

# LA16-30 / LA16-35 TOWER INSTRUCTIONS

1



 **Applied**  
Truss and Electronics

722 Blue Crab Road  
Newport News, VA 23606  
757.591.9371 / fax 757.591.9514  
[www.appliednn.com](http://www.appliednn.com)

**ATTENTION!**  
**2200 lb WEIGHT LIMIT**

REVISED: 13Oct23  
PROUDLY MADE IN THE U.S.A.

# LA16-30 / LA16-35 TOWER INSTRUCTIONS

# 2

## BILL OF GOODS

QTY: (2) 16" LA1630 Towers

(2) V-BASES  
(2) HINGE SECTIONS  
(4) 10' 16IN TOWER TRUSS (TOWERS)  
(2) 5' 16IN TOWER TRUSS (TOWERS)  
(2) HEAD BLOCKS  
(4) 10' 16IN BOX TRUSS (LEGS)  
(4) 8' 16IN BOX TRUSS (LEGS)  
(4) LEG PLATES  
(4) LEG BRACKETS  
(4) TOWER BRACKETS  
(4) MOTOR SUPPORTS  
(2) LIFTING LADDERS  
(4) TOWER BRACES  
(96) 5/8-11 BOLT SETS  
> WITH (192) WASHERS AND (96) NUTS  
(24) 3/4 X 4" CLEVIS PINS WITH R-CLIPS  
(4) LEVELING JACK TUBES  
(20) LEVELING JACKS  
(2) SETS OF BUILD INSTRUCTIONS

Shipped on 2 pallets

## BILL OF GOODS

QTY: (2) 16" LA1635 Towers

(2) V-BASES  
(2) HINGE SECTIONS  
(6) 10' 16IN TOWER TRUSS (TOWERS)  
(2) HEAD BLOCKS  
(4) 10' 16IN BOX TRUSS (LEGS)  
(4) 8' 16IN BOX TRUSS (LEGS)  
(4) LEG PLATES  
(4) LEG BRACKETS  
(4) TOWER BRACKETS  
(4) MOTOR SUPPORTS  
(2) LIFTING LADDERS  
(4) TOWER BRACES  
(96) 5/8-11 BOLT SETS  
> WITH (192) WASHERS AND (96) NUTS  
(24) 3/4 X 4" CLEVIS PINS WITH R-CLIPS  
(4) LEVELING JACK TUBES  
(20) LEVELING JACKS  
(2) SETS OF BUILD INSTRUCTIONS

Shipped on 2 pallets

## REQUIREMENTS FOR SAFE USE

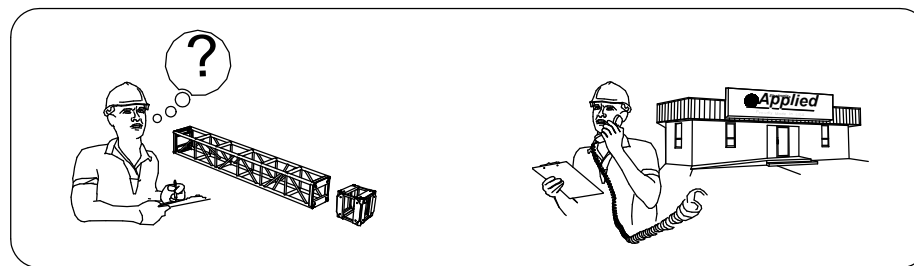
- 1) Build Tower on flat surface.
- 2) Thick wood or metal plates under leveling jacks.
- 3) Don't lift tower with a load.
- 4) **SEE ENGINEERING REPORT FOR BALLAST REQUIREMENTS**

**THIS TOWER SHOULD BE ASSEMBLED/ERECTED AND  
BALLASTED BY QUALIFIED RIGGERS.**

\*\*\**BALLAST IS NOT PROVIDED*\*\*\*



722 Blue Crab Road  
Newport News, VA 23606  
757.591.9371 / fax 757.591.9514  
www.appliednn.com

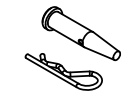


**ALWAYS...IF YOU HAVE QUESTIONS, PLEASE CALL!  
(757)591-9371**

REVISED: 13Oct23

**PROUDLY MADE IN THE U.S.A.**

## LA16-30 TOWER PARTS SHEETS / PER TOWER



**X 12**

91-345A

Consists of:

1 ea 91-345 Clevis Pin

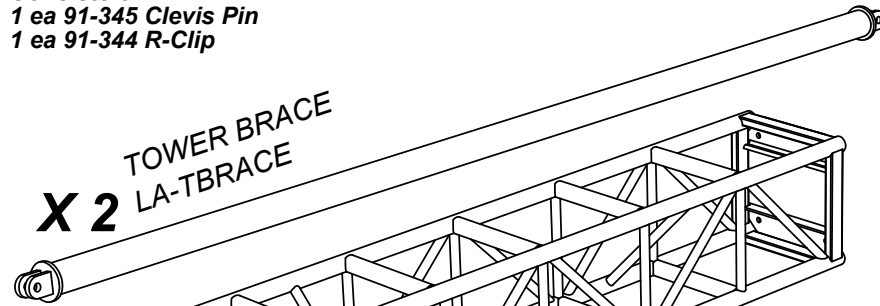
1 ea 91-344 R-Clip



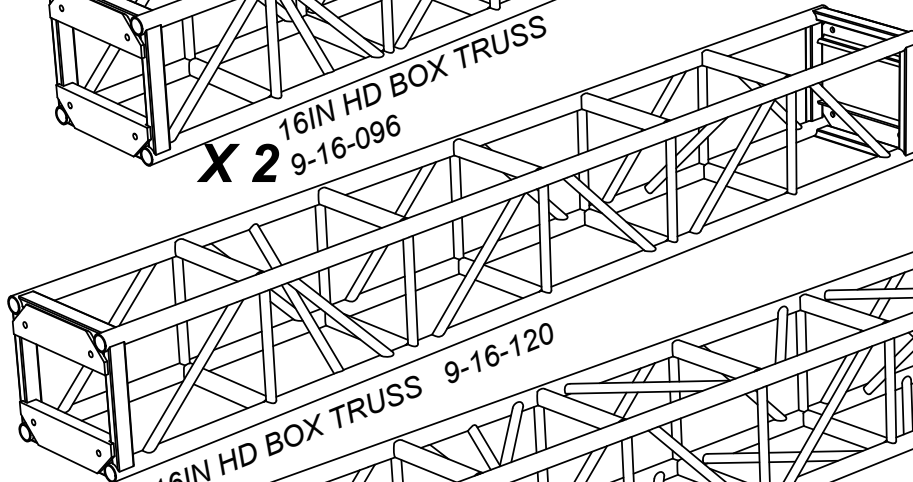
**X 48**

5/8HDRW

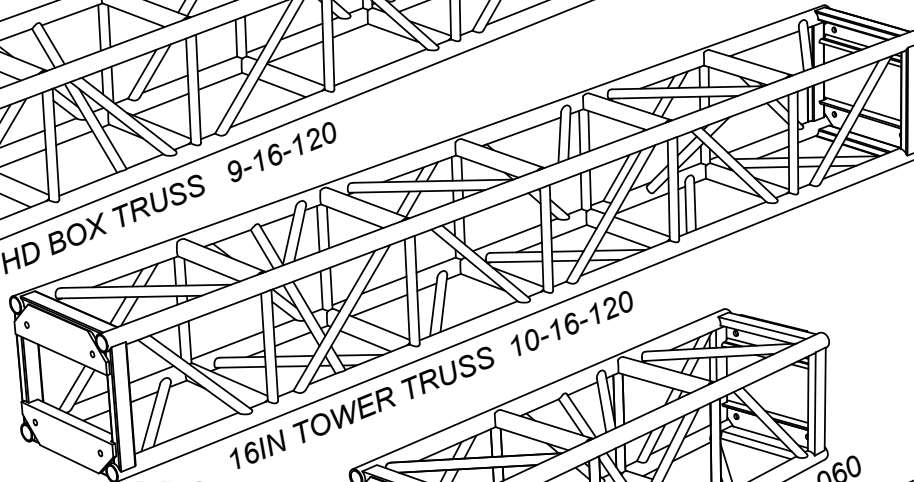
**X 2** TOWER BRACE  
LA-TBRACE



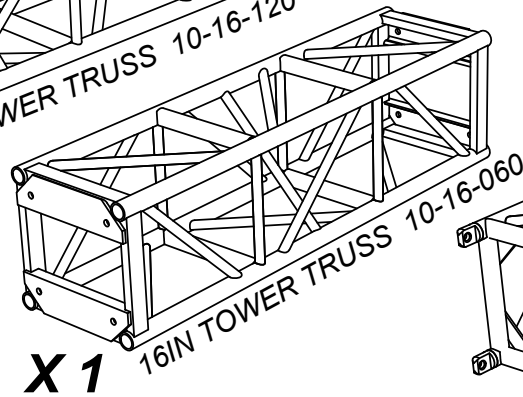
**X 2** 16IN HD BOX TRUSS  
9-16-096



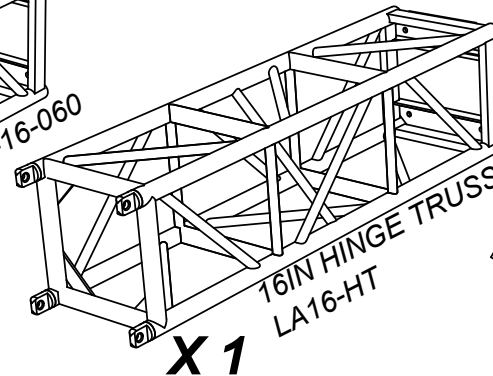
**X 2** 16IN HD BOX TRUSS 9-16-120



**X 2** 16IN TOWER TRUSS 10-16-120



**X 1** 16IN TOWER TRUSS 10-16-060



**X 1** 16IN HINGE TRUSS  
LA16-HT

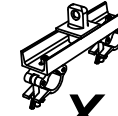


LEVELING  
JACK TUBE  
LA-16-LJT

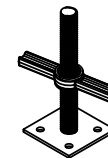
**X 2**

LEVELING  
JACK  
91-027L

**X 6**

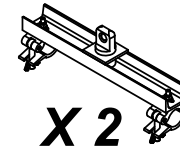


**X 2**  
LEG BRACKET  
LA-16-LB

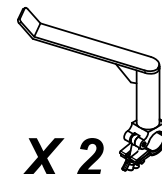


LEVELING  
JACK  
91-027S

**X 4**

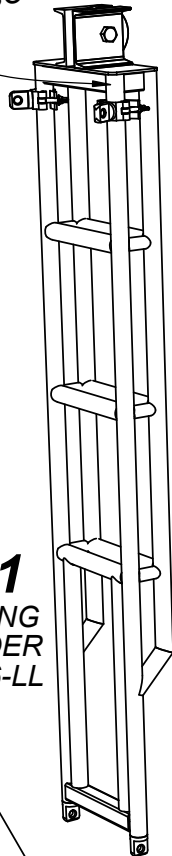


**X 2**  
TOWER  
BRACKET  
LA-16-TB

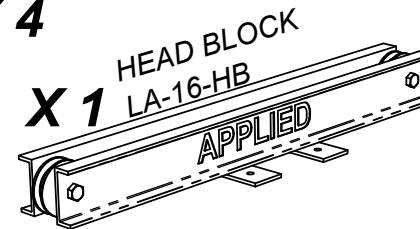


**X 2**  
MOTOR SUPPORT  
LA-MS

SPIGOT  
CLAMP  
LA-LLSC

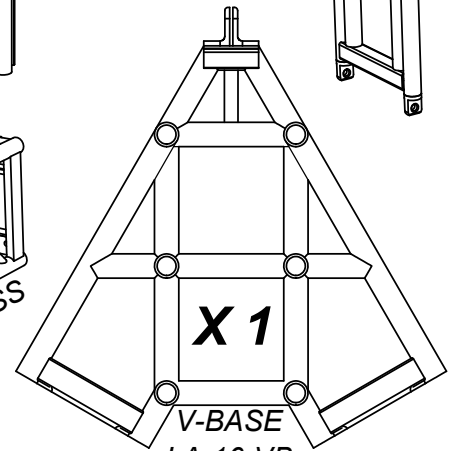
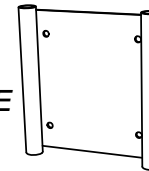


**X 1**  
LIFTING  
LADDER  
LA-16-LL



**X 1** HEAD BLOCK  
LA-16-HB

**X 2**  
LEG PLATE  
LA-16-LP



**X 1**  
V-BASE  
LA-16-VB

REVISED: 13Oct23

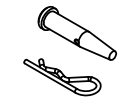
PROUDLY MADE IN THE U.S.A.



722 Blue Crab Road  
Newport News, VA 23606  
757.591.9371 / fax 757.591.9514  
www.appliednnc.com

# LA16-35 TOWER PARTS SHEETS / PER TOWER

4



**X 12**

91-345A

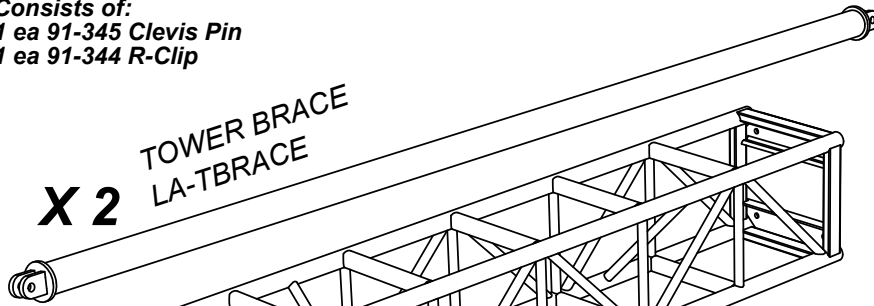
Consists of:  
1 ea 91-345 Clevis Pin  
1 ea 91-344 R-Clip



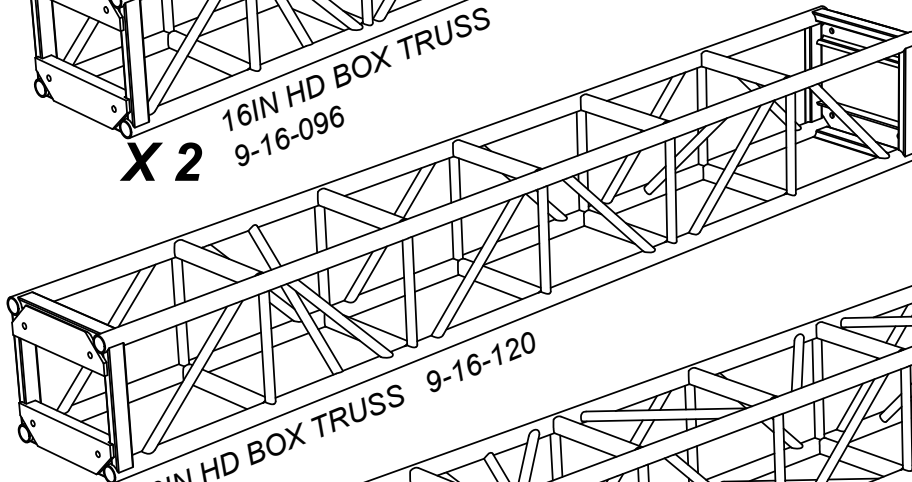
**X 48**

5/8HDRW

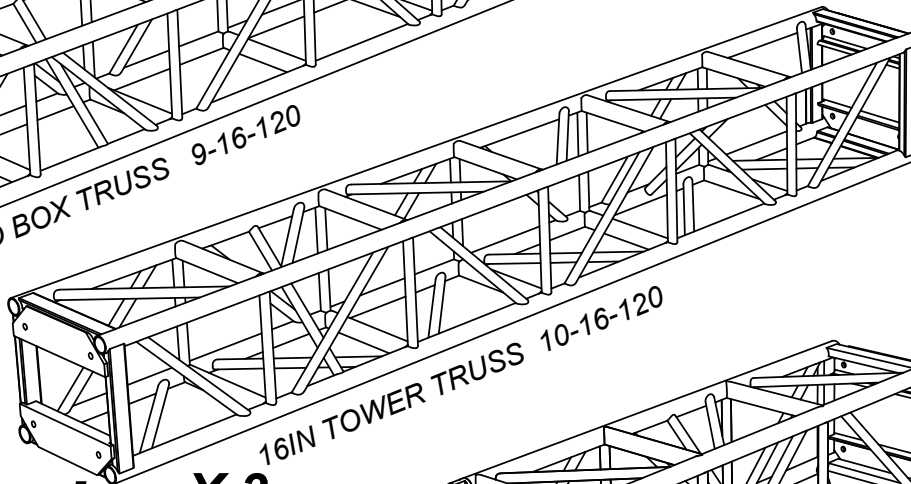
**X 2** TOWER BRACE  
LA-TBRACE



**X 2** 16IN HD BOX TRUSS  
9-16-096

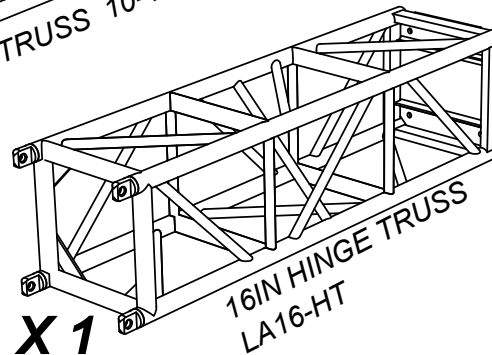


**X 2** 16IN HD BOX TRUSS 9-16-120



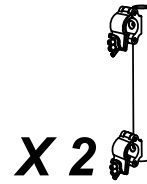
**X 3**

16IN TOWER TRUSS 10-16-120

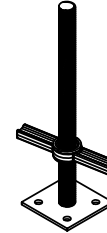


**X 1**

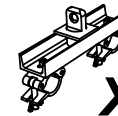
16IN HINGE TRUSS  
LA16-HT



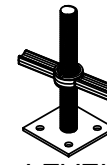
**X 2** LEVELING  
JACK TUBE  
LA-16-LJT



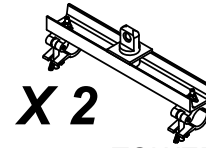
LEVELING  
JACK  
91-027L  
**X 6**



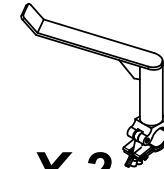
**X 2** LEG BRACKET  
LA-16-LB



LEVELING  
JACK  
91-027S  
**X 4**

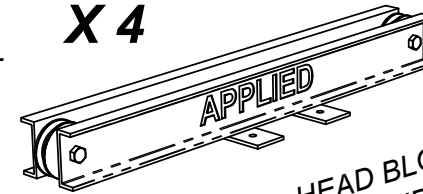
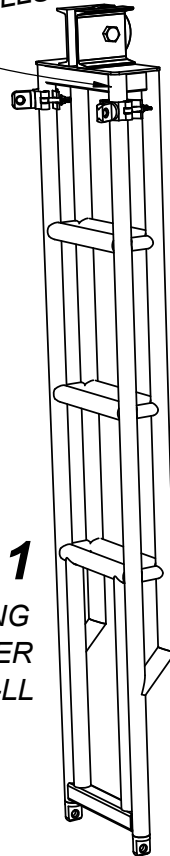


**X 2** TOWER  
BRACKET  
LA-16-TB



**X 2** MOTOR SUPPORT  
LA-MS

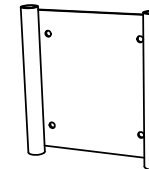
SPIGOT  
CLAMP  
LA-LLSC



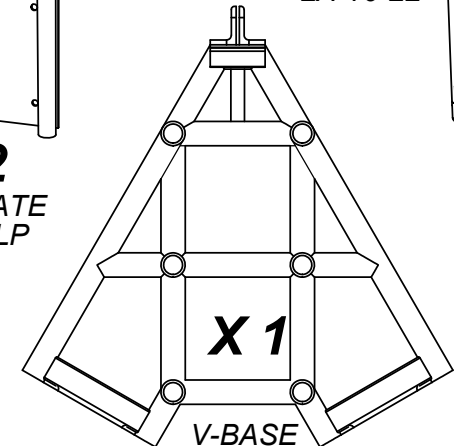
**X 1** HEAD BLOCK  
LA-16-HB

**X 1**

LIFTING  
LADDER  
LA-16-LL



**X 2** LEG PLATE  
LA-16-LP



**X 1**

V-BASE  
LA-16-VB

**Applied**  
Truss and Electronics

722 Blue Crab Road  
Newport News, VA 23606  
757.591.9371 / fax 757.591.9514  
www.appliednnc.com

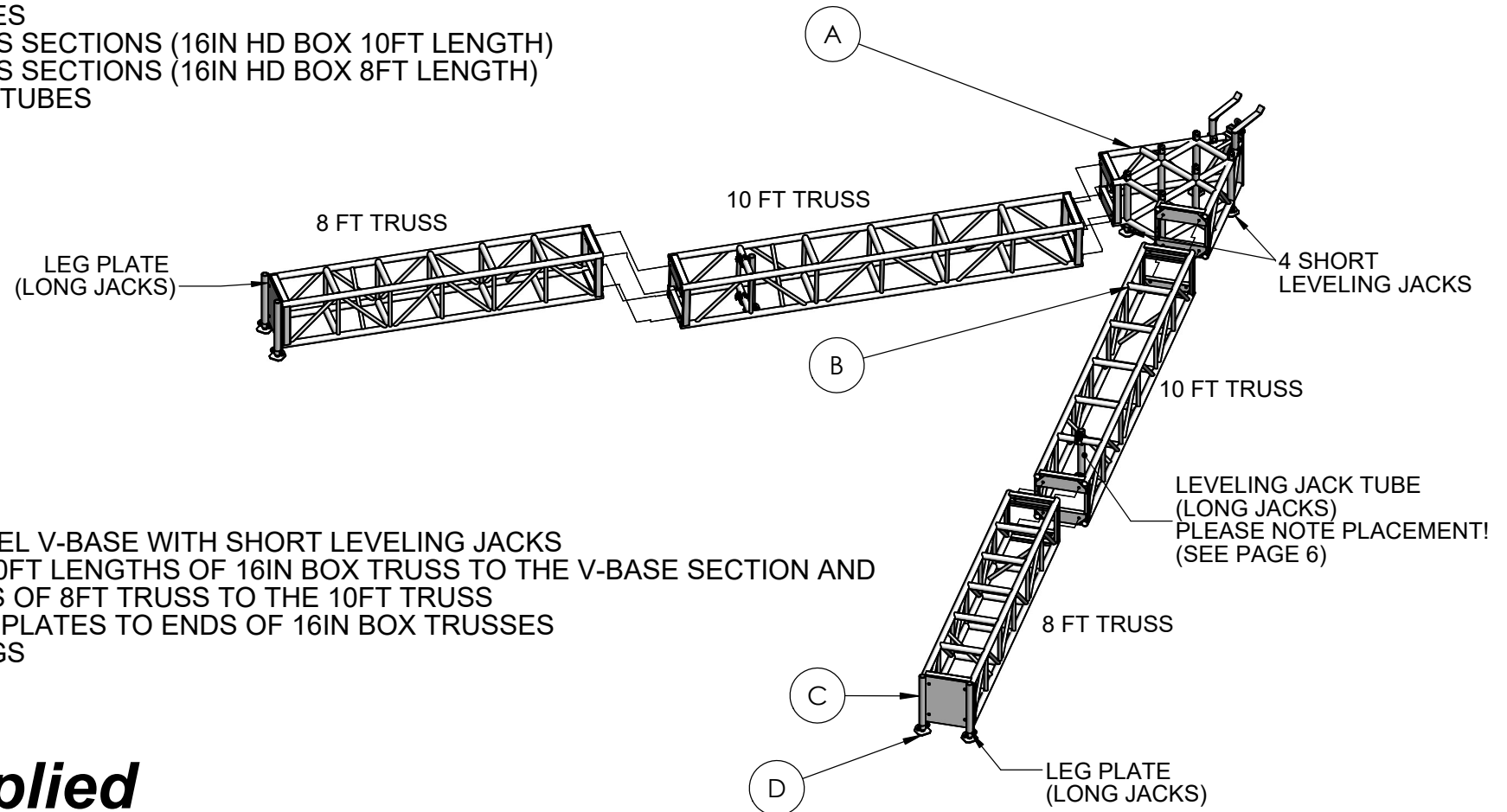
# LA16-30 / LA16-35 TOWER INSTRUCTIONS

# 5

## STEP#1 BASE ASSEMBLY

### PARTS - (PER TOWER)

- (1) V-BASE
- (10) LEVELING JACKS
  - > (6) LONG
  - > (4) SHORT
- (2) LEG PLATES
- (2) LEG TRUSS SECTIONS (16IN HD BOX 10FT LENGTH)
- (2) LEG TRUSS SECTIONS (16IN HD BOX 8FT LENGTH)
- (2) LEVELING TUBES



- A) SET & LEVEL V-BASE WITH SHORT LEVELING JACKS
- B) BOLT (2) 10FT LENGTHS OF 16IN BOX TRUSS TO THE V-BASE SECTION AND 2 LENGTHS OF 8FT TRUSS TO THE 10FT TRUSS
- C) BOLT LEG PLATES TO ENDS OF 16IN BOX TRUSSES
- D) LEVEL LEGS



722 Blue Crab Road  
Newport News, VA 23606  
757.591.9371 / fax 757.591.9514  
www.appliednn.com

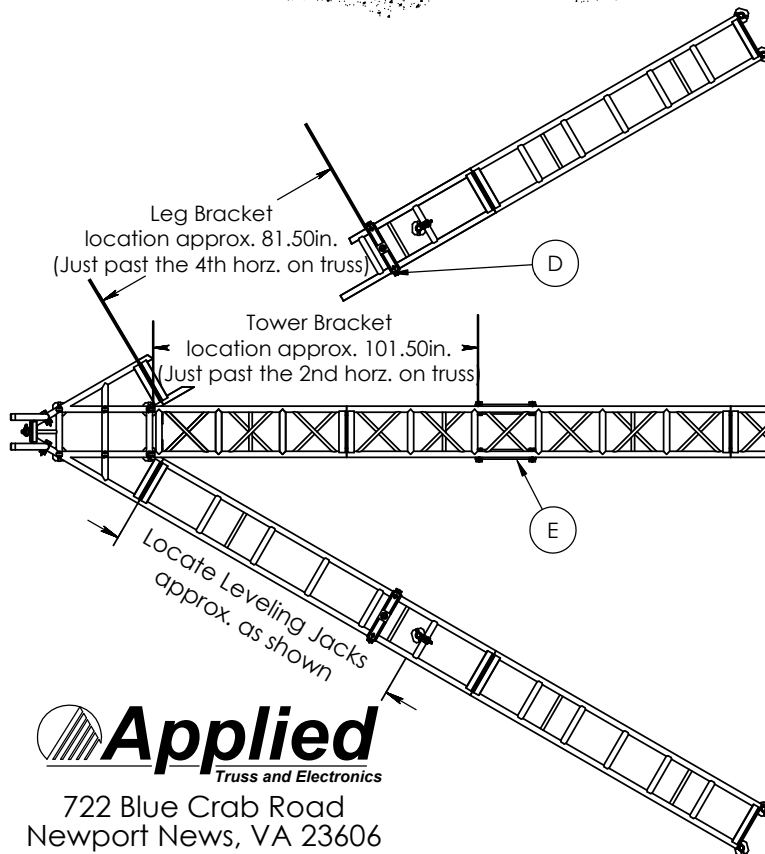
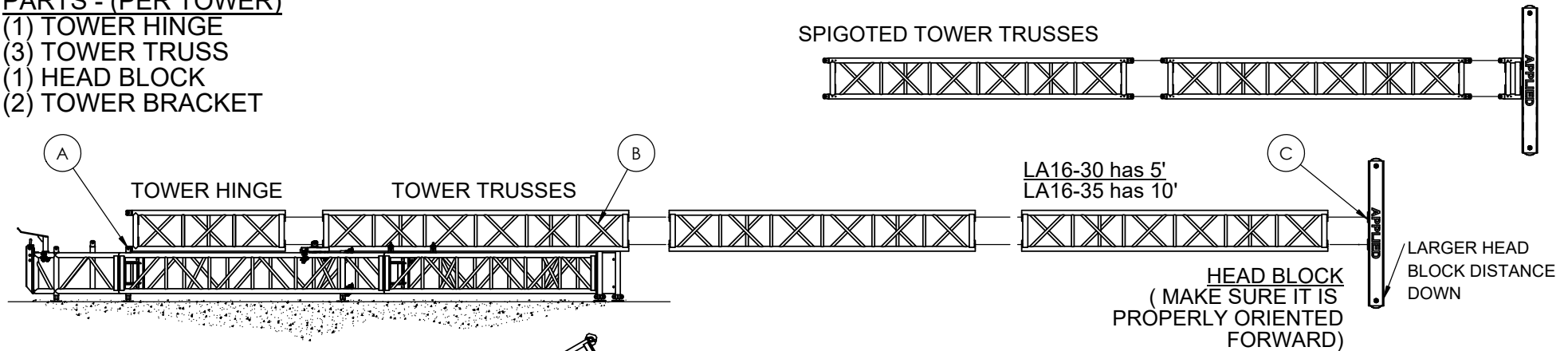
# LA16-30 / LA16-35 TOWER INSTRUCTIONS

6

## STEP#2 TOWER ASSEMBLY

### PARTS - (PER TOWER)

- (1) TOWER HINGE
- (3) TOWER TRUSS
- (1) HEAD BLOCK
- (2) TOWER BRACKET



### STEP#2

- A) PIN BOTTOM MALE SPIGOT OF HINGE SECTION TO FRONT SPIGOTS OF V-BASE.
- B) BOLT/PIN ALL THE TOWER TRUSS SECTIONS.
- C) BOLT / PIN THE HEAD BLOCK IN PLACE, **LONG SIDE DOWN**.
- D) POSITION LEG BRACKETS **AS SHOWN**.
- E) POSITION TOWER BRACKETS **AS SHOWN**.

### CAUTION:

PLACEMENT OF BRACE BRACKETS IS CRITICAL FOR THE TOWER TO SUPPORT THE LOAD. DO NOT VARY FROM GIVEN DIMENSIONS.

**CHECK THAT ALL BOLTS, PINS & CLAMPS ARE SECURE BEFORE PROCEEDING.**



722 Blue Crab Road  
Newport News, VA 23606  
757.591.9371 / fax 757.591.9514  
www.appliednnc.com

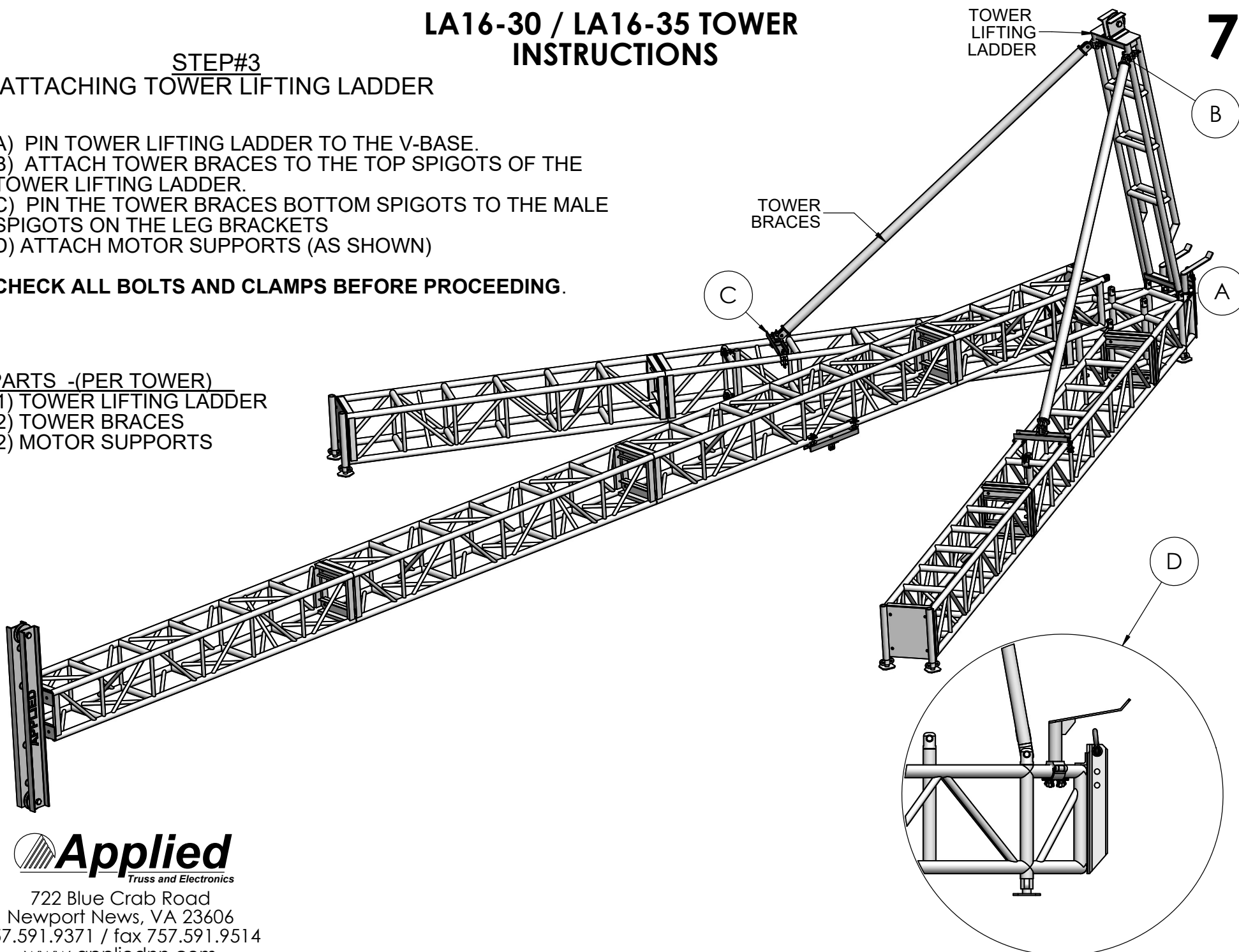
# LA16-30 / LA16-35 TOWER INSTRUCTIONS

## STEP#3 ATTACHING TOWER LIFTING LADDER

- A) PIN TOWER LIFTING LADDER TO THE V-BASE.
- B) ATTACH TOWER BRACES TO THE TOP SPIGOTS OF THE TOWER LIFTING LADDER.
- C) PIN THE TOWER BRACES BOTTOM SPIGOTS TO THE MALE SPIGOTS ON THE LEG BRACKETS
- D) ATTACH MOTOR SUPPORTS (AS SHOWN)

**CHECK ALL BOLTS AND CLAMPS BEFORE PROCEEDING.**

PARTS -(PER TOWER)  
(1) TOWER LIFTING LADDER  
(2) TOWER BRACES  
(2) MOTOR SUPPORTS



**Applied**  
Truss and Electronics

722 Blue Crab Road  
Newport News, VA 23606  
757.591.9371 / fax 757.591.9514  
www.appliednn.com

REVISED: 13Oct23  
PROUDLY MADE IN THE U.S.A.

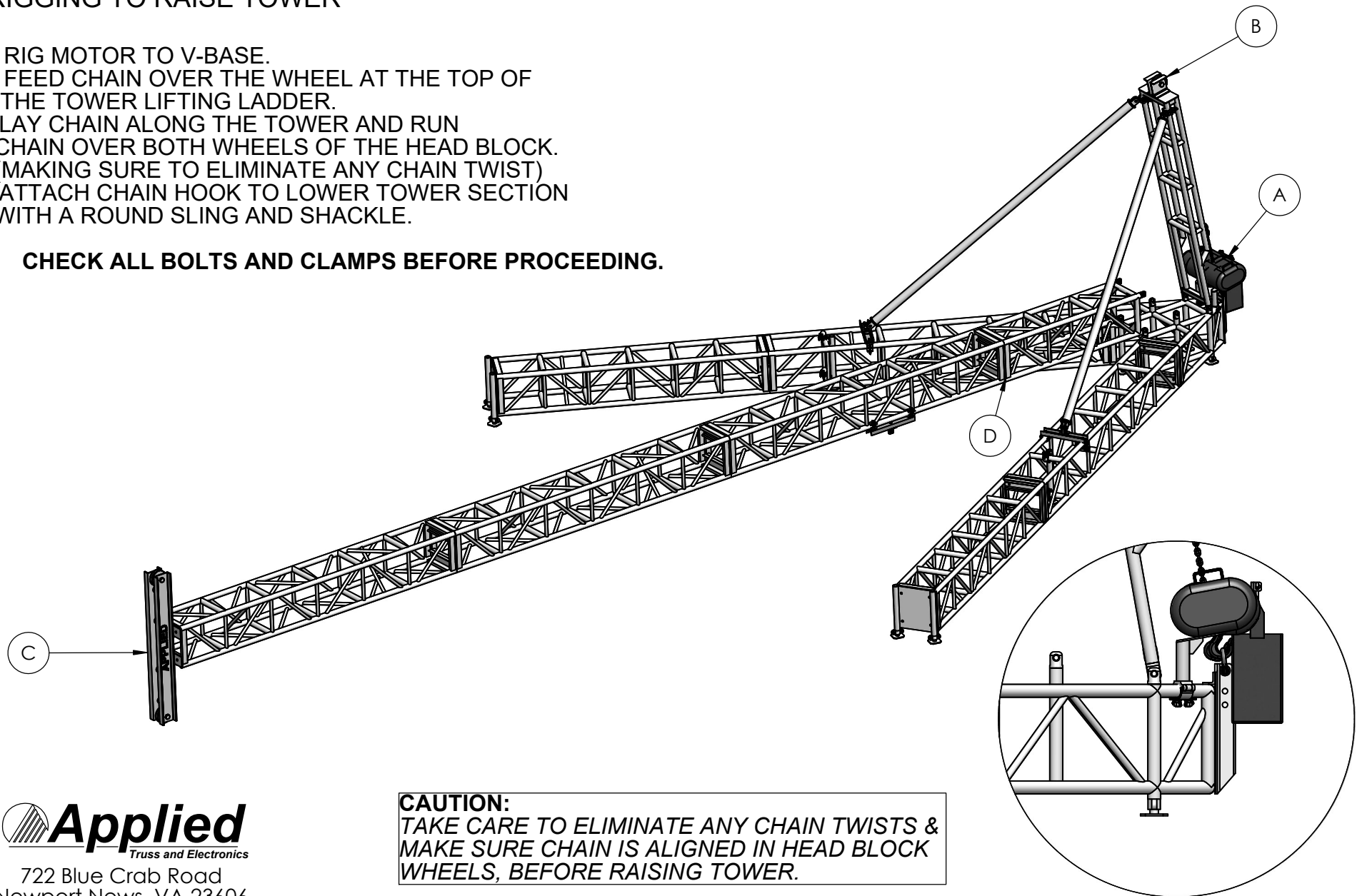
# LA16-30 / LA16-35 TOWER INSTRUCTIONS

8

## STEP #4 RIGGING TO RAISE TOWER

- A) RIG MOTOR TO V-BASE.
- B) FEED CHAIN OVER THE WHEEL AT THE TOP OF THE TOWER LIFTING LADDER.
- C) LAY CHAIN ALONG THE TOWER AND RUN CHAIN OVER BOTH WHEELS OF THE HEAD BLOCK. (MAKING SURE TO ELIMINATE ANY CHAIN TWIST)
- D) ATTACH CHAIN HOOK TO LOWER TOWER SECTION WITH A ROUND SLING AND SHACKLE.

**CHECK ALL BOLTS AND CLAMPS BEFORE PROCEEDING.**



**Applied**  
Truss and Electronics

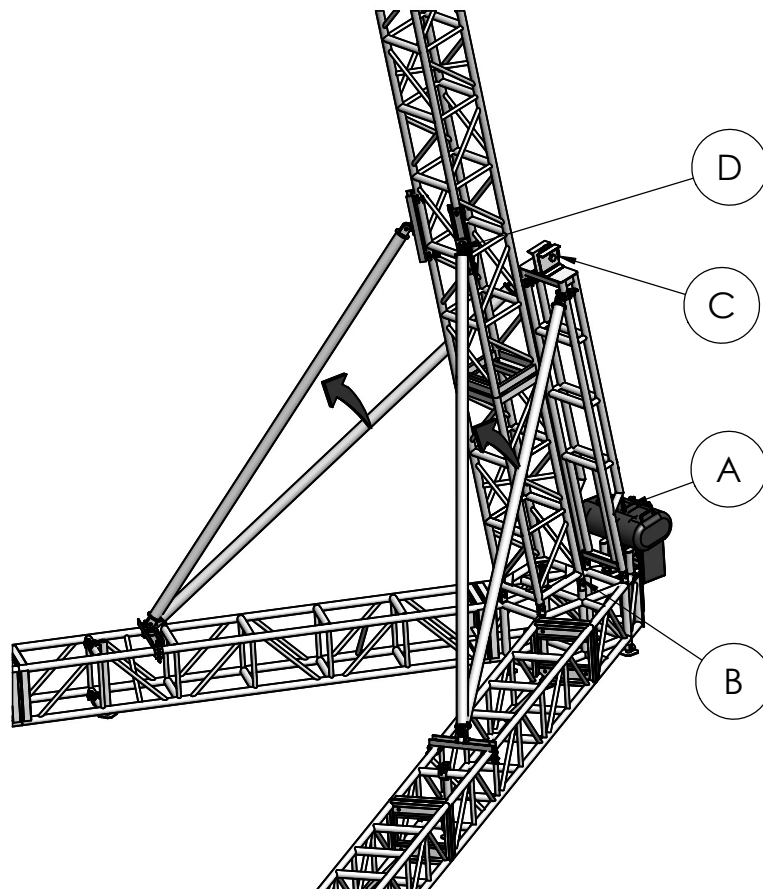
722 Blue Crab Road  
Newport News, VA 23606  
757.591.9371 / fax 757.591.9514  
www.appliednn.com

**CAUTION:**  
TAKE CARE TO ELIMINATE ANY CHAIN TWISTS &  
MAKE SURE CHAIN IS ALIGNED IN HEAD BLOCK  
WHEELS, BEFORE RAISING TOWER.



# LA16-30 / LA16-35 TOWER INSTRUCTIONS

9



## STEP#5 RAISING & BRACING TOWER

**DOUBLE CHECK ALL CONNECTORS AND  
CLAMPS BEFORE PROCEEDING!**

A) ENGAGE MOTOR TO RAISE TOWER.

**CAUTION:**  
TAKE NOTICE OF TOWER KICK BACK

B) PIN REMAINING SPIGOTS AT TOWER BASE.

C) UNPIN TOP OF TOWER BRACES FROM THE  
LIFTING LADDER.

D) PIN TOWER BRACES TO TOWER BRACKETS.

*TOWER LIFTING LADDER CAN REMAIN ATTACHED  
TO TOWER.*



722 Blue Crab Road  
Newport News, VA 23606  
757.591.9371 / fax 757.591.9514  
[www.appliednn.com](http://www.appliednn.com)

# LA16-30 / LA16-35 TOWER INSTRUCTIONS

# 10

## STEP#6 FLYING LINE ARRAY SPEAKERS

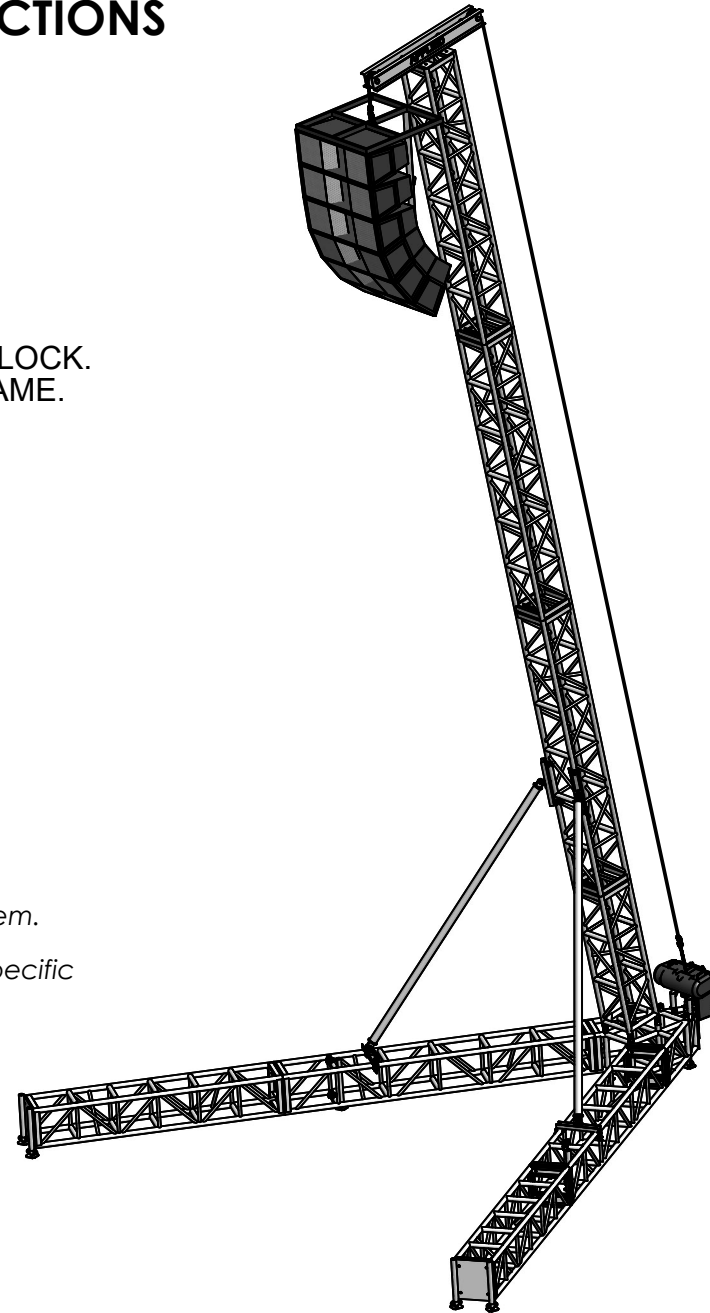
- A) APPLY BALLAST PER ENGINEERING DATA.
- B) DISCONNECT CHAIN HOOK FROM TOWER.
- C) CHECK THAT CHAIN ROLLS SMOOTHLY OVER HEAD BLOCK.
- D) CONNECT CHAIN HOOK TO LINE ARRAY SPEAKER FRAME.

**CAUTION:**  
**BEFORE FLYING LOAD** - BALLAST TOWER BASE  
ACCORDING TO ENGINEERING DOCUMENT.  
APPENDIX A

**\*\*BALLASTS ARE NOT PROVIDED\*\***

*Notes: Follow all instructions from your line array manufacturer  
for proper rigging and flying instructions for your specific speaker system.*

*Speakers pictured are for illustration only and do not represent any specific  
model or brand.*

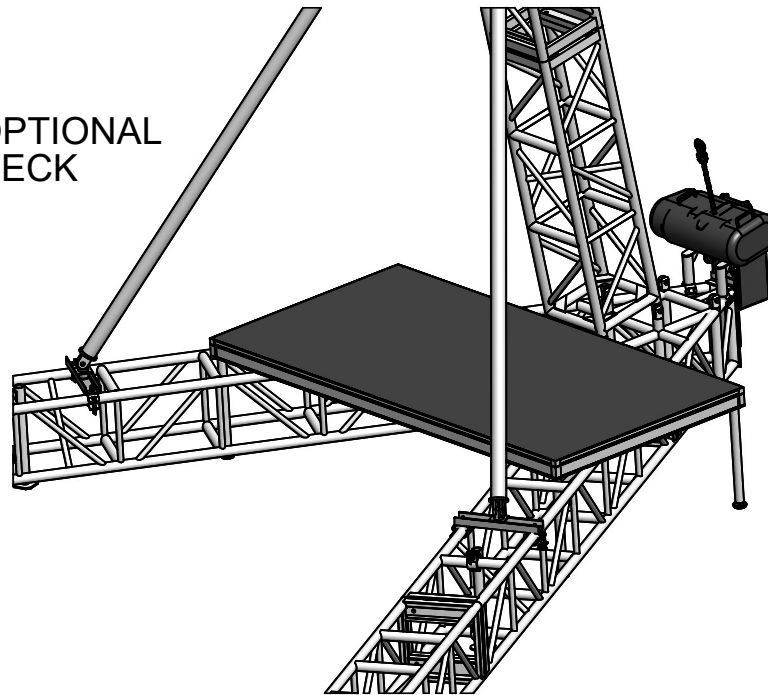


722 Blue Crab Road  
Newport News, VA 23606  
757.591.9371 / fax 757.591.9514  
[www.appliednn.com](http://www.appliednn.com)

# LA16-30 / LA16-35 TOWER INSTRUCTIONS

11

## STEP#7 INSTALLATION OF OPTIONAL SUBWOOFER DECK



IF DECK LEGS ARE USED, ENSURE DECK FRAME RESTS ON THE TRUSS CHORDS



722 Blue Crab Road  
Newport News, VA 23606  
757.591.9371 / fax 757.591.9514  
[www.appliednn.com](http://www.appliednn.com)

REVISED: 13Oct23  
PROUDLY MADE IN THE U.S.A.



### **16" LINE ARRAY TOWER – ENGINEERING GUIDELINES**

1. MAXIMUM ALLOWABLE HANGING LOAD FOR TOWER USING STANDARD 16" TRUSS SHALL NOT EXCEED 2,200 POUNDS IN ALL CASES, INDOORS OR OUTDOORS.
2. IF THE ARRAY TOWER IS USED OUTDOORS THEN SPEAKER ARRAY AND TOWER ARE REQUIRED TO BE LOWERED WHEN WIND SPEEDS ARE EXPECTED TO EXCEED 45 MPH.
3. THE ARRAY TOWER IS REQUIRED TO BE BALLASTED IN ONE OF TWO WAYS:
  - a. 300 POUNDS AT THE END OF EACH OUTRIGGER LEG – BALLAST WILL BE PLACED ON TOP OF THE END OF THE LEG TRUSS AND SECURED TO THE STRUCTURE.
  - b. 500 POUNDS AT BASE OF TOWER