



**M2 ANTENNA SYSTEMS, INC.
MODEL NO: SYSTEM SAMPLE 1
AZEL100WS 10' DH SATELLITE DISH
S-BAND FEED**



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12/13/17
REV 1

SATELLITE DISH INSTALLATION

BEFORE YOU BEGIN: Look over all the DRAWINGS to get familiar with the various parts and assemblies in the system. Tools handy for assembly process: 11/32", 7/16", 1/2", 9/16" and 5/8" spin-tites, end wrenches and/or sockets.

NOTE:

All installations are unique in some way, which means it's OK to preassemble certain hardware, or rearrange the assembly process to meet specific site requirements. A quick review of the assembly notes and drawings should help firm up the appropriate strategy. Please remember to double-check all hardware for tightness BEFORE it becomes inaccessible.

Two containers of zinc paste (Penetrox, Noalox, or equiv.) have been provided to enhance and maintain the quality of all electrical junctions on this system. Apply a thin coat wherever two pieces of aluminum come in contact or any other electrical connections are made. It is also useful on screws and bolt threads as an ANTI SEIZE compound.

STEP 1:

Install dish mount to antenna positioner by bolting the dish mount base plate to the box frame (See FIG. 1). Tighten all hardware.

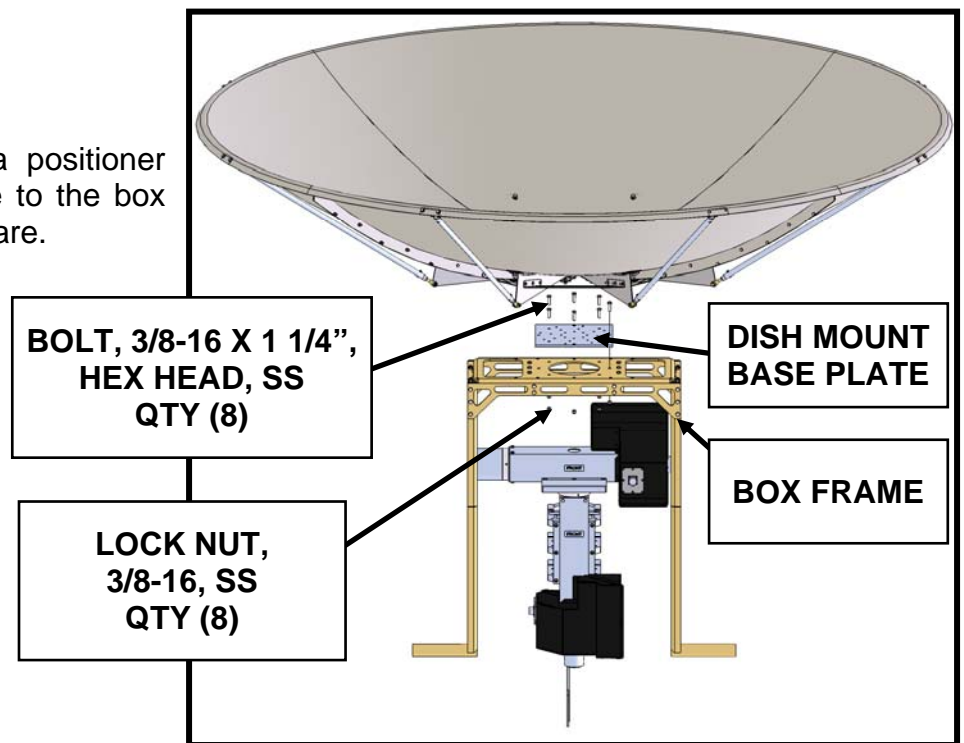


FIG. 1

SATELLITE DISH INSTALLATION

STEP 2:

The satellite dish now needs to be stabilized to the box frame. There are specific gussets designed to attach the dish to the box frame (**See FIG 4.**). To mount the gussets to the box frame you will need to remove some hardware that comes with the box frame assembly and replace with longer bolts (**See FIG. 2.**).

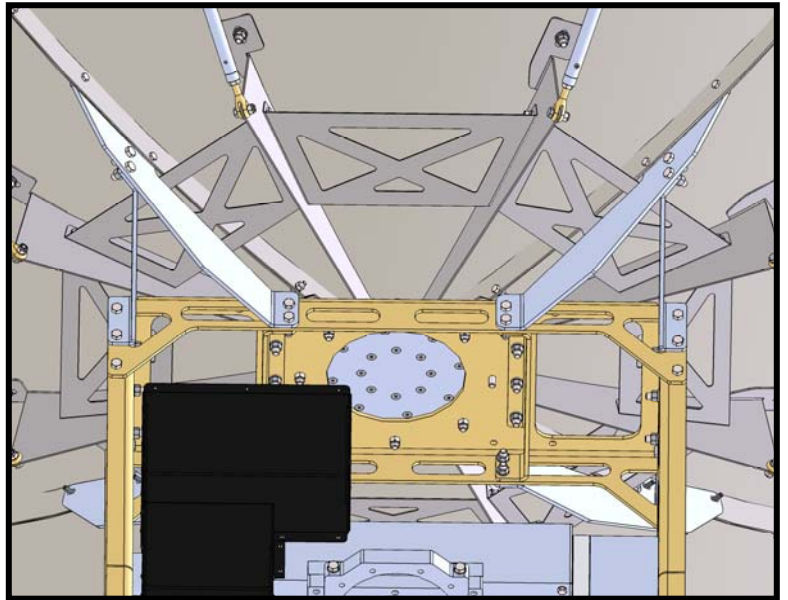


FIG. 2

STEP 3:

Install dish mount gusset and truss to box frame. Connect dish mount gusset to satellite dish (**See FIG 3.**). Leave all hardware loose until all support structures have been installed.

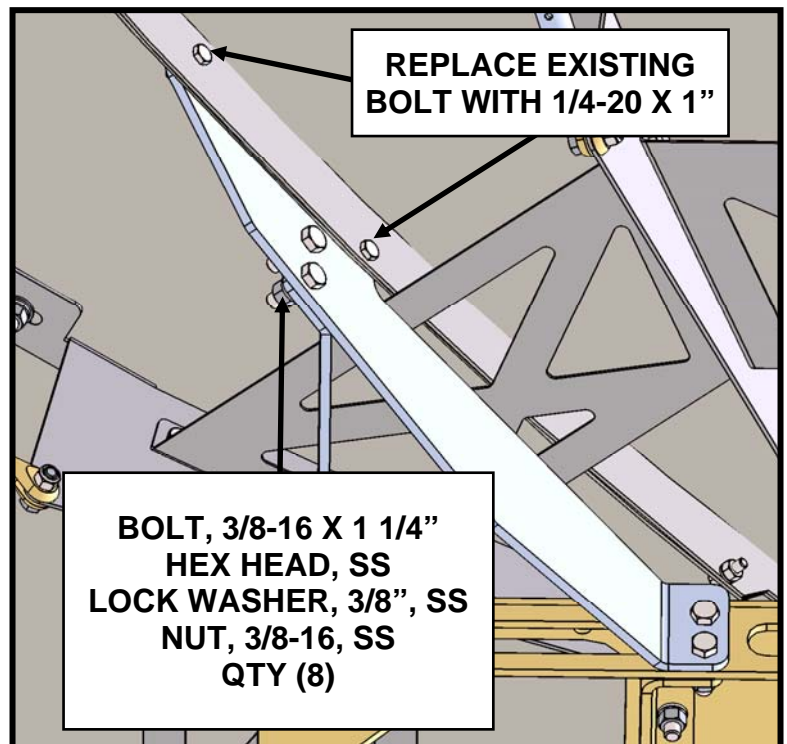


FIG. 3

SATELLITE DISH INSTALLATION

STEP 4:

Continue installing dish mount gussets and trusses as described in **FIG. 4** (bird's eye view of system). Tighten all hardware.

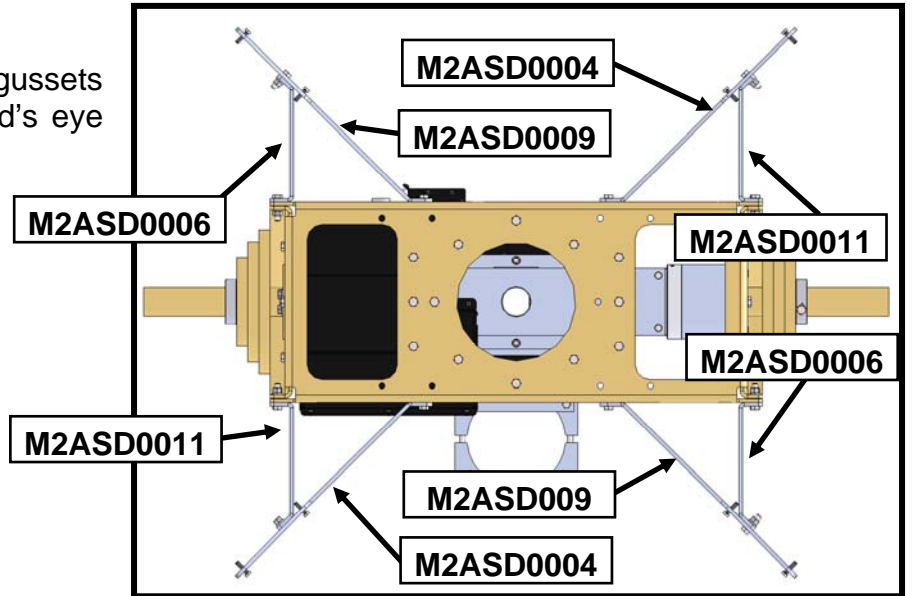


FIG. 4

STEP 5:

Once the satellite dish is properly mounted, the counter balance weights need to be added to the system. Refer to **FIG. 5** for amount of weight that needs to be added to the system.

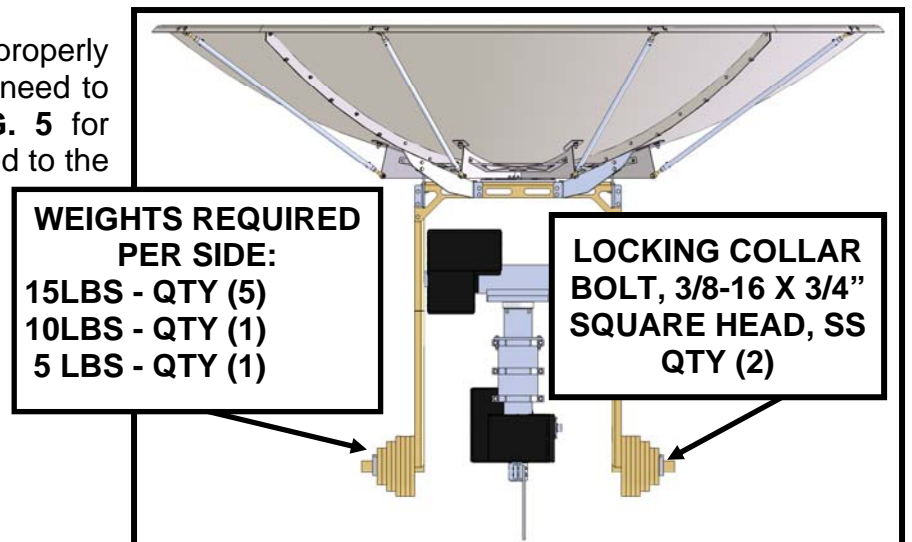


FIG. 5

FEED INSTALLATION

STEP 1:

Preassemble feed leg clamp assemblies (See FIG. 6). There are 4 total that need to be assembled. Tighten all hardware.

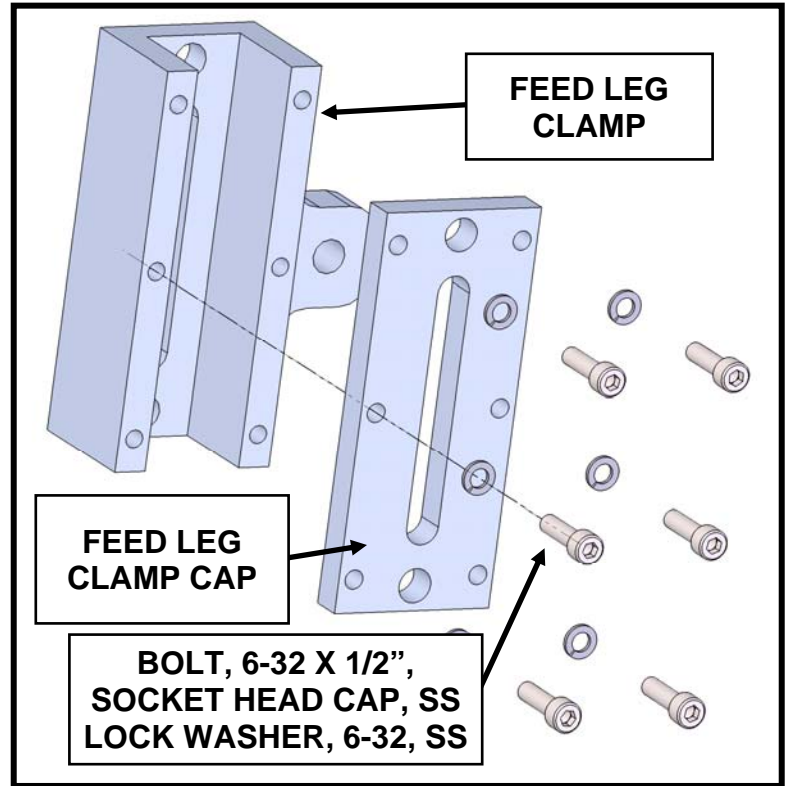


FIG. 6

STEP 2:

Pin feed leg clamps to feed legs. Pin with bolt, washers, and lock nut. Use the second hole (closest to center of feed leg) to pin feed leg. The other hole can be used later to tune feed. The second hole will use the slot and not the hole to pin the feed leg (See FIG. 7). Tighten fasteners. Pin all feed legs.

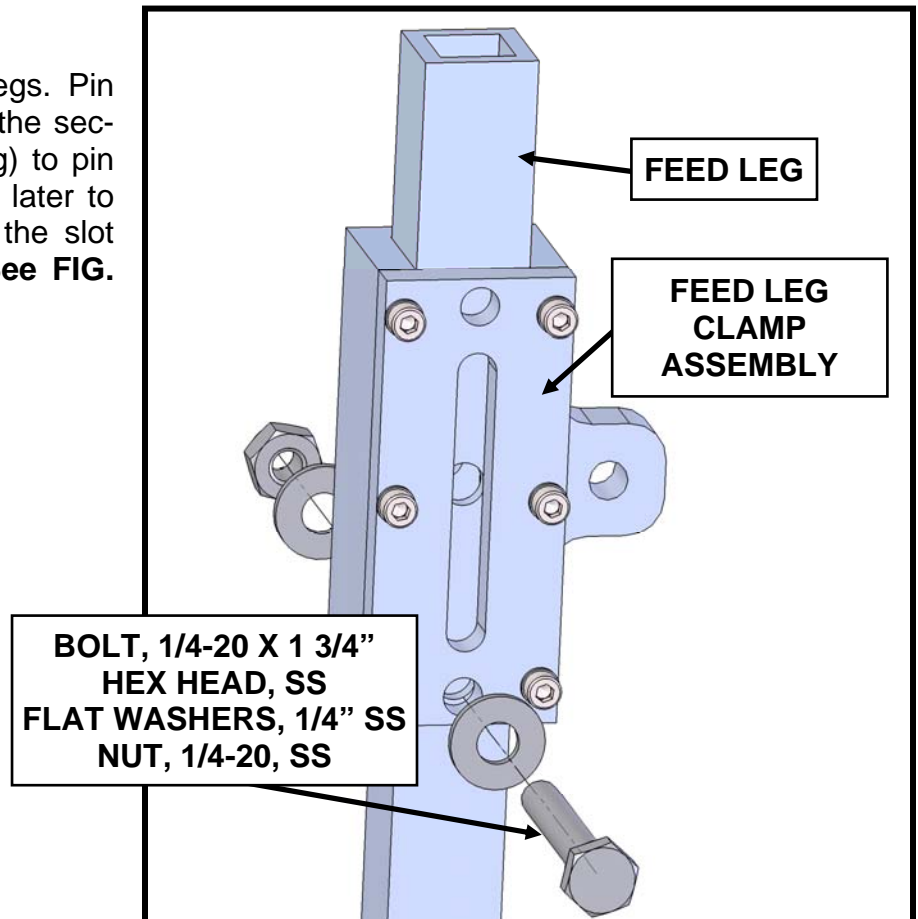


FIG. 7

FEED INSTALLATION

STEP 3:

Pin feed leg and clamp assembly to quad leg feed plate. (See FIG. 8). Leave loose until bottom of leg is mounted to dish.

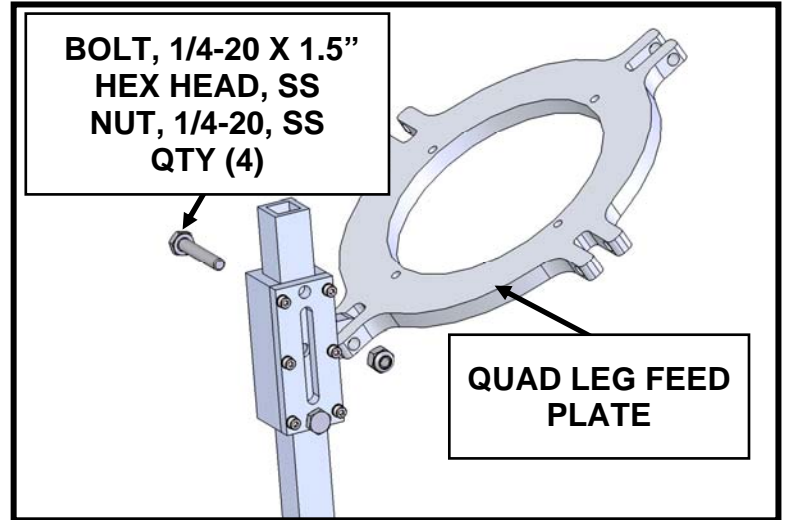


FIG. 8

STEP 4:

Continue assembling all the feed legs assemblies to the quad leg feed plate. (See FIG. 9).

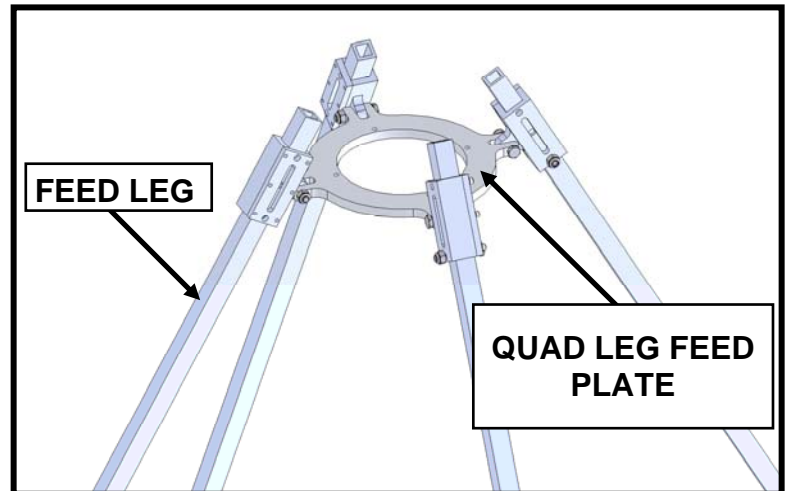


FIG. 9

STEP 5:

To mount the feed to the dish you will need to remove some hardware already used during assembly of the dish to mount. Remove every other bolt holding the satellite dish to the mount. There should be 4 total bolts that need to be removed. Keep the hardware. It does not matter which bolts you remove as the feed orientation is not dependent on feed leg placement. Feed the bolt through the feed leg tab. Insert feed leg into tab. Pin with hardware (See FIG. 10). Continue assembling all 4 feed leg tabs.

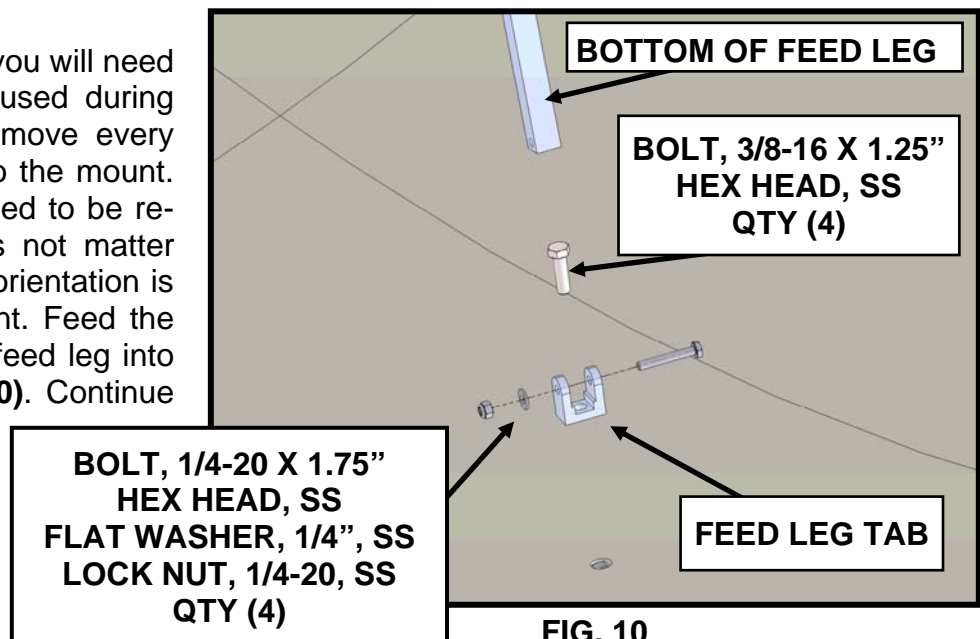


FIG. 10

FEED INSTALLATION

STEP 7:

Insert feed assembly into dish assembly. It is recommended for ease of installation to manipulate the dish to **0** degrees in elevation. Insert bolts through the dish holes. Tighten nuts holding the feed assembly. (See **FIG. 7**). Tighten all hardware for feed assembly as well as the satellite dish mount.

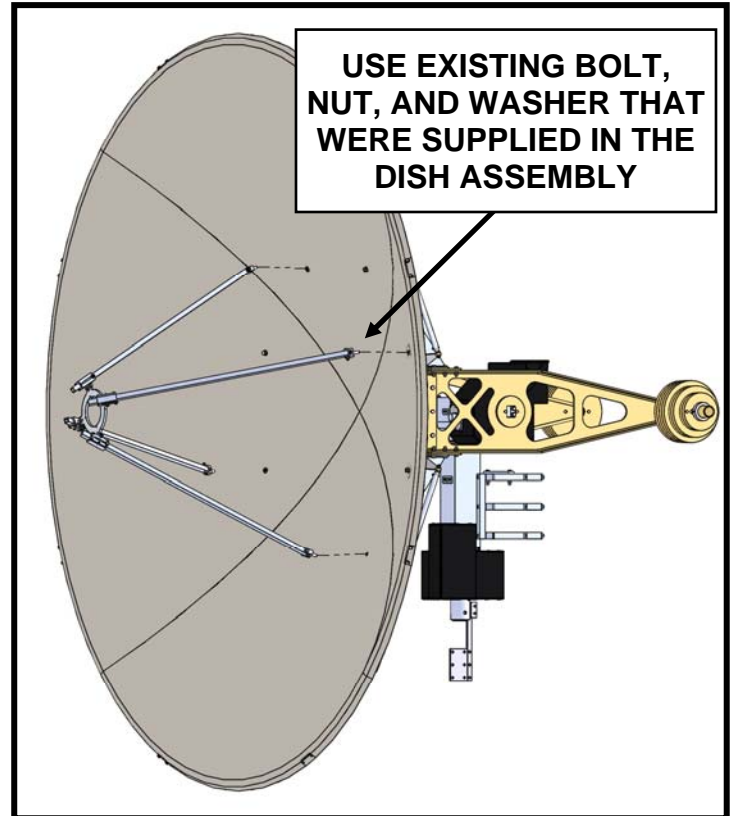


FIG. 7

STEP 8:

Insert feed into feed bracket assembly. Tighten all hardware (See **FIG. 8**).

NOTE:

Cabling for the feed can be routed down one of the feed legs and over the rim of the dish or a 2" hole can be cut into the dish near the bottom of the feed leg used to route the cable.

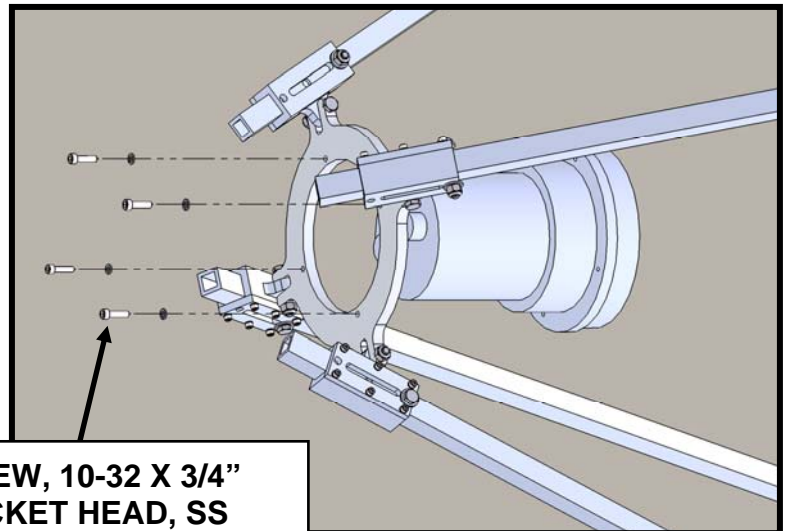


FIG. 8

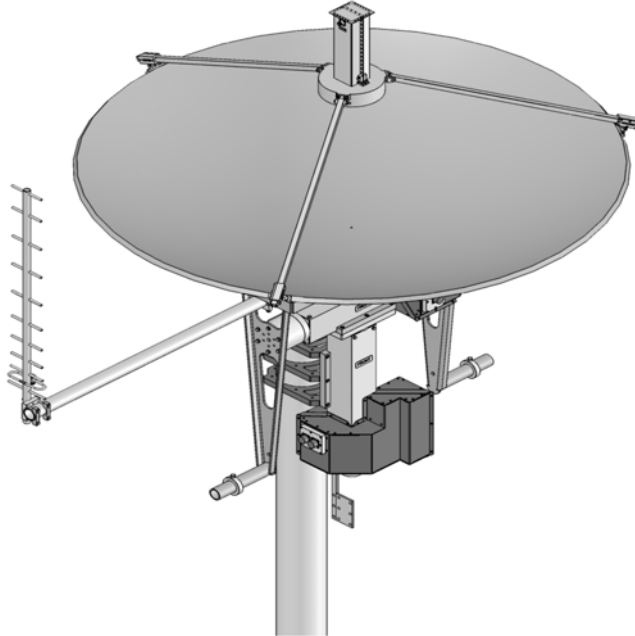
SYSTEM PARTS & HARDWARE

<u>DESCRIPTION</u>	<u>QTY</u>
FGAE1000WS, AZEL1000 WEATHER STEEL	1
3.0m SATELLITE DISH W/ MOUNT ASSEMBLY (SASD0002)	1
COUNTER BALANCE WEIGHT, 15LBS. (M2AAE1627)	8
DISH MOUNT GUSSET (M2ASD0004)	2
DISH GUSSET TRUSS (M2ASD0006)	2
DISH GUSSET TRUSS (M2ASD0009)	2
DISH MOUNT GUSSET (M2ASD00011)	2
FEED LEG CLAMP (M2AAE1631)	4
FEED LEG CLAMP CAP (M2AAE1632)	4
QUAD FEED MOUNT PLATE (M2AAE1637)	1
FEED LEG (M2ASD0014).....	4
FEED LEG TAB (M2ASD0031).....	4
NYLON TIE, 14"	5
NYLON TIE, 8"	15
PENETROX OR ZINC PASTE (CUP).....	1

HARDWARE

BOLT, 3/8-16 X 1 1/2", HEX HEAD, SS.....	16
BOLT, 3/8-16 X 1 1/4", HEX HEAD, SS.....	16
LOCK WASHER, 3/8", SS.....	8
LOCK NUT, 3/8-16, SS.....	8
NUT, 3/8-16, SS.....	8
BOLT, 1/4-20 X 1 3/4", HEX HEAD, SS.....	8
BOLT, 1/4-20 X 1 1/2", HEX HEAD, SS.....	4
BOLT, 1/4-20 X 1", HEX HEAD, SS.....	8
FLAT WASHER, 1/4", SS.....	12
LOCK NUT, 1/4-20, SS.....	12
SCREW, 10-32 X 3/4", SOCKET HEAD CAP, SS.....	4
LOCK WASHER, 10-32, SS.....	4
SCREW, 6-32 X 1/2", SOCKET HEAD CAP, SS.....	24
LOCK WASHER, 6-32, SS.....	24

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- **IMPROPERLY PREPARED INSTALLATION SITE**
- **UNAUTHORIZED MODIFICATIONS OR MISUSE**
- **ACCIDENT, ABUSE, OR MISAPPLICATION**
- **NORMAL WEAR**

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