

# P1600

## 16' Video Surveillance Rated Fixed Steel CCTV Standard Pole Lowering Device

P1600.....Standard 16' steel pole (4" x 4" tubing) with access panels on top and bottom, square base with a maximum load of 75 Lbs.



Moog Inc.  
Sensor and Surveillance Systems

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## IMPORTANT SAFEGUARDS

- 1 Read these instructions.
- 2 Keep these instructions.
- 3 Heed all warnings
- 4 Follow all instructions.
- 5 Do not use this apparatus near water.
- 6 Clean only with damp cloth.
- 7 Do not block any of the ventilation openings. Install in accordance with the manufacturers instructions.
- 8 Cable Runs- All cable runs must be within permissible distance.
- 9 Mounting - This unit must be properly and securely mounted to a supporting structure capable of sustaining the weight of the unit.

### Accordingly:

- a. The installation should be made by a qualified installer.
  - b. The installation should be in compliance with local codes.
  - c. Care should be exercised to select suitable hardware to install the unit, taking into account both the composition of the mounting surface and the weight of the unit.
- 10 Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus ( including amplifiers) that produce heat.
  - 11 Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
  - 12 Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
  - 13 Only use attachment/ accessories specified by the manufacturer.
  - 14 Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.
  - 15 Unplug this apparatus during lightning storms or when unused for long periods of time.
  - 16 Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Be sure to periodically examine the unit and the supporting structure to make sure that the integrity of the installation is intact. Failure to comply with the foregoing could result in the unit separating from the support structure and falling, with resultant damages or injury to anyone or anything struck by the falling unit.

## UNPACKING

**Unpack carefully. Electronic components can be damaged if improperly handled or dropped. If an item appears to have been damaged in shipment, replace it properly in its carton and notify the shipper.**

### Be sure to save:

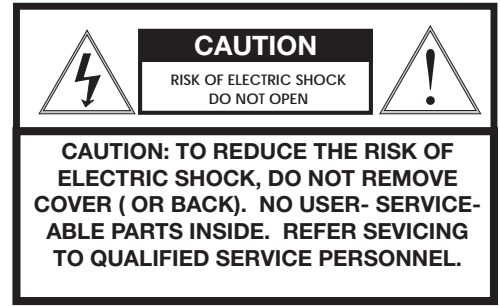
- 1 **The shipping carton and packaging material. They are the safest material in which to make future shipments of the equipment.**
- 2 **These Installation and Operating Instructions.**

## SERVICE

If technical support or service is needed, contact us at the following number:

TECHNICAL SUPPORT  
AVAILABLE 24 HOURS  
1 - 800 - 554 -1124

## SAFETY PRECAUTIONS



The lightning flash with an arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of non-insulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk to persons.

Este símbolo se piensa para alertar al usuario a la presencia del “voltaje peligroso no-aislado” dentro del recinto de los productos que puede ser un riesgo de choque eléctrico.

Ce symbole est prévu pour alerter l'utilisateur à la presence “de la tension dangereuse” non-isolée dans la clôture de produits qui peut être un risque de choc électrique.

Dieses Symbol soll den Benutzer zum Vorhandensein der nicht-Isolier “Gefährdungsspannung” innerhalb der Produkteinschließung alarmieren die eine Gefahr des elektrischen Schlages sein kann.

Este símbolo é pretendido alertar o usuário à presença “di tensão perigosa non-isolada” dentro do cerco dos produtos que pode ser um risco de choque elétrico.

Questo simbolo è inteso per avvertire l'utente alla presenza “di tensione pericolosa” non-isolata all'interno della recinzione dei prodotti che può essere un rischio di scossa elettrica.



The exclamation point within an equilateral triangle is intended to alert the user to presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Este símbolo del punto del exclamation se piensa para alertar al usuario a la presencia de instrucciones importantes en la literatura que acompaña la aplicación.

Ce symbole de point d'exclamation est prévu pour alerter l'utilisateur à la presence des instructions importantes dans la littérature accompagnant l'appareil.

Dieses Ausruf Punktsymbol soll den Benutzer zum Vorhandensein de wichtigen Anweisungen in der Literatur alarmieren, die das Gerät begleitet.

Este símbolo do ponto do exclamation é pretendido alertar o usuário à presença de instruções importantes na literatura que acompanha o dispositivo.

Questo simbolo del punto del exclamation è inteso per avvertire l'utente alla presenza delle istruzioni importanti nella letteratura che accompagna l'apparecchio.

**MADE IN**  
**USA**  
BUY AMERICA COMPLIANT • COUNTRY OF ORIGIN U.S.A.

# Product Warranty Registration

Register Your Products Online

[www.moogS3.com/technical-support/product-registration](http://www.moogS3.com/technical-support/product-registration)

Moog values your patronage. We are solely committed to providing you with the highest quality products and superior customer service. With 3-Year and 5-Year warranties (depending on the product purchased) we stand behind every product we sell.

See full warranty details at [www.moogS3.com/technical-support/warranty-plan/](http://www.moogS3.com/technical-support/warranty-plan/)

**Register your products today to receive the following benefits:**

- Simple and Trouble-Free RMA process
- Product / software updates
- Special promotions
- Eliminate the need to archive purchase documents such as receipts, purchase orders, etc.

# Limited Warranty for Moog Products

Moog - Decatur Operations, subsequently referred to as "Manufacturer," warrants these products to be free from defects in material or workmanship as follows:

PRODUCT CATEGORY	PARTS \ LABOR
All Enclosures and Electronics	Five (5) Years
Accessory Brackets	Five (5) Years
Controllers	Three (3) Years
Power Supplies / IR Illuminators	Three (3) Years
Poles / PolEvators™ / CamEvator	Three (3) Years
Warrior Series™ / Q-View™	Three (3) Years
SView Series™	Three (3) Years 6 months if used in auto scan / tour operation
DeputyDome™, NiteTrac™, Igloo Dome, PurgeDome™	Three (3) Years 6 months if used in auto scan / tour operation
EXO Series™ Dome and Fixed Camera Systems*	Three (3) Years 6 months if used in auto scan / tour operation
EXO Series™ GeminEye Visible and Thermal Camera Systems	One (1) Year

During the labor warranty period, to repair the Product, Purchaser will either return the defective product, freight prepaid, or deliver it to Manufacturer at Moog Decatur Operations, 2525 Park Central Boulevard, Decatur, Georgia, 30035. The Product to be repaired is to be returned in either its original carton or a similar package affording an equal degree of protection with a RMA # (Return Materials Authorization number) displayed on the outer box or packing slip. To obtain a RMA# you must contact our Technical Support Team at 800.554.1124, extension 101. Manufacturer will return the repaired product freight prepaid to Purchaser. Manufacturer is not obligated to provide Purchaser with a substitute unit during the warranty period or at any time. After the applicable warranty period, Purchaser must pay all labor and/or parts charges. The limited warranty stated in these product instructions is subject to all of the following terms and conditions.

## TERMS AND CONDITIONS

**1. NOTIFICATION OF CLAIMS: WARRANTY SERVICE:** If Purchaser believes that the Product is defective in material or workmanship, then written notice with an explanation of the claim shall be given promptly by Purchaser to Manufacturer. All claims for warranty service must be made within the warranty period. If after investigation, Manufacturer determines the reported problem was not covered by the warranty, Purchaser shall pay Manufacturer for the cost of investigating the problem at its then prevailing per incident billable rate. No repair or replacement of any Product or part thereof shall extend the warranty period of the entire Product. The specific warranty on the repaired part only shall be in effect for a period of ninety (90) days following the repair or replacement of that part or the remaining period of the Product parts warranty, whichever is greater.

**2. EXCLUSIVE REMEDY: ACCEPTANCE:** Purchaser's exclusive remedy and Manufacturer's sole obligation is to supply (or pay for) all labor necessary to repair any Product found to be defective within the warranty period and to supply, at no extra charge, new or rebuilt replacements for defective parts.

**3. EXCEPTIONS TO LIMITED WARRANTY:** Manufacturer shall have no liability or obligation to Purchaser with respect to any Product requiring service during the warranty period which is subjected to any of the following: abuse, improper use, negligence, accident, or acts of God (i.e., hurricanes, earthquakes), modification, failure of the end-user to follow the directions outlined in the product instructions, failure of the end-user to follow the maintenance procedures recommended by the International Security Industry Organization, written in product instructions, or recommended in the service manual for the Product. Furthermore, Manufacturer shall have no liability where a schedule is specified for regular replacement or maintenance or cleaning of certain parts (based on usage) and the end-user has failed to follow such schedule; attempted repair by non-qualified personnel; operation of the Product outside of the published environmental and electrical parameters, or if such Product's original identification (trademark, serial number) markings have been defaced, altered, or removed. Manufacturer excludes from warranty coverage Products sold AS IS and/or WITH ALL FAULTS and excludes used Products which have not been sold by Manufacturer to the Purchaser. All software and accompanying documentation furnished with, or as part of the Product is furnished "AS IS" (i.e., without any warranty of any kind), except where expressly provided otherwise in any documentation or license agreement furnished with the Product. ANY COST ASSOCIATED WITH REMOVAL OF DEFECTIVE PRODUCT AND INSTALLATION OF REPLACEMENT PRODUCT IS NOT INCLUDED IN THIS WARRANTY.

**4. PROOF OF PURCHASE:** The Purchaser's dated bill of sale must be retained as evidence of the date of purchase and to establish warranty eligibility.

## DISCLAIMER OF WARRANTY

EXCEPT FOR THE FOREGOING WARRANTIES, MANUFACTURER HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO ANY AND/OR ALL IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND/OR ANY WARRANTY WITH REGARD TO ANY CLAIM OF INFRINGEMENT THAT MAY BE PROVIDED IN SECTION 2-312(3) OF THE UNIFORM COMMERCIAL CODE AND/OR IN ANY OTHER COMPARABLE STATE STATUTE. MANUFACTURER HEREBY DISCLAIMS ANY REPRESENTATIONS OR WARRANTY THAT THE PRODUCT IS COMPATIBLE WITH ANY COMBINATION OF NON-MANUFACTURER PRODUCTS OR NON-MANUFACTURER RECOMMENDED PRODUCTS PURCHASER MAY CHOOSE TO CONNECT TO THE PRODUCT.

## LIMITATION OF LIABILITY

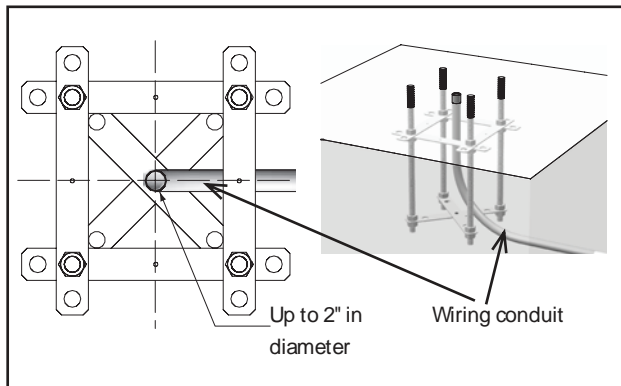
THE LIABILITY OF Manufacturer, IF ANY, AND PURCHASER'S SOLE AND EXCLUSIVE REMEDY FOR DAMAGES FOR ANY CLAIM OF ANY KIND WHATSOEVER, REGARDLESS OF THE LEGAL THEORY AND WHETHER ARISING IN TORT OR CONTRACT, SHALL NOT BE GREATER THAN THE ACTUAL PURCHASE PRICE OF THE PRODUCT WITH RESPECT TO WHICH SUCH CLAIM IS MADE. IN NO EVENT SHALL MANUFACTURER BE LIABLE TO PURCHASER FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND INCLUDING, BUT NOT LIMITED TO, COMPENSATION, REPLACEMENT LABOR COSTS, REIMBURSEMENT, OR DAMAGES ON ACCOUNT OF THE LOSS OF PRESENT OR PROSPECTIVE PROFITS OR FOR ANY OTHER REASON WHATSOEVER.

# 1

## Part 1: Site Preparation Figure 1



**NOTE:** Special attention must be paid to the size of the wiring conduit and its location within the concrete foundation and jig (if applicable.) The **Wiring Conduit** can be up to 2" in diameter. Use reducers if necessary. Also, make sure that the **Wiring Conduit** is in the center of the foundation and **Anchor Jig** during installation (Figure 1).



# 2

## Part 1: Site Preparation

1. Select a suitable site for the P1600 and prepare the pad site using a hole 36" x 36" x 36" deep. The top of the concrete foundation should be flush with the ground.

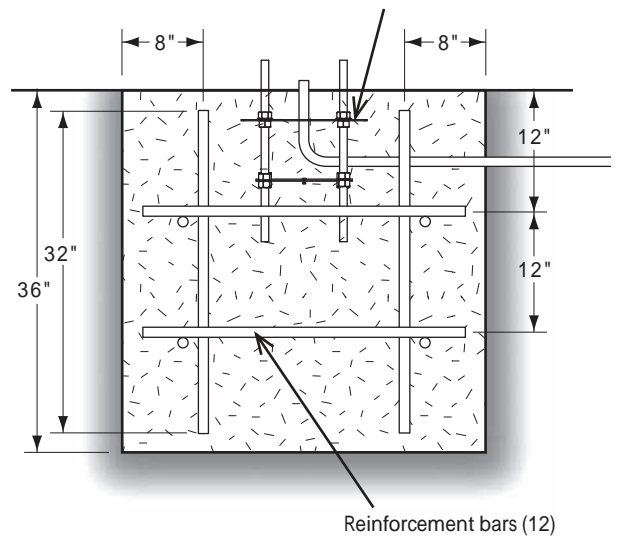
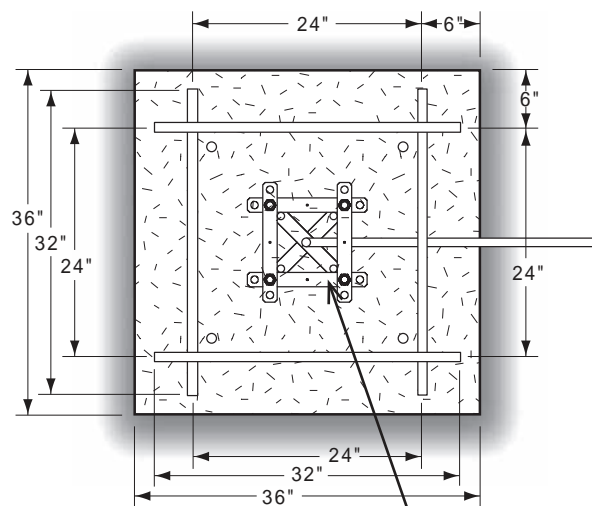


**CALL BEFORE DIGGING!** Be sure that there are no underground electric or phone cables, gas or water lines in the area where the pole will be located.

3650 Woodhead Drive Northbrook, IL. USA 60062  
+1.847.498.0700 Fax: +1.847.498.1258 [www.moogS3.com](http://www.moogS3.com)

# 3

## Part 1: Site Preparation Figure 2



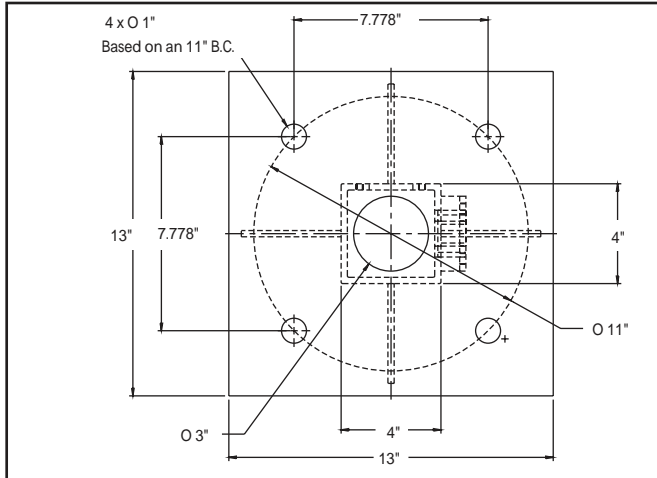
To help reinforce the concrete foundation, place (12) 1/2" diameter x 32" long Reinforcement Bars ("rebar") as shown in figure 2. Use suitable preparation methods to place the rebar.

# 4

## Part 1: Site Preparation Figure 3

### 3. FOR ANCHOR BOLT INSTALLATIONS:

Pour concrete per manufacturer's directions. See Figure 3 for dimensions of the bolt pattern and suspend appropriate bolts in the concrete around the wiring conduit. Leave 2" to 3" of the **BOLTS** protruding above the pad. If you are using leveling nuts, leave 4" to 6" protruding.

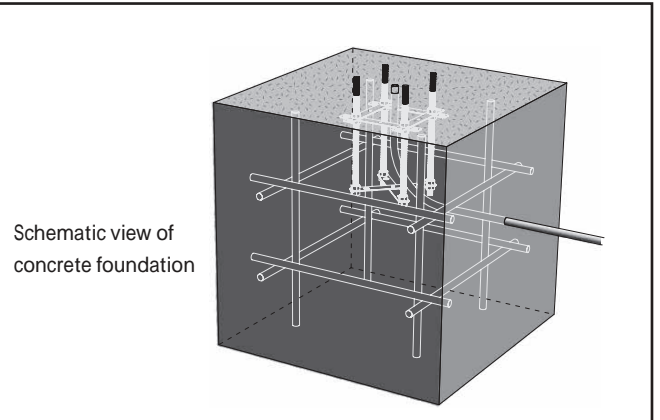


# 5

## Part 1: Site Preparation Figure 4



Prepare the concrete per manufacturer's directions. The concrete must have a compressive strength of **3000 psi**, and must be fabricated following **ACI318-89** requirements. Allow the concrete foundation to cure thoroughly before proceeding with the installation.



Schematic view of concrete foundation

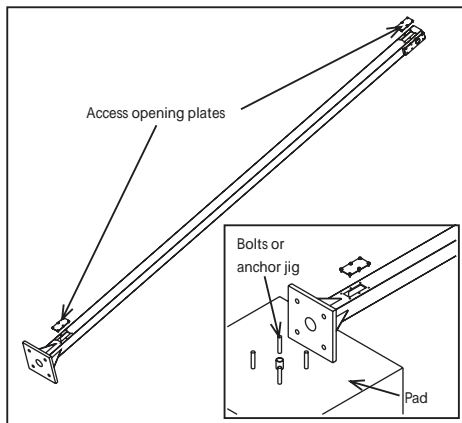
# 6

## Part 2: Installation Figure 5



**NOTE:** Be sure that the pole is oriented properly, with the carriage

1. Place the pole on the pad with the holes on the Base Plate aligned with the bolts of the anchor bolts or anchor jig (Figure 5).
2. Remove the access opening plates at the bottom and top.

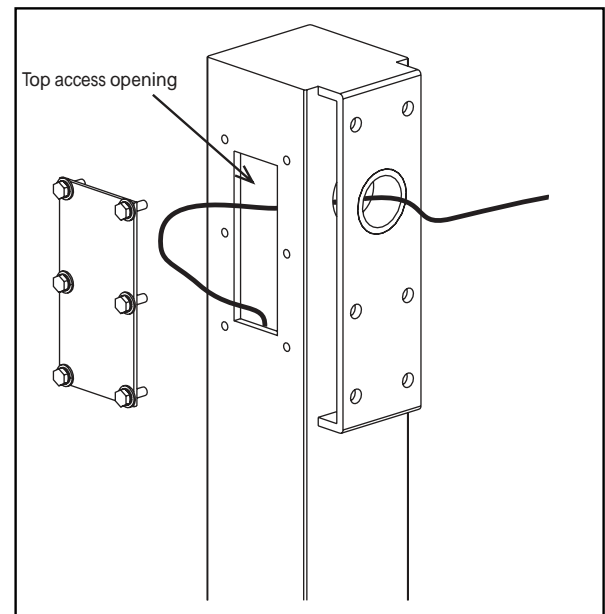


3. Insert the wiring into the 3" diameter hole in the base of the pole up, into and out of the bottom access opening. Make sure all slack is pulled completely through.

# 7

## Part 2: Installation Figure 6

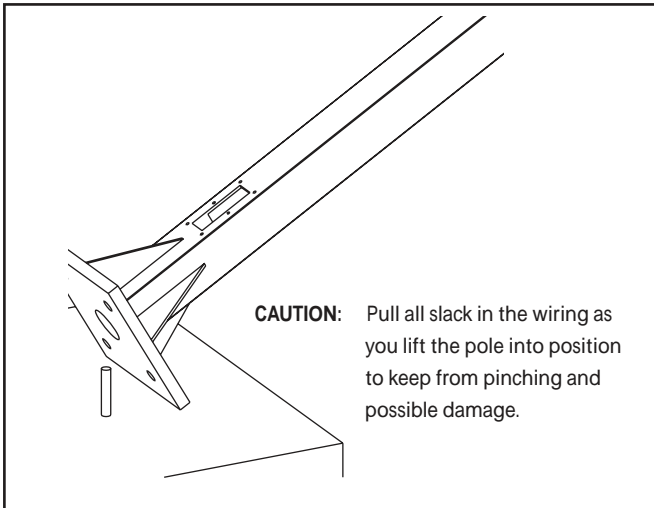
4. Insert connecting wiring into the bottom access opening, run through the pole up to the top access opening. Insert the end through the housing connecting hole. Close the top access opening and make necessary wiring connections at the bottom access opening (Figure 6).



# 8

## Part 2: Installation Figure 7

5. Slowly lift the pole into the upright position, aligning the holes of the Base Plate with the Bolts in the concrete pad (Figure 7).

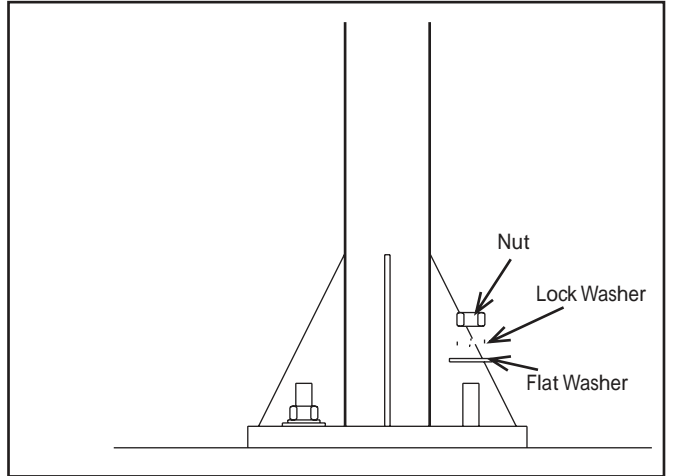


5. Ensure that the pole is vertical on all sides. Use a bubble level or plumb bob to check.

# 9

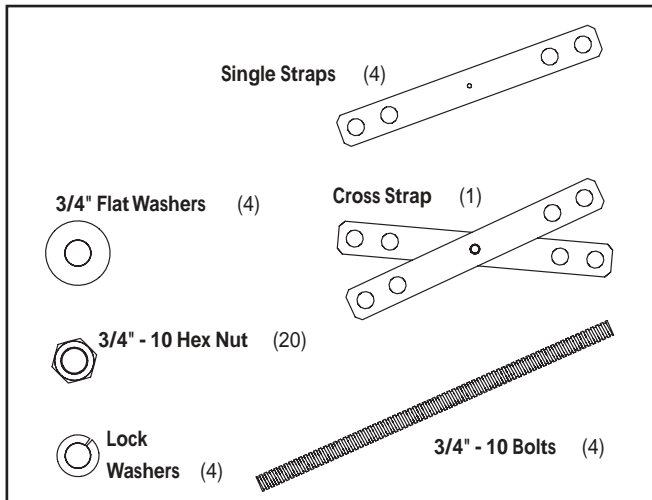
## Part 2: Installation Figure 8

6. Secure the pole to the pad with fasteners (Figure 8).



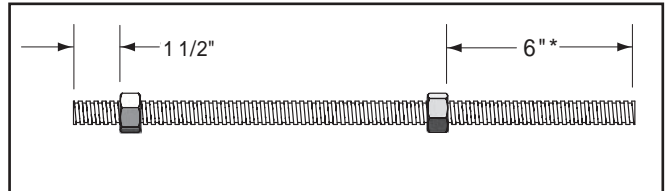
# 10

## Anchor Jig Assembly Anchor Jig Kit Parts List



# 11

## Jig Assembly Figure 1

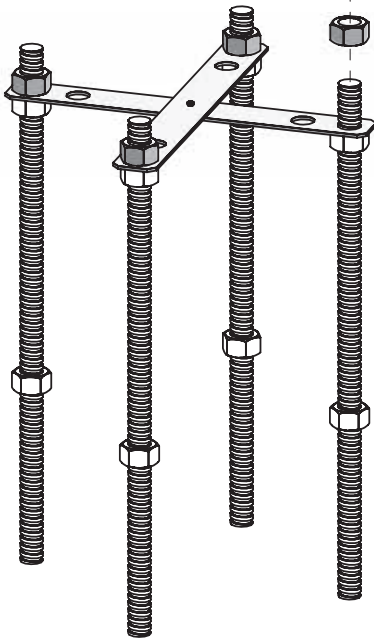


1. Thread two (2) nuts onto each of the (4) bolts (Figure 1). The end with 6" of clearance will be the top of the Anchor Jig, the end with 1 1/2" clearance will be the bottom.

**NOTE:** Because of surface conditions it may be necessary to use leveling nuts. See step 5 below for information.

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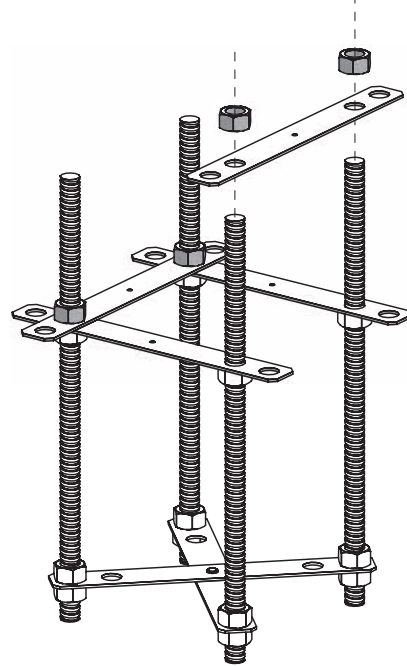
Jig Assembly Figure 2



2. Place the short end of each Bolt into the outside holes of the Cross Strap. Place Hex Nuts onto each Bolt and finger tighten (Figure 2).

13

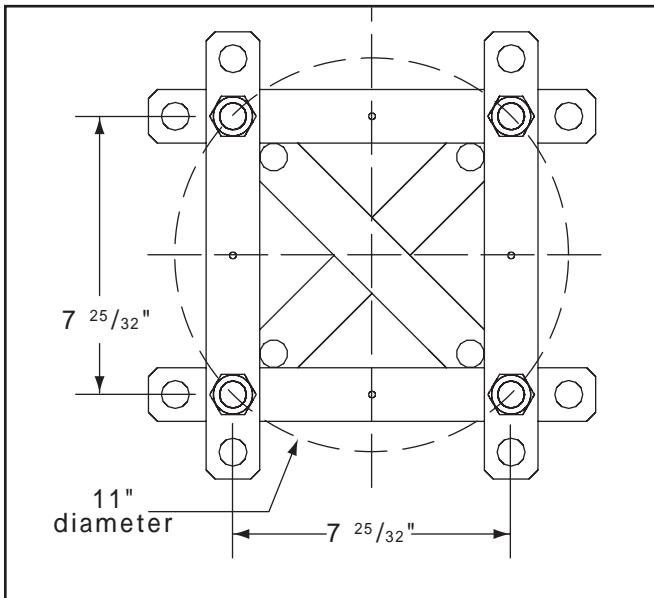
Jig Assembly Figure 3



3. Turn the Anchor Jig over and place Single Straps over the Bolts (Figure 3). Use the inside hole of each strap. Place Hex Nuts onto each Bolt and finger tighten.

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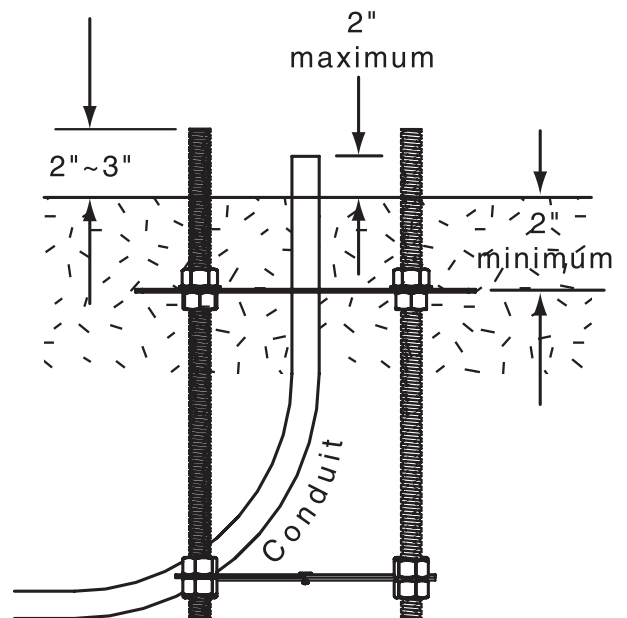
Jig Assembly Figure 4



4. Before using the Anchor Jig verify that the center to center dimensions between the bolts are even (Figure 4). If not, adjust accordingly. Firmly tighten all Hex Nuts.

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Jig Assembly Figure 5



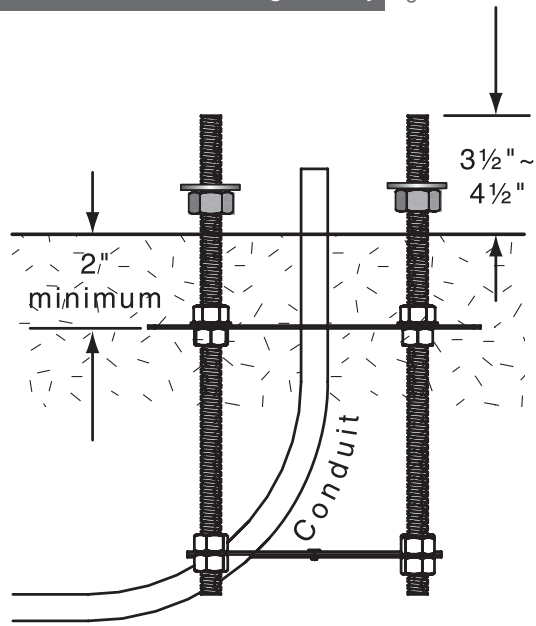
Without Leveling Nuts

5. Standard installation without leveling nuts.



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Jig Assembly Figure 6

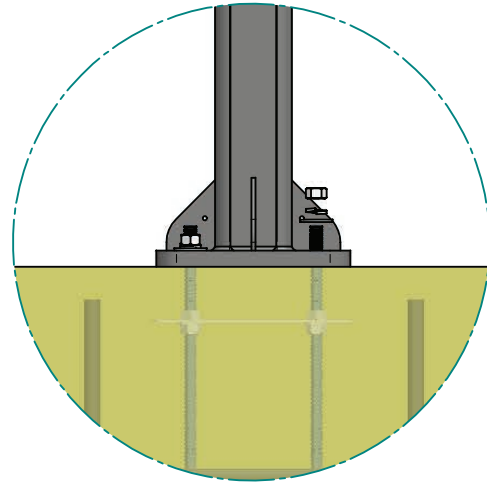


### With Leveling Nuts

6. If, due to conditions or other requirements, leveling nuts are needed, adjustments will have to be made to the **Anchor Jig**. Leveling nuts and washers are NOT provided with the pole,

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Jig Assembly Figure 7



**NOTE:** The **Flat Washers**, **Lock Washers**, and remaining **Hex Nuts** will be used to fasten the pole to the **Anchor Jig**.