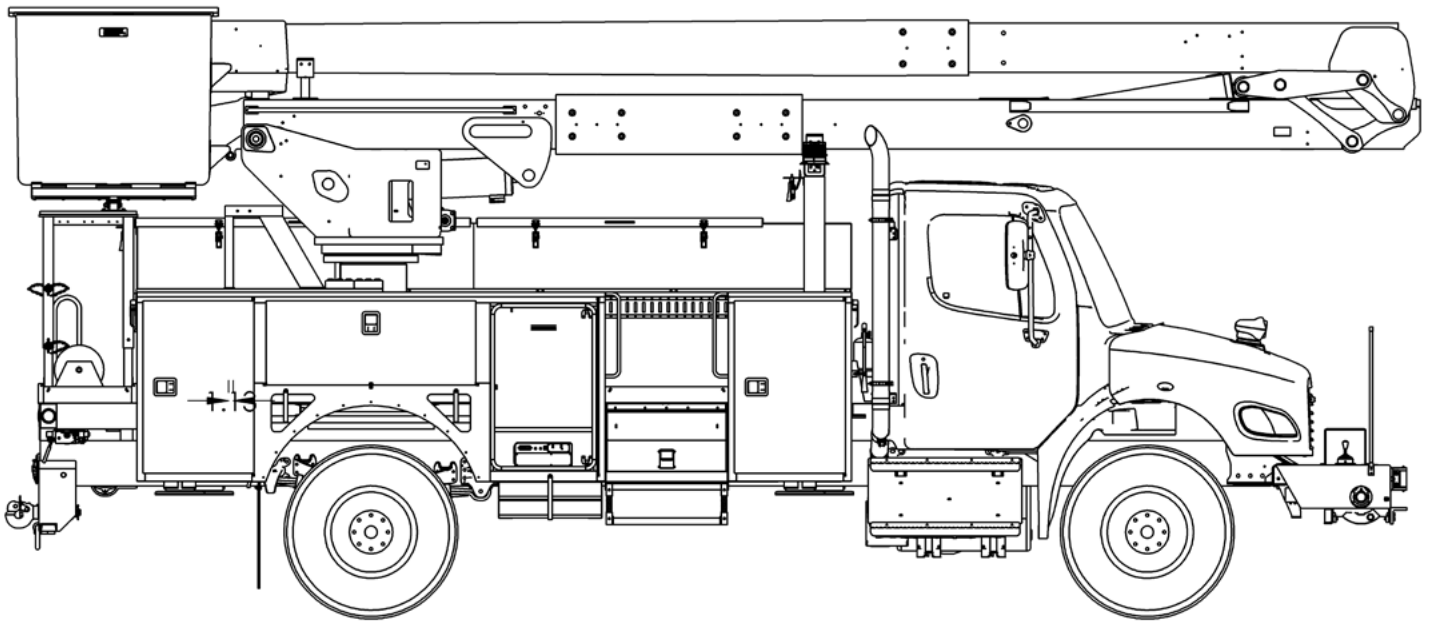




TECH TIPS

AERIAL LOAD CHARTS P/N 623746

NO. 181



GENERAL KNOWLEDGE
AERIAL LOAD CHARTS



MODEL(S):
AERIAL UNITS USING LOAD
CHART 623746



TOOLS NEEDED:
NONE

TEREX UTILITIES TECHNICAL SUPPORT TEAM

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DANGER

Failure to obey the instructions and safety rules in the appropriate Operator's Manual and Service Manual for your machine will result in death or serious injury.

Many of the hazards identified in the Operator's Manual are also safety hazards when maintenance and repair procedures are performed.

DO NOT PERFORM MAINTENANCE UNLESS:

- ✓ You are trained and qualified to perform maintenance on this machine.
- ✓ You read, understand and obey:
 - manufacturer's instructions and safety rules
 - employer's safety rules and worksite regulations
 - applicable governmental regulations
- ✓ You have the appropriate tools, lifting equipment and a suitable workshop.

The information contained in this Tech Tip is a supplement to the Service Manual. Consult the appropriate Service Manual of your machine for safety rules and hazards.



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CONTENTS

TECH TIP#181

TOC

4

| Transformer weight

INTRODUCTION
STEP 1

5

| Determine weight within platform

STEP 2

6

| Zone A and Zone B

STEP 3

7

| Load Radius

STEP 4

8

| Upper boom angle

STEP 5

INTRODUCTION

An operator will move a transformer from the ground and position it on a pole. Using the information in the following steps, determine if the lift plan can be achieved while remaining within the limits of the load chart.



This tech-tip demonstrates how to use a load chart. Always use the unit specific load chart to determine capacities and to plan the path of the load.

STEP 1

The transformer has a known weight of 415 lbs. Performing a dry run, the operator determined the boom angles required to move and place the transformer.

TEREX UTILITIES					
OPTIMA HRX60 JIB CAPACITIES					
JIB CAPACITY AT LOAD RADIUS SHOWN					
Upper Boom Angle	Zone A			Zone B	
	Lower Boom to 110 deg			LB Over 110 Deg	
	0-2'	2-4'	4-6'	0-2'	2'+
-60	1410	750	500	910	500
-30	610	580	500	180	170
0	580	560	500	100	90
30	730	700	500	270	260
60	1500	750	500	1180	500
90	1230	750	500	1230	500
120	160	160	160	160	160
150	0	0	0	0	0
180	0	0	0	0	0

1) Capacities are in pounds
 2) Load radius is the horizontal distance from basket shaft to winch line
 3) See lower boom angle indicator for correct zone
 4) If upper boom is between angles shown, use lower jib capacity
 5) Platform capacity is 600. Capacities are independent of platform load

PN 623746B

Load Radius	3 feet	Liner	80 lbs.
Operators	180 lbs. 260 lbs.	Tools	120 lbs.
Transformer	415 lbs.	Lower Boom Angle	97 degrees
Upper Boom Angle	55 degrees		

STEP 2

Determine if the load in the platform is within capacity. Using the load chart, the platform capacity is 600 lbs. The weight of the Operators + Liner + Tools = 180 + 260 + 80 + 120 = 640 lbs. The total weight is greater than the platform capacity.

The operator removed 60 lbs. of tools to get within platform capacity.

Load Radius	3 feet	Liner	80 lbs.
Operators	180 lbs. 260 lbs.	Tools	120 lbs.
Transformer	415 lbs.	Lower Boom Angle	97 degrees
Upper Boom Angle	55 degrees		

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120	160	160	160	160	160
150	0	0	0	0	0
180	0	0	0	0	0

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PN 623746B

STEP 3

An indicator light on top of the lower controls will be ON when the lower boom is greater than 110 degrees – indicating Zone B must be used.

Figure 3

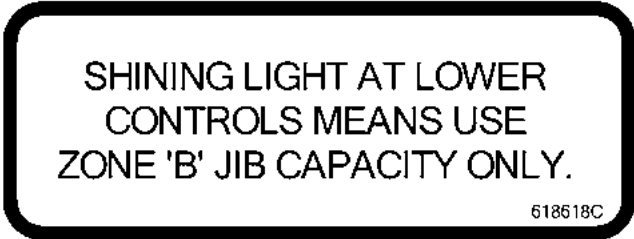


FIGURE 3

According to the table, the lower boom is at 97 degrees. This means we'll be using Zone A of the load chart.. **Figure 4**

TEREX UTILITIES					
OPTIMA HPRX60 JIB CAPACITIES					
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1) Capacities are in pounds
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PN 623746B

FIGURE 4

STEP 4

The load radius is 3 feet. Based on this load radius, we will be using the center column in Zone A.

Load Radius	3 feet	Transformer	415 lbs.
Lower Boom Angle	97 degrees	Upper Boom Angle	55 degrees

TEREX UTILITIES					
OPTIMA HPRX60 JIB CAPACITIES					
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STEP 5

Use the angle indicator located at the upper boom tip to determine the angle of the upper boom. The upper boom angle is listed in the table at 55 degrees. Since 55 is between 30 and 60, the lower jib capacity must be used. The max load than can be lifted in this position is 700 lbs. The 415 lb. transformer can be placed. **Figure 7**

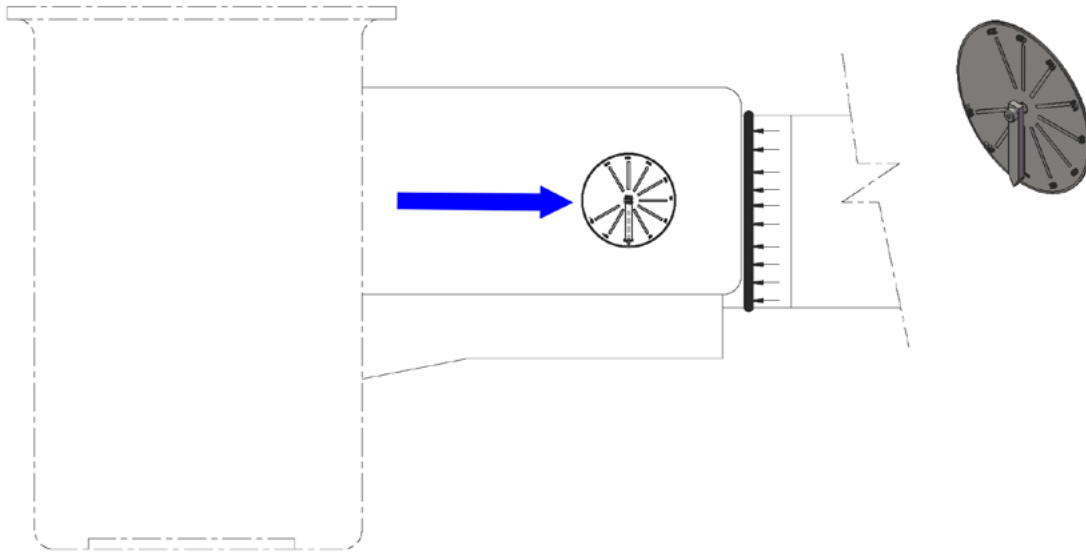


FIGURE 6

TEREX UTILITIES					
OPTIMA HPX60 JIB CAPACITIES					
JIB CAPACITY AT LOAD RADIUS SHOWN					
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1) Capacities are in pounds
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 4) If upper boom is between angles shown, use lower jib capacity
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FIGURE 7



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