER OF GRAVITY
APPROXIMATE WEIGHT TO BE LIFTED IS 2,500 LBS
TIE ARM WITH STRAP TO HOLD THE 2ND ARM FOLDED BACK

15/16 HEX ON BEARING BOLTS (5/8-18 THREAD)

TORQUING THE BEARING BOLTS:
1. SEQUENCE FOR THE FIRST 10 BOLTS SHOWN.
2. ADD SERVICE GRADE THREAD LOCKER TO THE BOLTS.
3. TORQUE THE BOLTS TO 28 FT/LBS FOLLOWING THE SEQUENCE BELOW AND THEN ROTATE THE BEARING ONE FULL TURN EACH DIRECTION MAKING SURE THE BEARING ROTATES FREE.
4. TORQUE THE BOLTS TO 56 FT/LBS FOLLOWING THE SEQUENCE BELOW AND THEN ROTATE THE BEARING ONE FULL TURN EACH DIRECTION MAKING SURE THE BEARING ROTATES FREE.
5. FINAL TORQUE THE BOLTS TO 83 FT/LBS FOLLOWING THE SEQUENCE BELOW AND THEN ROTATE THE BEARING ONE FULL TURN EACH DIRECTION MAKING SURE THE BEARING ROTATES FREE.