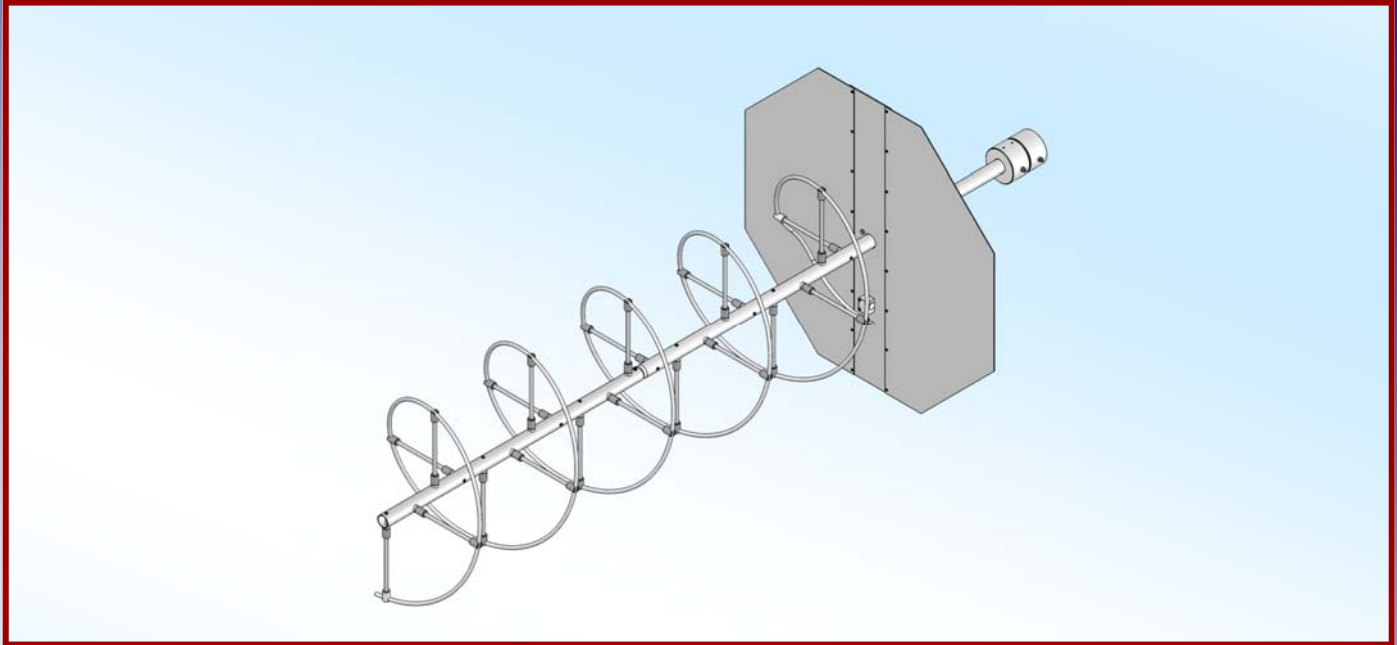




# M2 Antenna Systems, Inc.

## Model No: FG170-230-5



### SPECIFICATIONS:

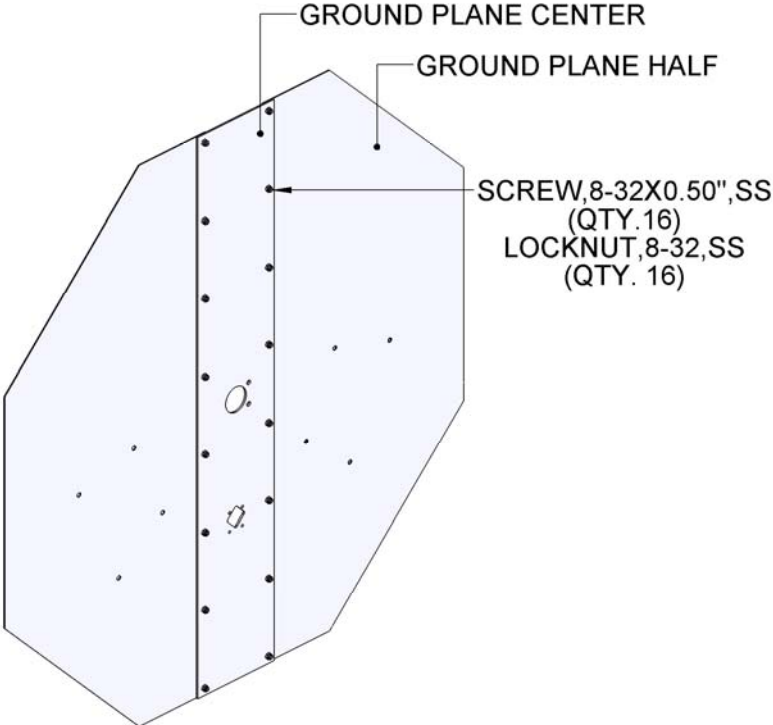
Model .....	FG170-230-5	Elipticity .....	<3db
Frequency Range.....	170 To 230 mHz	Connector.....	Type "N" Female
*Gain .....	8.2 dBic Nominal	Power Handling .....	1 kW, Higher avl.
Beamwidth .....	150 mHz = 70°	Boom Length / Dia.....	94" / 1-1/2"
Impedance. ....	50 Ohms Unbalanced	Turning Radius: .....	76-5/8"
VSWR .....	1.5 Typical	Mast Size.....	2" Nom.
Polarity .....	RHCP or LHC (Customer Specified)	Wind Survival .....	100 MPH
		Weight / Ship Wt.....	31 Lbs. / 185 Lbs.

### FEATURES:

The M2 170-230-5 Helix antenna offers medium performance characteristics for specialized fixed and rapid deploy operations within the 170 to 230 MHz band. It is perfect for either terrestrial or satellite applications. The antenna is supplied with a manually adjustable Azimuth / Elevation mount and a counter weight. The antenna is shipped with the helix assembled less ground plane. Finishes are optional. The steel adjustable mounting fixture and counterweight are zinc plated. Optional arrays of 2 or more are available. Other frequency ranges and gains are also available down to 100 MHz. Complete motorized, computer controlled AZ-EL systems are also manufactured by M2. Where circular polarity is not required but high bandwidth is, M2 offers a line of various log periodic antennas from 5 to 1300 MHz. If it is antenna related, we probably have made it. Call us with your requirements.

# HELICAL 170-230-5 ASSEMBLY

1

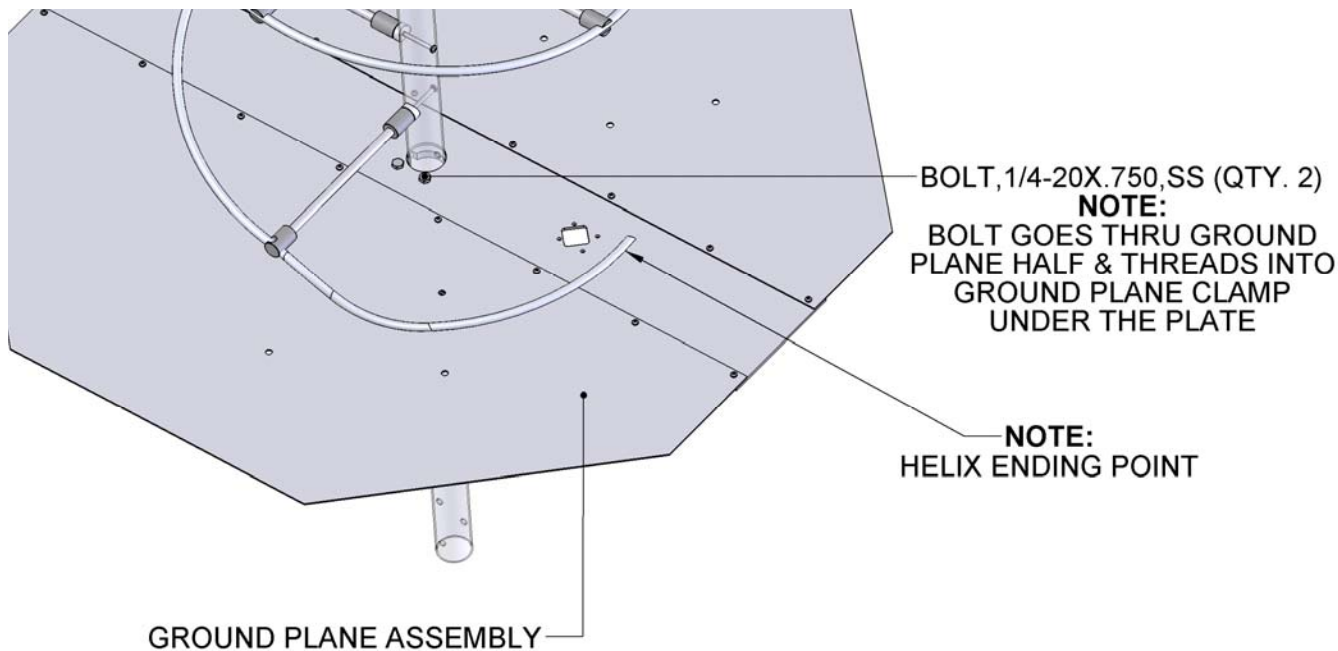
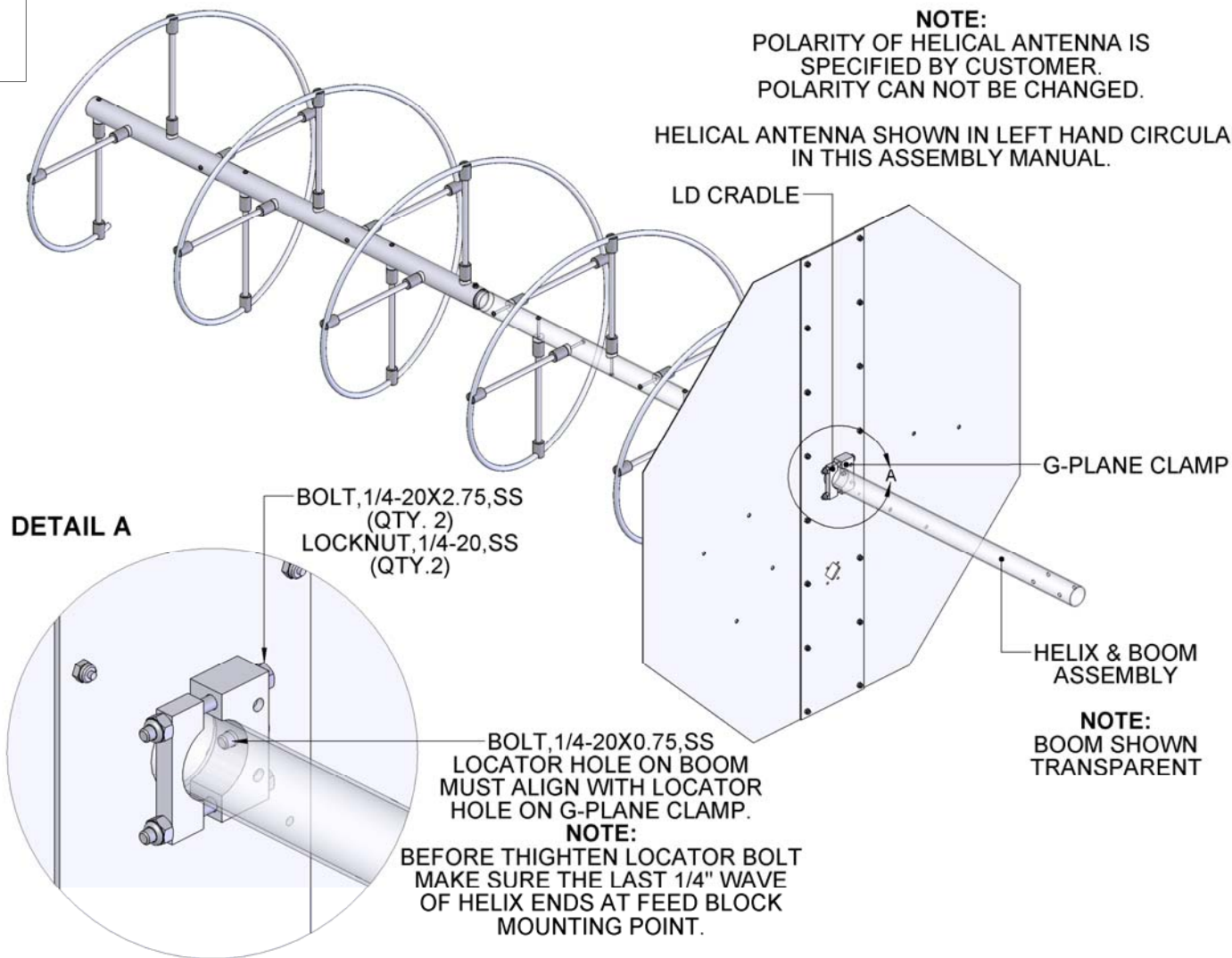


# HELICAL 170-230-5 ASSEMBLY

2

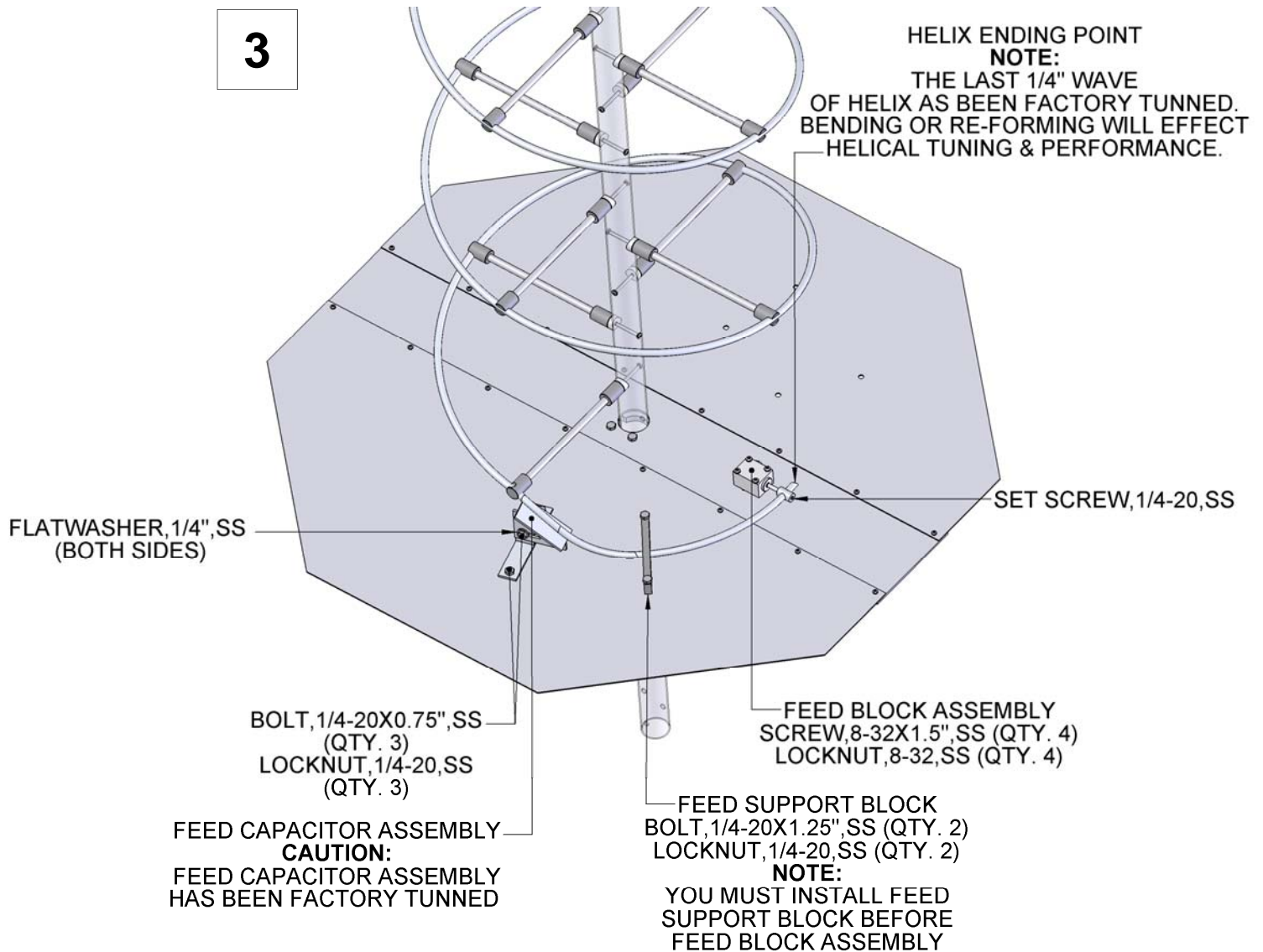
**NOTE:**  
POLARITY OF HELICAL ANTENNA IS  
SPECIFIED BY CUSTOMER.  
POLARITY CAN NOT BE CHANGED.

HELICAL ANTENNA SHOWN IN LEFT HAND CIRCULAR  
IN THIS ASSEMBLY MANUAL.



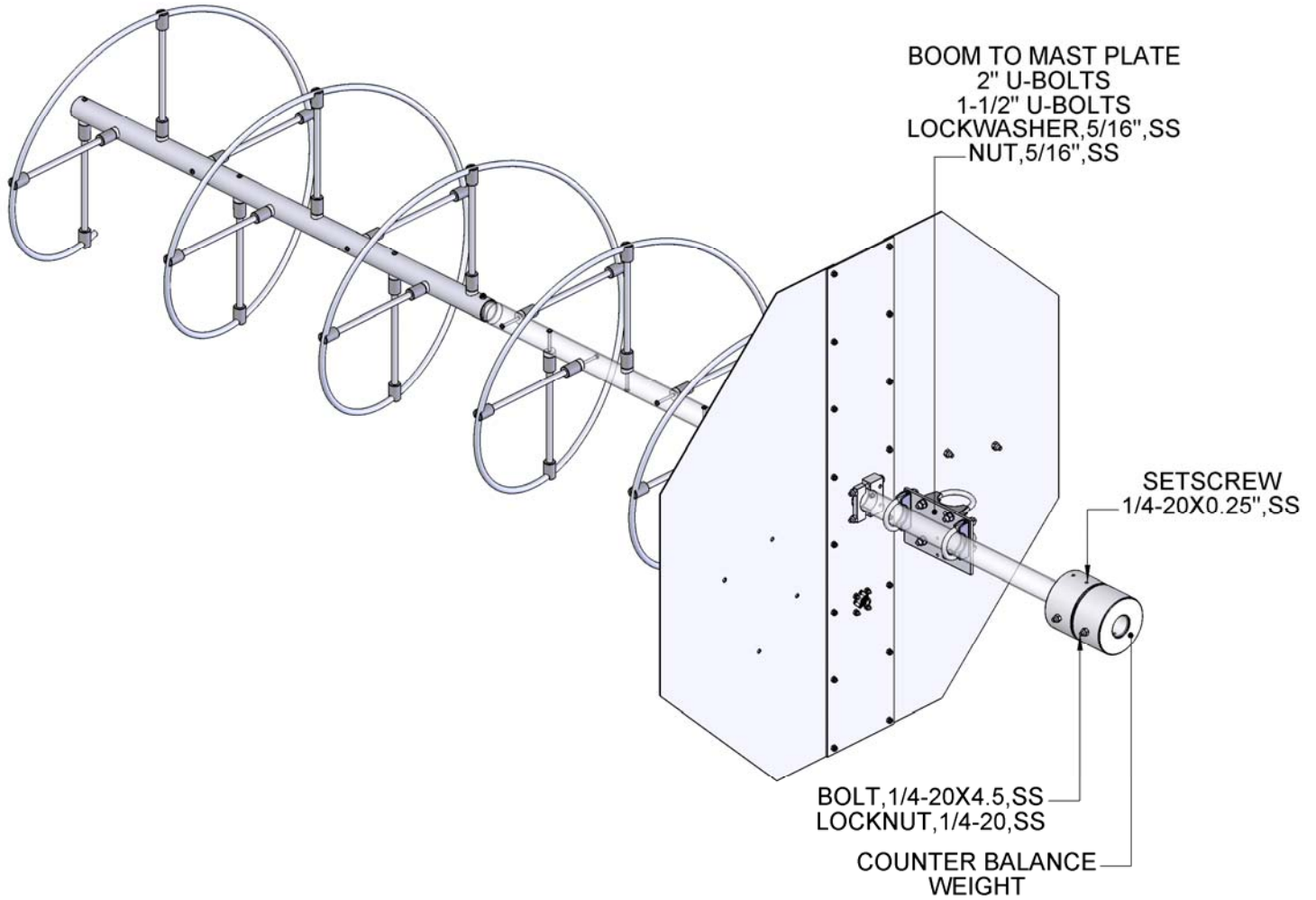
# HELICAL 170-230-5 ASSEMBLY

3



# HELICAL 170-230-5 ASSEMBLY

4



**M<sup>2</sup> ANTENNA SYSTEMS, INC.**

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# HELICAL 170-230-5 PARTS & HARDWARE

DESCRIPTION.....	QTY
HELIX & BOOM ASSEMBLY .....	1
FEED BLOCK ASSEMBLY .....	1
FEED SUPPORT BLOCK .....	1
GROUND PLANE CENTER.....	1
GROUND PLANE HALF .....	2
G-PLANE CLAMP (R. 0.750) .....	1
LD CRADLE. 1.5".....	1
BOOM TO MAST PLATE, 3/16" X 4" X 6", (M2APT0022).....	1
FEED CAPACITOR ASSEMBLY (FACTORY TUNED).....	1
COUNTER BALANCE WEIGHT .....	2
U-BOLT & CRADLE, 2.0".....	2
U-BOLT & CRADLE, 1.5".....	2
ASSEMBLY MANUAL.....	1

**HARDWARE:**

LOCKWASHER, 5/16", SS.....	8
NUT, 5/16-18, SS.....	8
BOLT, 1/4-20 X 4-1/2", SS.....	2
BOLT, 1/4-20 X 2-3/4", SS.....	2
BOLT, 1/4-20 X 1-1/4", SS.....	2
BOLT, 1/4-20 X 3/4", SS.....	6
SET SCREW, 1/4-20 X 1/4", SS.....	5
FLATWASHER, 1/4, SS.....	2
LOCKNUT, 1/4-20, SS.....	9
SCREW, 8-32 X 1-1/2", SS.....	4
SCREW, 8-32 X 1/2", SS.....	16
LOCKNUT, 8-32, SS.....	20
ALLEN HEAD WRENCH, 1/8".....	1

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