

4096-132
REV. A



ASSEMBLY INSTRUCTIONS

1.8 METER SERIES 1184 ANTENNA SYSTEM

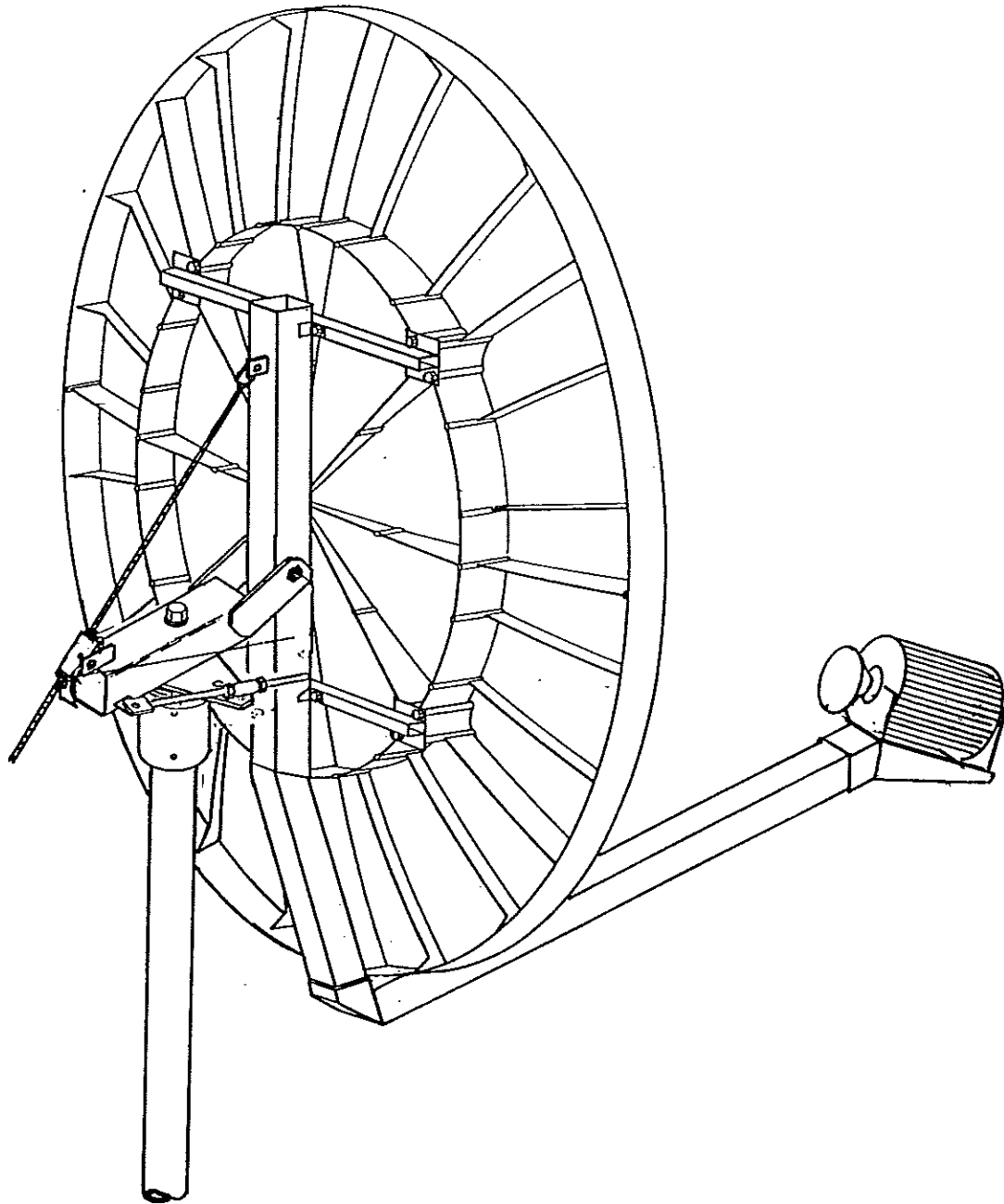
PRODELIN CORPORATION
1700 NE CABLE DRIVE
CONOVER, NC 28613-0368

TABLE OF CONTENTS

1.8 METER Rx/Tx ANTENNA SYSTEM
ASSEMBLY MANUAL

<u>SECTION</u>	<u>TITLE</u>
I	INTRODUCTION
1.0	GENERAL INFORMATION
II	UNPACKING & INSPECTION
2.0	UNPACKING & INSPECTION
2.1	FREIGHT DAMAGE
2.2	MATERIAL - MISSING OR DAMAGED
III	SUGGESTED TOOL LIST
3.0	MECHANICAL INSTALLATION TOOLS
3.1	MECHANICAL ALIGNMENT TOOLS
IV	ANTENNA ASSEMBLY
4.0	ANTENNA ASSEMBLY
4.1	CANISTER & Az/EI POSITIONER
4.2	REFLECTOR SUPPORT ASSEMBLY
4.3	ELEVATION & AZIMUTH INDICATORS
4.4	FEED SUPPORT ASSEMBLY
4.5	ADDITIONAL INFORMATION
4.6	FEED ALIGNMENT
V	ANTENNA POINTING
5.0	ALIGNMENT TO SATELLITE
5.1	INITIAL ALIGNMENT
5.2	REPOINTING
VI	MAINTENANCE
6.0	MAINTENANCE OVERVIEW
6.1	PERIODIC INSPECTION
6.2	REFLECTOR
6.3	MOUNT & REFLECTOR SUPPORT STRUCTURE
6.4	FEED & FEED SUPPORT

1.8 METER SERIES 1184



SECTION I

INTRODUCTION

1.0 GENERAL INFORMATION

This manual describes the assembly and installation of Prodelin's 1.8 meter Rx/Tx offset antenna system with Quick Repoint Az/El mount series number 1184. The Prodelin 1.8 meter is a rugged, reliable antenna system, which will operate in the 11.7 to 14.5 GHz frequency bands with high efficiency and at the same time successfully withstand the effects of the environment.

These instructions are listed by sections that cover all areas of assembly and installation. Additional sections are included in the manual to provide information on antenna alignment to the satellite and maintenance.

SECTION II

UNPACKING, INSPECTION

2.0 UNPACKING AND INSPECTION

The antenna containers (see figure 2.0-1) should be unpacked and inspected at the earliest date to ensure that all material has been received and is in good condition. A complete packing list for each major component is supplied.

2.1 FREIGHT DAMAGE

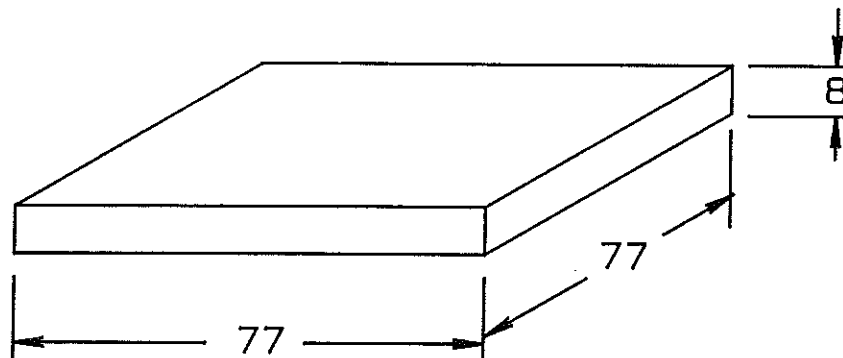
Any damage to materials while in transit should be immediately directed to the freight carrier. He will instruct you on matters regarding any freight damage claims.

2.2 MATERIAL - MISSING OR DAMAGED

Any questions regarding missing or damaged materials that is not due to the freight carrier should be directed to Prodelin's Customer Service Department at:

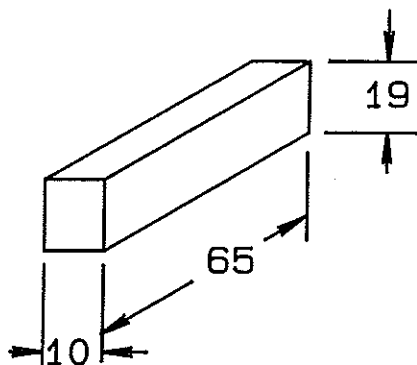
PRODELIN CORPORATION
1700 NE CABLE DRIVE
P.O. BOX 368
CONOVER, NORTH CAROLINA 28613
(704) 464-4141

ANTENNA SYSTEM SHIPPING CONTAINERS



1.8M REFLECTOR W/VELLOX

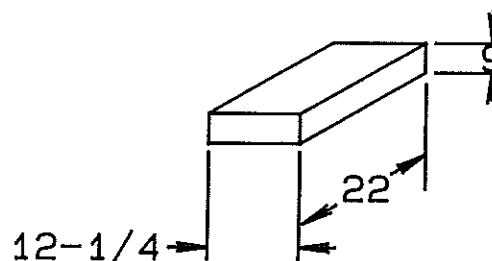
P/N 0800-208 WEIGHT - 85 LBS.



REFLECTOR SUPPORT ASSEMBLY

P/N 0800-300 WEIGHT - 95 LBS.

CONSISTS OF: REFLECTOR SUPPORT TUBE
MOUNTING ARM (2)
AEU BRACKET
FEED SUPPORT TUBE
Rx/Tx BRACKET
AZIMUTH ADJ. ROD
ELEVATION ADJ. ROD
HARDWARE



Az/EI POSITIONER

P/N 0800-308 WEIGHT - 45 LBS.

CONSISTS OF: Az/EI POSITIONER
CANISTER
AZIMUTH INDICATOR KIT
ELEVATION INDICATOR KIT
NEC RADIO ADAPTER KIT
AZIMUTH COLLAR

FIGURE 2.0-1

SECTION III

SUGGESTED TOOL LIST

3.0 MECHANICAL INSTALLATION TOOLS

The following tools are suggested for the antenna installation.

- 1 Ratchet, 1/2" drive
- 1 Socket, 9/16" deep well, 1/2" drive
- 1 Socket, 3/4" deep well, 1/2" drive
- 1 Wrench, combination 5/16
- 1 Wrench, combination 3/8
- 1 Wrench, combination 1/2
- 1 Wrench, combination 9/16
- 1 Wrench, combination 3/4
- 1 Wrench, combination 1-1/8
- 1 Wrench, combination 1-1/2
- 1 Screwdriver, standard blade
- 1 10" adjustable Crescent Wrench
- 1 Allen Wrench, 1/8"

3.1 MECHANICAL ALIGNMENT TOOLS

The following tools are suggested for the initial alignment to the satellite.

- Compass
- Inclinometer
- Carpenter's Square (18" minimum)
- Feed Alignment Tool (Prodelin P/N 0800-216)

SECTION IV

ANTENNA ASSEMBLY

CAUTION: During the assembly procedure, the sequence of instructions must be followed. DO NOT TIGHTEN ANY HARDWARE UNTIL INSTRUCTED.

4.0 ANTENNA ASSEMBLY

The 1.8 meter antenna system consists of four (4) major components:

- 1) Reflector
- 2) Reflector Support Assembly (reflector support tube and reflector mounting arms.
- 3) Az/El Positioner
- 4) Feed Support Structure

The interface from the ground foundation to the antenna is a 4.0" O.D. pipe, vertical within 5°. It is assumed that the foundation and pipe has been properly installed.

4.1 CANISTER AND Az/El POSITIONER ASSEMBLY

As shown in figures 4.1-1 and 4.1-2, assemble the following items in the listed sequence.

Step 1: Place the azimuth collar onto the canister and secure with the three (3) 1/4-20 set screws. The orientation of the label will be set after the antenna is aligned to the satellite so it is only important at this time to be sure that the set of numbers needed is at the bottom of the label.

Step 2: Place the canister onto the mast and insert the eight (8) 1/2-13 square head set screws and 1/2-13 lock nuts. (Note that there is one 3" long set screw. It is to be placed in any hole at the bottom of the canister along with the two internal tooth lockwashers and two lock nuts for the purpose of grounding the antenna's electronics.) The canister must be oriented correctly in relation to the center of the satellite orbital arc in order for the azimuth Quick Repoint feature to work correctly. Refer to figure 4.1-1.

Step 3: Alternately tighten the set screws while watching the bubble level on the top canister plate to be sure that the canister plate is level.

1.8 METER SERIES 1184

- Step 4: With all set screws snug, check again to be sure that the canister is level and securely tighten the set screws. Tighten the lock nuts against the canister.
- Step 5: Place the Az/El positioner on top of the canister and attach with a 1-8 x 6" bolt, flatwasher and lockwasher.
- Step 6: Attach the azimuth adjustment tube to the canister plate with a 1/2" nut, two flatwashers, lockwasher and .40" sleeve. Tighten and check to be sure that the tube will rotate freely.
- Step 7: Place a 3/4" nut and flatwasher onto the azimuth rod, insert the azimuth rod through the azimuth adjustment tube and secure with another 3/4" flatwasher and nut.
- Step 8: Attach the azimuth rod to the Az/El positioner with a 1/2-13 x 1.50" bolt, two flatwashers, lockwasher, nut and .55" sleeve. Tighten securely.
- Step 9: Tighten the 1" bolt from step 5 at this time.

4.2 REFLECTOR SUPPORT ASSEMBLY

As shown in figures 4.2-1, assemble the following items in the listed sequence.

- Step 1: Attach the reflector support tube to the Az/El positioner with a 1-8 x 7" bolt, two flatwashers, lockwasher and nut.
- Step 2: Attach the elevation block to the Az/El positioner with a 1/2-13 x 2.75" bolt, two flatwashers, lockwasher, nut and 1.6" sleeve. Tighten and check to be sure that the block will pivot freely.
- Step 3: Place a 3/4" nut and flatwasher well up onto the elevation rod, insert the elevation rod through the block and secure with another 3/4" flatwasher and nut.
- Step 4: Attach the end of the elevation rod to the reflector support tube with a 1/2-13 x 1.50" bolt, two flatwashers, lockwasher, nut and .55" sleeve. Tighten securely.
- Step 5: Tighten the 1" bolt from step 1 at this time.
- Step 6: Attach the two reflector mounting arms to the reflector support tube with a 1/2-13 x 2.75" bolt, two flatwashers, lockwasher and nut at each of the four locations. NOTE: Be sure that the reflector mounting bolt holes in the ends of the mounting arms are oriented as shown in figure 4.2-1.

Attach the two reflector mounting arms to the reflector support tube with a 1/2-13 x 1.50" carriage bolt, flatwasher, lockwasher and nut at each of the four locations. Note: Be sure that the reflector mounting bolt in the ends of the mounting arms are oriented as shown .

1.8 METER SERIES 1184

Step 7: Lift, position and attach the reflector to the reflector mounting arms with the 3/8" hardware. Use a 3/8-16 x 5" bolt, flatwasher, lockwasher and nut at each of the four mounting locations at the top of the reflector and a 3/8-16 x 4.5" bolt, flatwasher, lockwasher and nut at each of the four mounting locations at the bottom of the reflector. The top of the reflector may be identified by the Prodelin logo. Tighten the eight bolts at this time.

Step 8: Tighten the four 1/2" bolts in the mounting arms from step 6 at this time.

4.3 ELEVATION AND AZIMUTH INDICATORS ASSEMBLY

As shown in figure 4.3-1 and 4.3-2, assemble the following items in the listed sequence.

Step 1: Attach the azimuth indicator plate to the bottom of the Az/El positioner tube with a #10-24 x 1.25" screw, spacer, two flatwashers, lockwasher and nut in two places.

Step 2: Attach the azimuth indicator to the end of the azimuth indicator plate with a #10-24 x .38" screw, flatwasher and lockwasher in the two tapped holes.

Step 3: Tighten the four screws holding the azimuth indicator.

Step 4: Attach the elevation plate to the reflector support tube with a #10-24 x 1.25" screw, flatwasher, lockwasher and spacer in two places. Tighten securely.

Step 5: Attach the elevation indicator to the side of the Az/El positioner with a #10-24 x .38" screw, flatwasher and lockwasher in two places.

4.4 FEED SUPPORT ASSEMBLY

As shown in figure 4.4-1 and 4.4-2, assemble the following items in the listed sequence.

Step 1: Place the feed support tube between the two plates at the bottom of the reflector support tube and loosely attach using the two nut plates on the inside of the tube and a 1/2-13 x 1" bolt, flatwasher and lockwasher in four places on the outside. Note the direction of the slot at the end of the feed support tube.

1.8 METER SERIES 1184

Step 2: Place the Rx/Tx bracket over the end of the feed support tube and attach with a 5/16-18 x .75" carriage bolt, flatwasher, lockwasher and nut in the four slots of the bracket. The carriage bolts are installed from the inside of the tube with the threads protruding out. Tighten snugly enough to support the radio unit.

Step 3: With the use of a carpenter's square, align the feed support tube and tighten the four 1/2" bolts at the bottom of the tube.

4.5 ADDITIONAL INFORMATION

Depending on the type of RF unit used, each 1.8 meter system will require either an AEU bracket (MAC radio unit) or a radio adapter kit (NEC radio unit). Assembly of each of these components is outlined below.

4.5.1 AEU BRACKET

Step 1: Attach the AEU bracket to the 4" OD mast pipe with the 3/8-16 u-bolts, channel brackets, flatwashers, lockwashers and hex nuts as shown in figure 4.5.1-1.

Step 2: Tighten the AEU bracket securely to the mast pipe.

Step 3: Attach the Auxiliary Electronic Unit to the bracket with the hardware supplied with the AEU.

4.5.2 RADIO ADAPTER KIT

Step 1: Attach the front and back adapter brackets to the Rx/Tx bracket with the #10-24 x .50" screw, flatwasher, lockwasher and hex nut as shown in figure 4.5.2-1.

Step 2: Attach the NEC radio unit to the adapter brackets with the hardware provided with the radio unit.

Step 3: Attach the power supply to the feed support tube with the #8 self-tapping screws.

4.6 FEED ALIGNMENT

In order to align the RF optics of the antenna system (feed horn to reflector), a feed alignment tool (Prodelin P/N 0800-216) is required as shown in figure 4.6-1.

Step 1: Attach the feed alignment tool to the reflector.

1.8 METER SERIES 1184

Step 2: With the RF radio unit attached to the Rx/Tx bracket, position and seat the feed horn into the raised rim of the tool.

Step 3: With the feed horn seated and the radio unit secured to the bracket, tighten securely the four 5/16" nuts attaching the Rx/Tx bracket to the feed support tube.

Step 4: Remove the feed alignment tool.

The antenna system's optics are now aligned and the antenna is ready to be aligned to the satellite.

1.8 METER SERIES 1184

TABLE 4.1-1
(REFERENCE FIGURE 4.1-1)

<u>ITEM NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>
1	0164-082	CANISTER ASSEMBLY	1
2	0181-234	AZIMUTH COLLAR	1
3	8307-006	1/4-20 x .25" SET SCREW	3
4	8317-003	1/2-13 x 1.75" SQ. HD. SCREW	7
5	8317-004	1/2-13 x 3.00" SQ. HD. SCREW	1
6	8104-007	1/2-13 HEX NUT	9
7	8200-017	1/2 INT. TOOTH LOCKWASHER	2

CANISTER ASSEMBLY

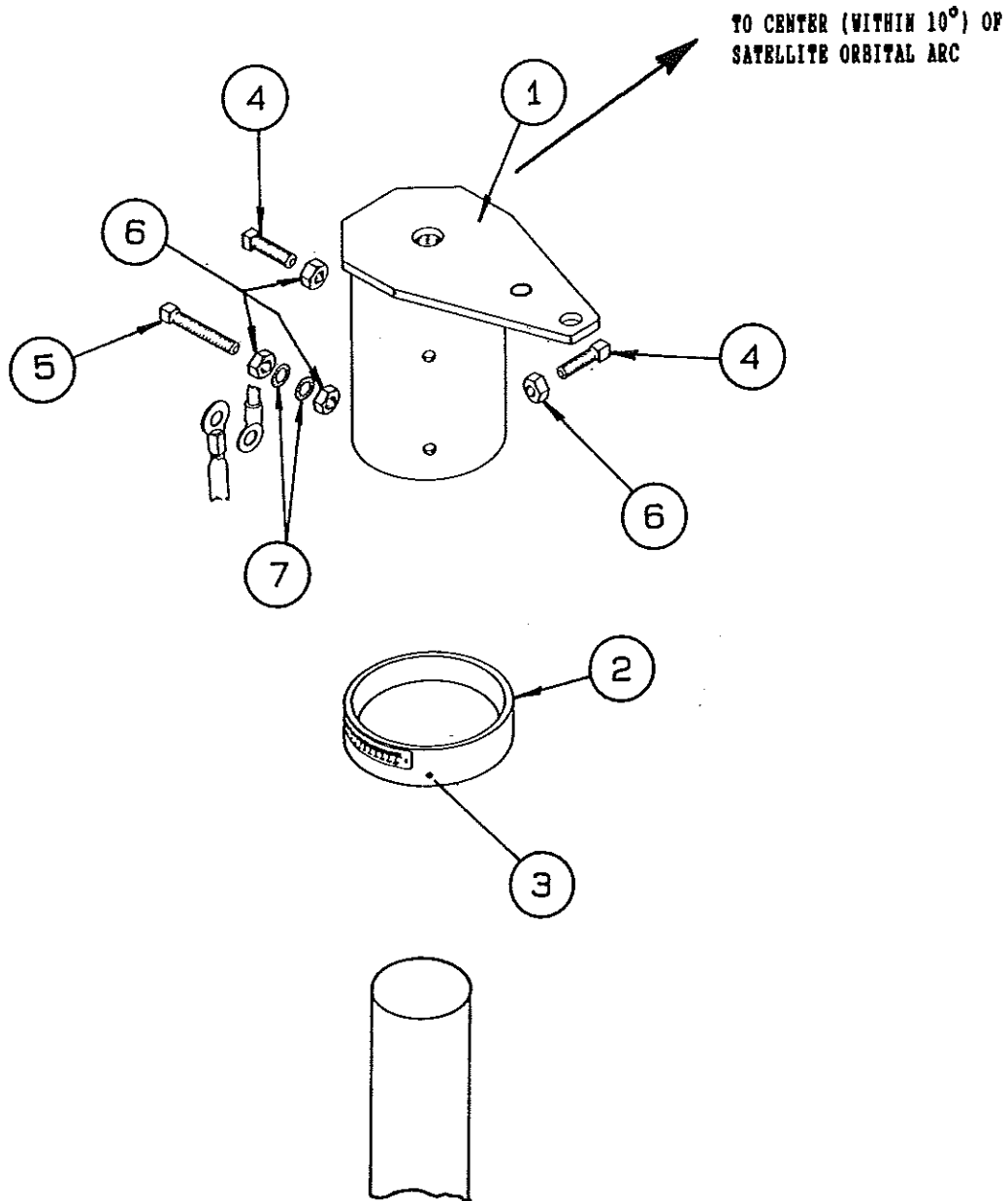


FIGURE 4.1-1

1.8 METER SERIES 1184

TABLE 4.1-2
(REFERENCE FIGURE 4.1-2)

<u>ITEM NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>
1	0490-141	Az/El POSITIONER	1
2	0490-143	AZIMUTH ADJUSTMENT ROD	1
3	0490-142	AZIMUTH TUBE	1
4	8036-048	1-8 x 6.00" BOLT	1
5	8201-046	1" FLATWASHER	1
6	8202-046	1" LOCKWASHER	1
7	0162-166	.40" LONG SLEEVE	1
8	0162-167	.55" LONG SLEEVE	1
9	8033-012	1/2-13 x 1.50" BOLT	1
10	8201-043	1/2" FLATWASHER	4
11	8202-043	1/2" LOCKWASHER	2
12	8104-007	1/2-13 HEX NUT	2
13	8201-047	3/4" FLATWASHER	2
14	8106-007	3/4-10 HEX NUT	2

AZ/EL POSITIONER ASSEMBLY

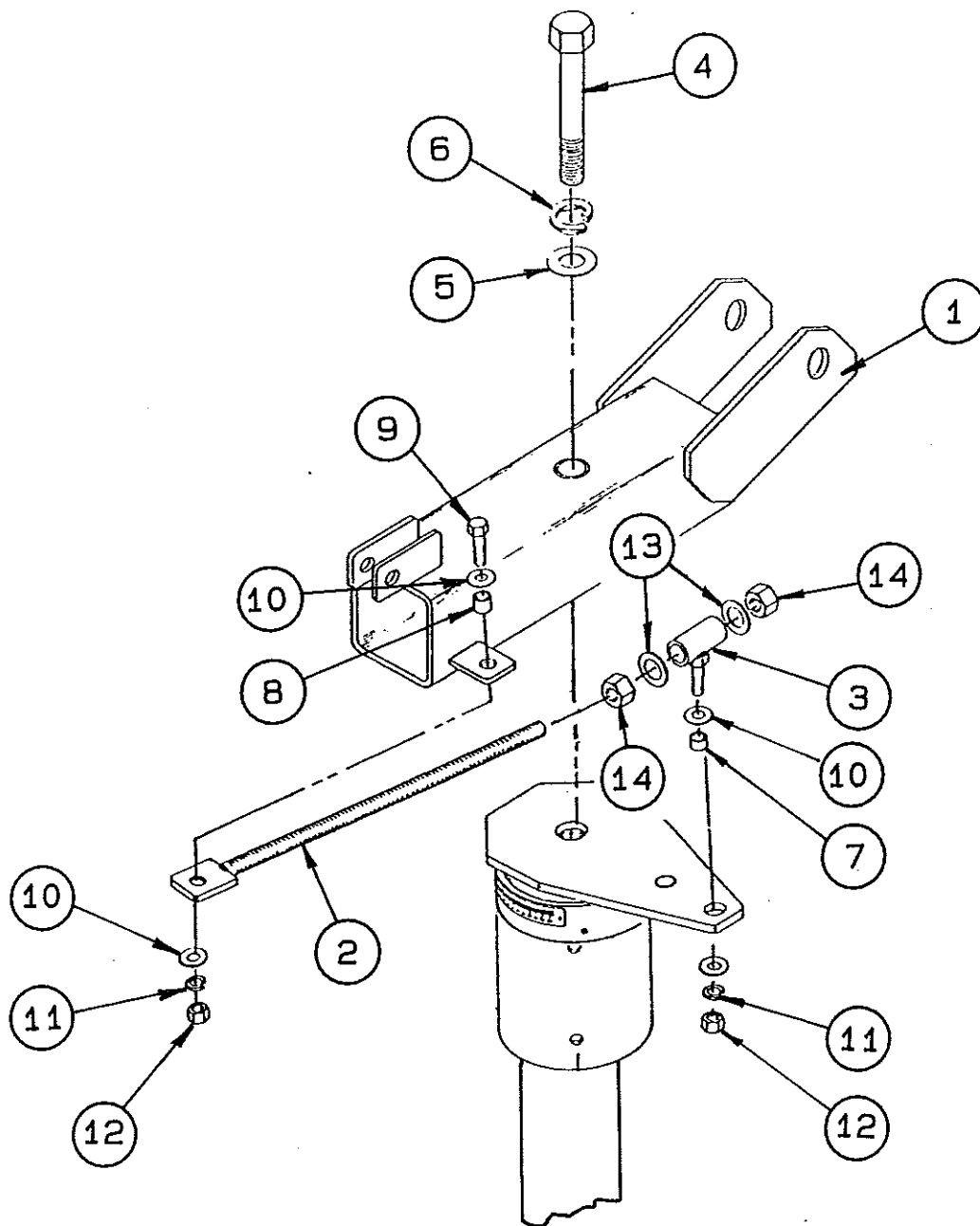


FIGURE 4.1-2

1.8 METER SERIES 1184

TABLE 4.2-1
(REFERENCE FIGURE 4.2-1)

ITEM NO.	PART NO.	DESCRIPTION	QUANTITY
1	0490-140	REFLECTOR SUPPORT TUBE	1
2	0211-417	MOUNTING ARM	2
3	0179-189-17	1.8M VELLOXED REFLECTOR	1
4	0490-144	ELEVATION ADJUSTMENT ROD	1
5	0168-112	ELEVATION ADJUSTMENT BLOCK	1
6	8036-056	1-8 X 7.00" BOLT	1
7	8201-046	1" FLATWASHER	2
8	8202-046	1" LOCKWASHER	1
9	8107-007	1-8 HEX HUT	1
10	0162-167	.55" LONG SLEEVE	1
11	0162-168	1.60" LONG SLEEVE	1
12	8033-012	1/2-13 X 1.50" BOLT	1
13	8033-022	1/2-13 X 2.75" BOLT	1
14	8201-043	1/2" FLATWASHER	8
15	8202-043	1/2" LOCKWASHER	6
16	8104-007	1/2-13 HEX NUT	6
17	8201-047	3/4" FLATWASHER	2
18	8106-007	3/4-10 HEX NUT	2
19	8032-036	3/8-16 X 4.50" BOLT	4
20	8032-040	3/8-16 X 5.00" BOLT	4
21	8201-042	3/8" FLATWASHER	8
22	8202-042	3/8" LOCKWASHER	8
23	8102-007	3/8-16 HEX NUT	8
24	8043-012	1/2-13 X 1.50 CARR. BOLT	4

1.8 METER SERIES 1184

TABLE 4.2-1
(REFERENCE FIGURE 4.2-1)

ITEM NO.	PART NO.	DESCRIPTION	QUANTITY
1	0490-140	REFLECTOR SUPPORT TUBE	1
2	0490-053	REFLECTOR MOUNTING ARM	2
3	0179-189-17	1.8M VELLOXED REFLECTOR	1
4	0490-144	ELEVATION ADJUSTMENT ROD	1
5	0168-112	ELEVATION BLOCK	1
6	8036-056	1-8 x 7.00" BOLT	1
7	8201-046	1" FLATWASHER	2
8	8202-046	1" LOCKWASHER	1
9	8107-007	1-8 HEX NUT	1
10	0162-167	.55" LONG SLEEVE	1
11	0162-168	1.60" LONG SLEEVE	1
12	8033-012	1/2-13 x 1.50" BOLT	1
13	8033-022	1/2-13 x 2.75" BOLT	5
14	8201-043	1/2" FLATWASHER	12
15	8202-043	1/2" LOCKWASHER	6
16	8104-007	1/2-13 HEX NUT	6
17	8201-047	3/4" FLATWASHER	2
18	8106-007	3/4-10 HEX NUT	2
19	8032-036	3/8-16 x 4.50" BOLT	4
20	8032-040	3/8-16 x 5.00" BOLT	4
21	8201-042	3/8" FLATWASHER	8
22	8202-042	3/8" LOCKWASHER	8
23	8102-007	3/8-16 HEX NUT	8

REFLECTOR SUPPORT ASSEMBLY

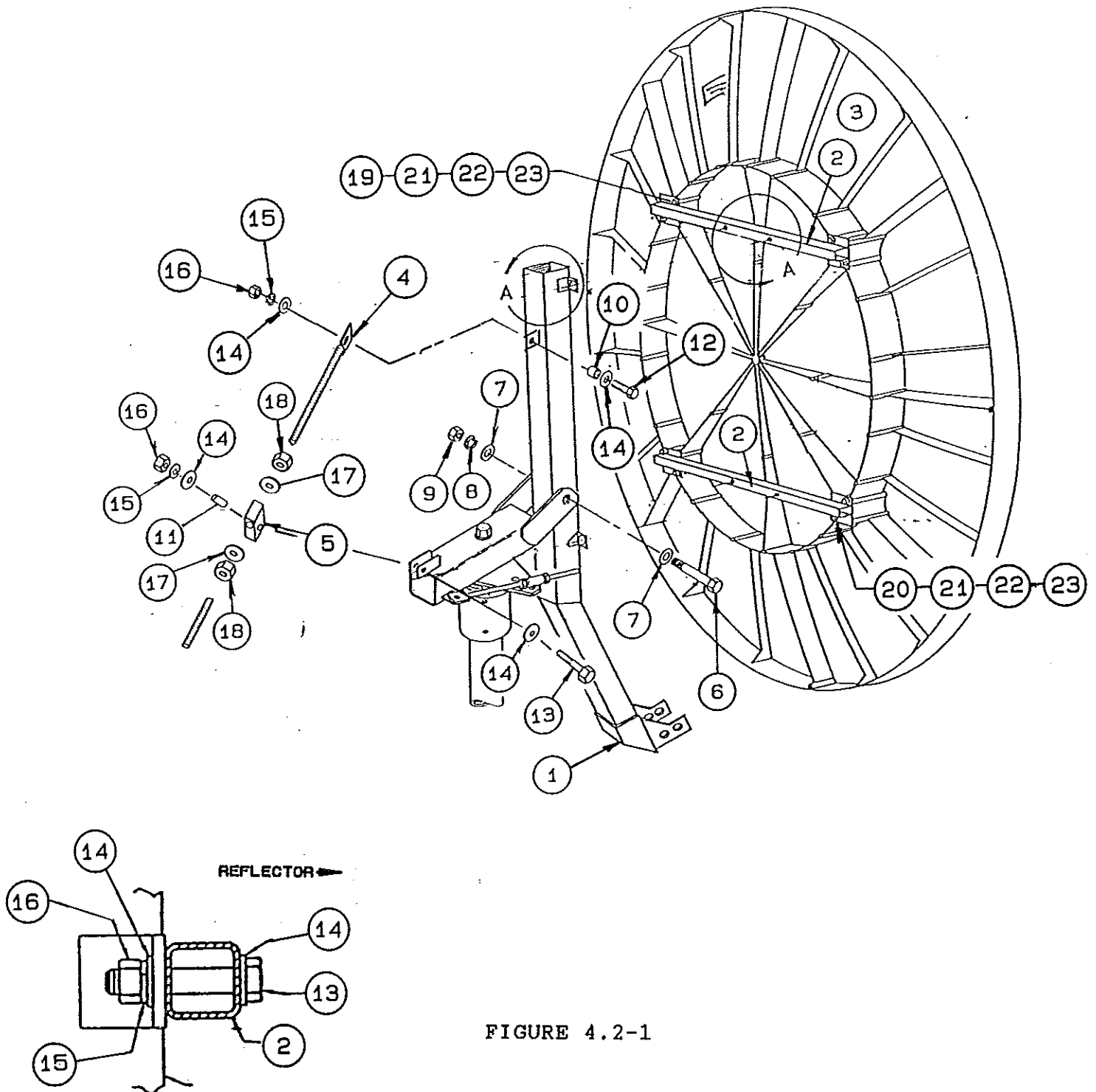


FIGURE 4.2-1

DETAIL A

1.8 METER SERIES 1184

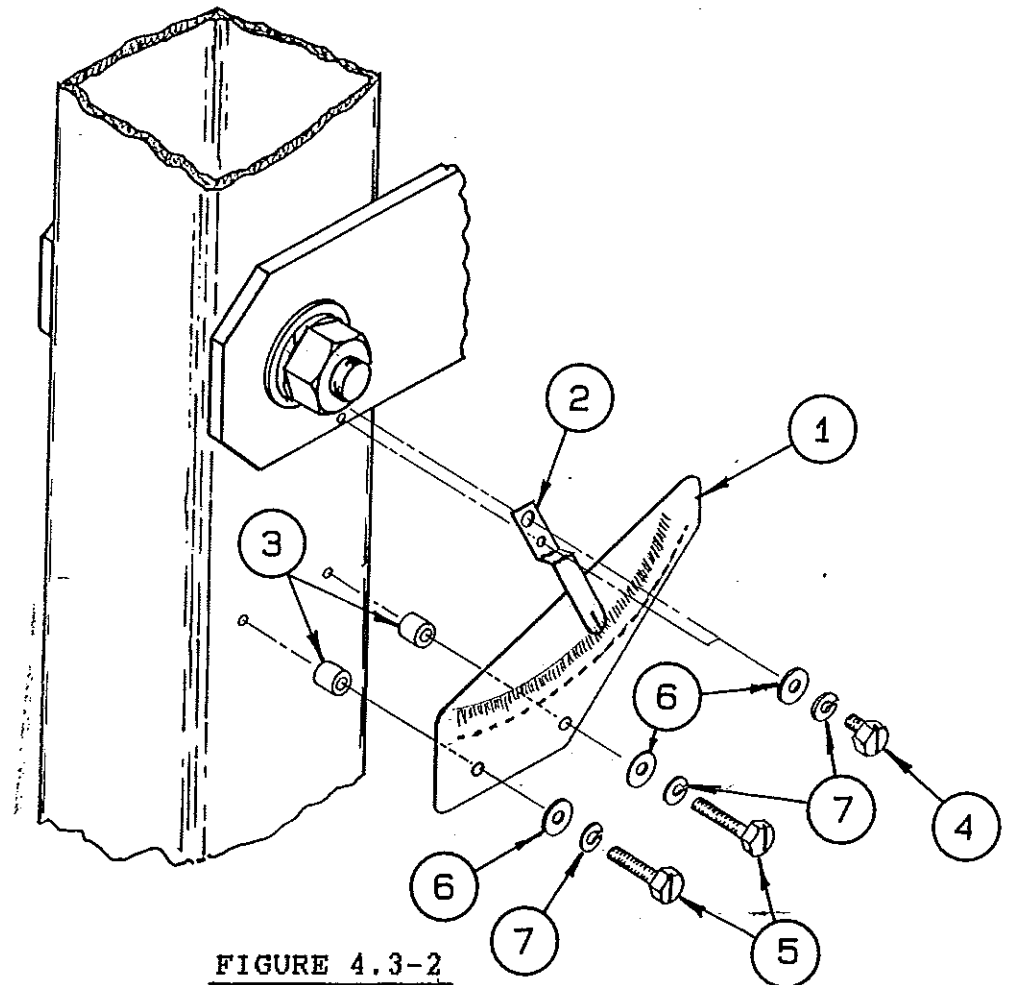
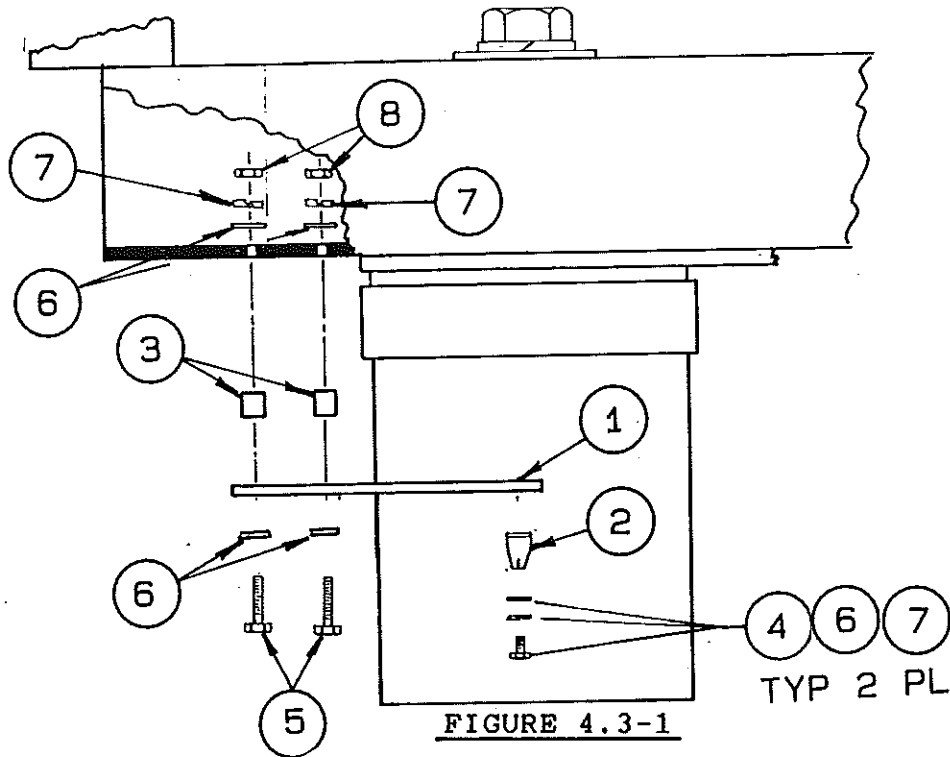
TABLE 4.3-1
(REFERENCE FIGURE 4.3-1)

<u>ITEM NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>
1	0156-705	AZIMUTH INDICATOR PLATE	1
2	0211-396	AZIMUTH INDICATOR	1
3	0159-220	SPACER	2
4	8302-008	#10-24 x .38" SCREW	2
5	8302-007	#10-24 x 1.25" SCREW	2
6	8201-037	#10 FLATWASHER	6
7	8202-032	#10 LOCKWASHER	4
8	8111-005	#10-24 HEX NUT	2

TABLE 4.3-2
(REFERENCE FIGURE 4.3-2)

<u>ITEM NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>
1	0156-700	ELEVATION PLATE	1
2	0211-395	ELEVATION INDICATOR	1
3	0159-220	SPACER	2
4	8302-008	#10-24 x .38" SCREW	2
5	8302-007	#10-24 x 1.25" SCREW	2
6	8201-037	#10 FLATWASHER	4
7	8202-032	#10 LOCKWASHER	4

AZIMUTH & ELEVATION INDICATOR ASSEMBLIES



1.8 METER SERIES 1184

TABLE 4.4-1
(REFERENCE FIGURE 4.4-1)

ITEM NO.	PART NO.	DESCRIPTION	QUANTITY
1	0250-248	FEED SUPPORT TUBE	1
2	0211-342	Rx/Tx BRACKET	1
3	0156-763	NUT PLATE	2
4	8033-008	1/2-13 x 1.00" BOLT	4
5	8201-043	1/2" FLATWASHER	4
6	8202-043	1/2" LOCKWASHER	4
7	8038-006	5/16-18 x 3/4" CARRIAGE BOLT	4
8	8201-041	5/16" FLATWASHER	4
9	8202-041	5/16" LOCKWASHER	4
10	8101-009	5/16-18 HEX NUT	4

FEED SUPPORT ASSEMBLY

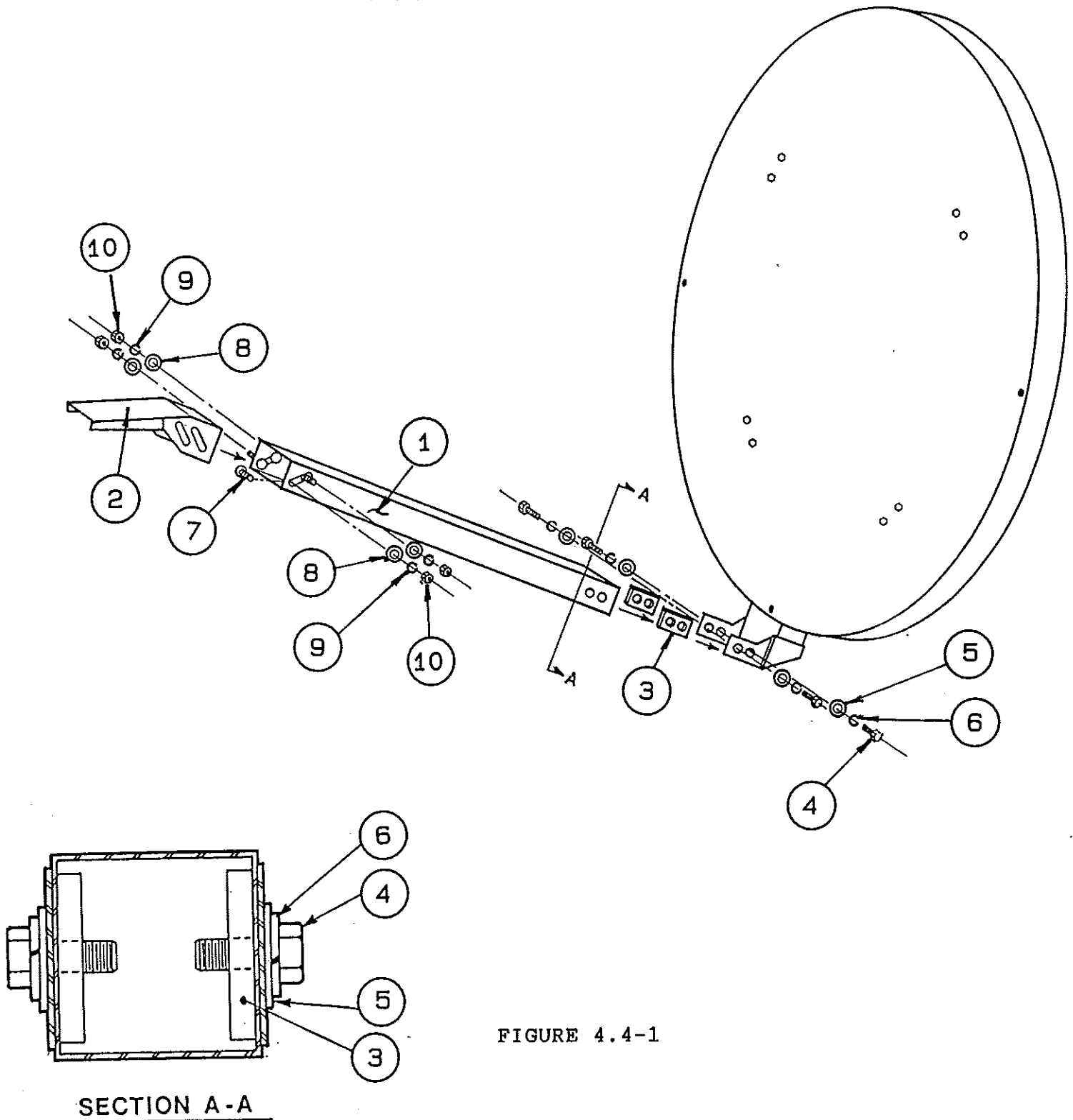


FIGURE 4.4-1

FEED SUPPORT TUBE ALIGNMENT

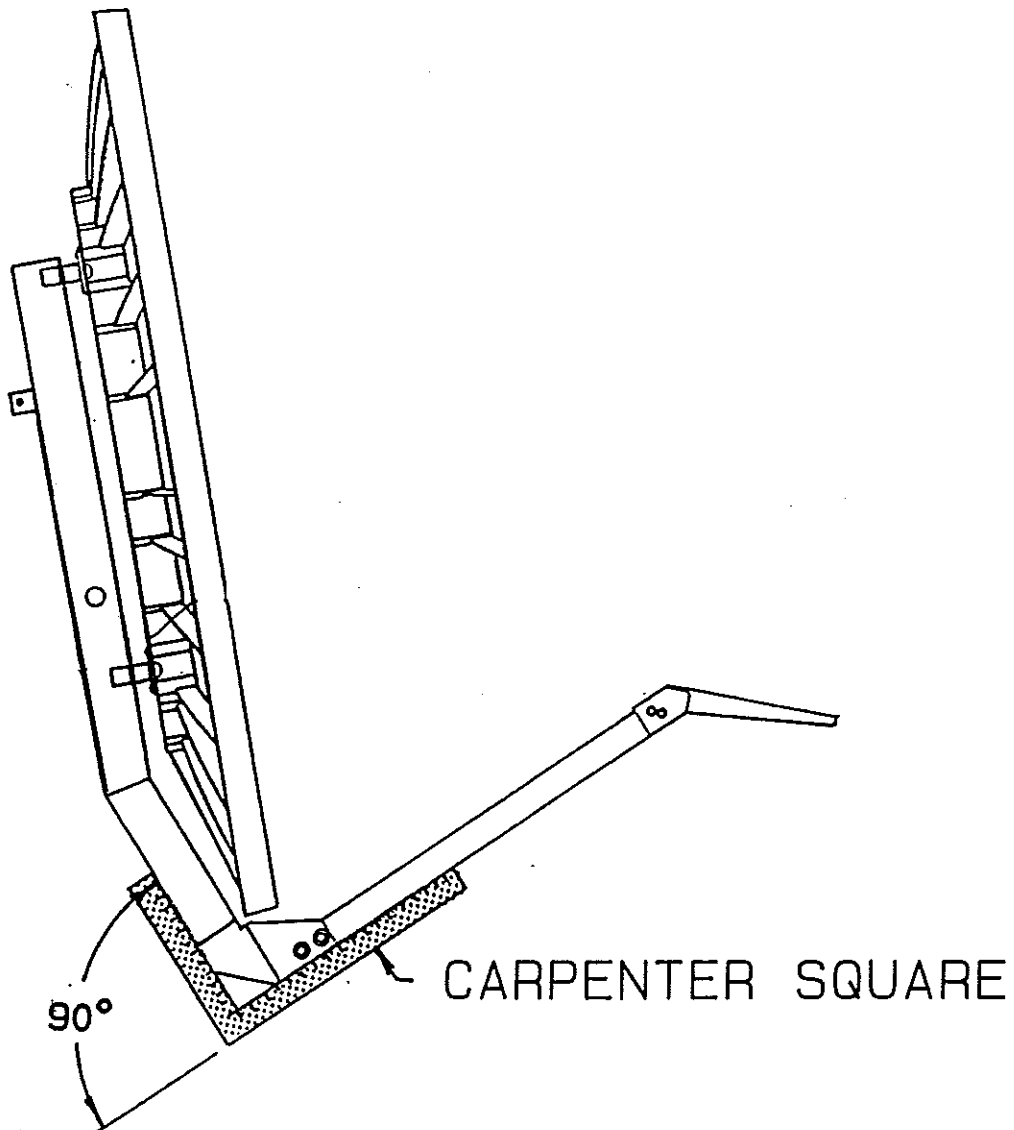


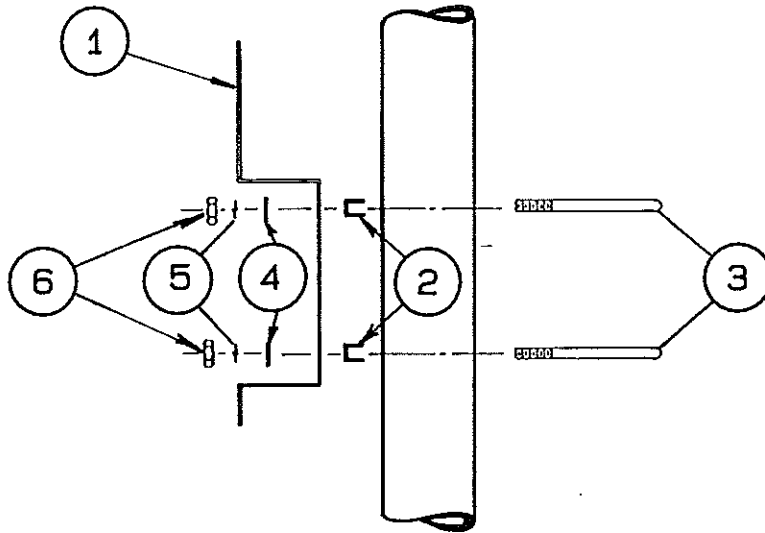
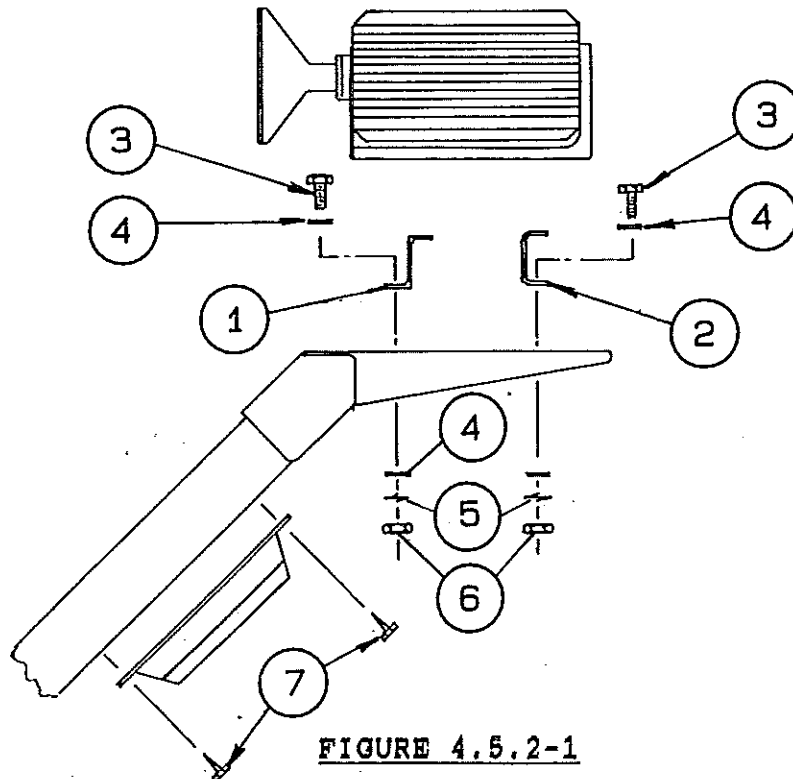
FIGURE 4.4-2

1.8 METER SERIES 1184

<u>TABLE 4.5.1-1</u> (REFERENCE FIGURE 4.5.1-1)			
<u>ITEM NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>
1	0211-339	AEU BRACKET	1
2	0247-116	CHANNEL	2
3	8402-006	3/8-16 x 4.50" U-BOLT	2
4	8201-042	3/8" FLATWASHER	4
5	8202-042	3/8" LOCKWASHER	4
6	8102-007	3/8-16 HEX NUT	4

<u>TABLE 4.5.2-1</u> (REFERENCE FIGURE 4.5.2-1)			
<u>ITEM NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>QUANTITY</u>
1	0211-363	ADAPTER - FRONT	1
2	0211-364	ADAPTER - BACK	1
3	8302-006	#10-24 x .50" SCREW	4
4	8201-037	#10 FLATWASHER	8
5	8202-032	#10 LOCKWASHER	4
6	8111-005	#10-24 HEX NUT	4
7	8320-001	#8 x .50" SELF-TAPPING SCREW	4

1.8 METER SERIES 1184

AEU BRACKETFIGURE 4.5.1-1NEC ADAPTER BRACKETFIGURE 4.5.2-1

1.8 METER SERIES 1184

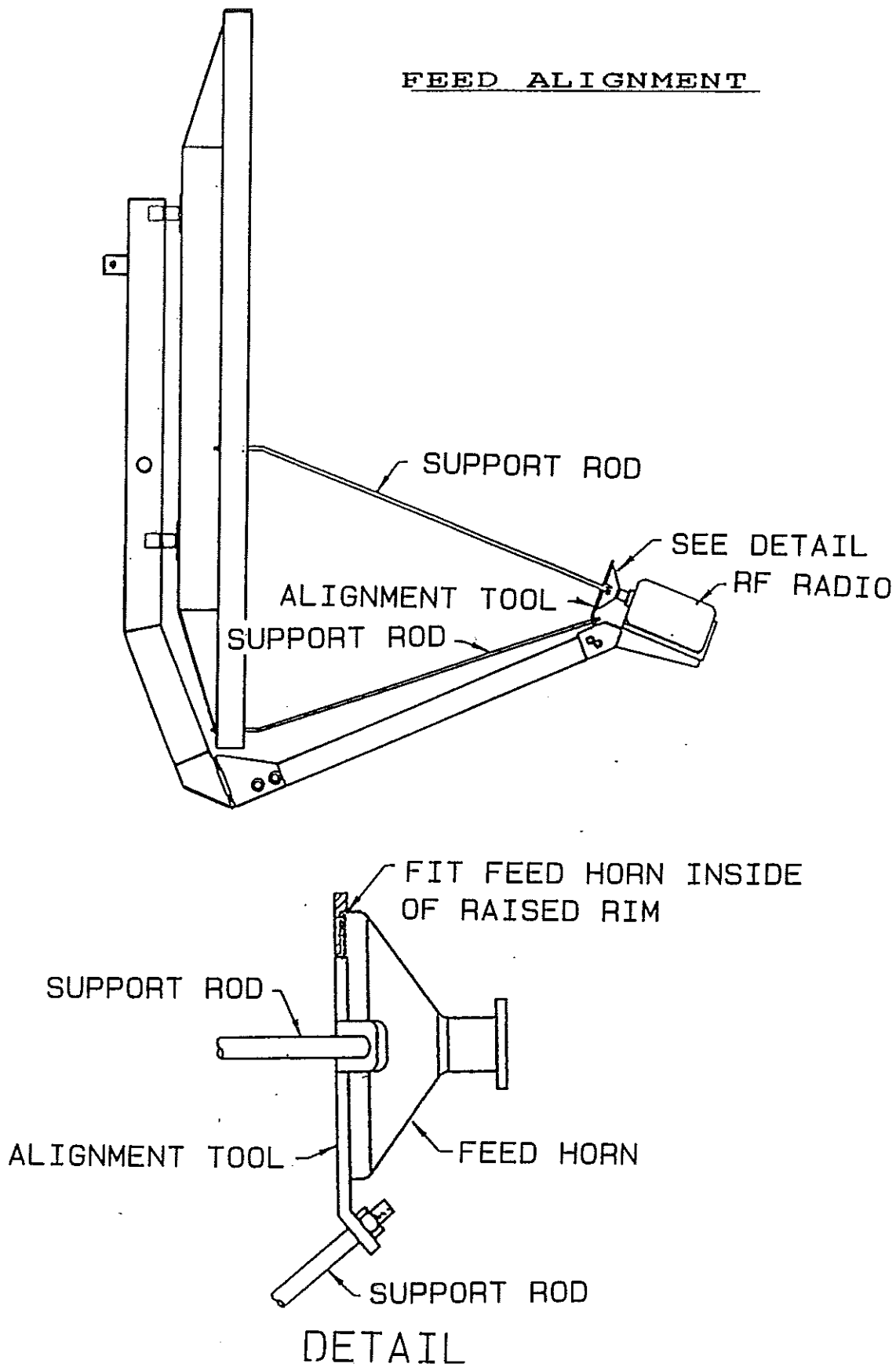
FEED ALIGNMENT

FIGURE 4.6-1

SECTION V

ANTENNA POINTING5.0 ALIGNMENT TO SATELLITE

Prodelin's 1.8 meter Quick Repoint Az/El mount requires that the antenna be positioned to the satellite orbital arc initially by a trained installer, after which, any future repointing to any other satellite can be accomplished quickly and easily by anyone with a minimum of tools and instruction.

5.1 INITIAL ALIGNMENT

The 1.8 meter offset reflector contains a 22.3° elevation offset look angle. Therefore, when the reflector aperture is perpendicular to the ground, the antenna is actually looking 22.3° in elevation.

Step 1: Attach an inclinometer to the angled part of the reflector support tube as shown in figure 5.1-1.

Step 2: Raise or lower the antenna to find the desired elevation by turning the $3/4"$ nuts located at the elevation block. Position the top nut so that it will not interfere with adjustment. Turn the bottom nut clockwise to increase elevation and counterclockwise to decrease elevation.

Step 3: After the correct elevation angle is set, rotate the antenna in azimuth by turning the $3/4"$ nuts located at the azimuth adjustment tube. Turn the front (near reflector) nut to decrease azimuth angle and the back nut to increase azimuth angle. Rotate azimuth until a signal is reached.

Step 4: Peak the antenna signal by fine adjustments made in both azimuth and elevation.

Step 5: Tighten the four $3/4"$ nuts used for adjustments.

Step 6: Adjust the elevation pointer and azimuth collar to read the correct angles so that any future repointing can be easily accomplished.

1.8 METER SERIES 1184

5.2 REPOINTING

- Step 1: Adjust elevation up or down by turning the 3/4" nuts as above in step 2. Adjust until new elevation angle is read at elevation pointer. See figure 5.2-1.
- Step 2: Adjust azimuth by turning 3/4" nuts as above in step 3. Adjust until new azimuth angle is read at azimuth pointer.
- Step 3: Tighten the four 3/4" nuts.

1.8 METER SERIES 1184

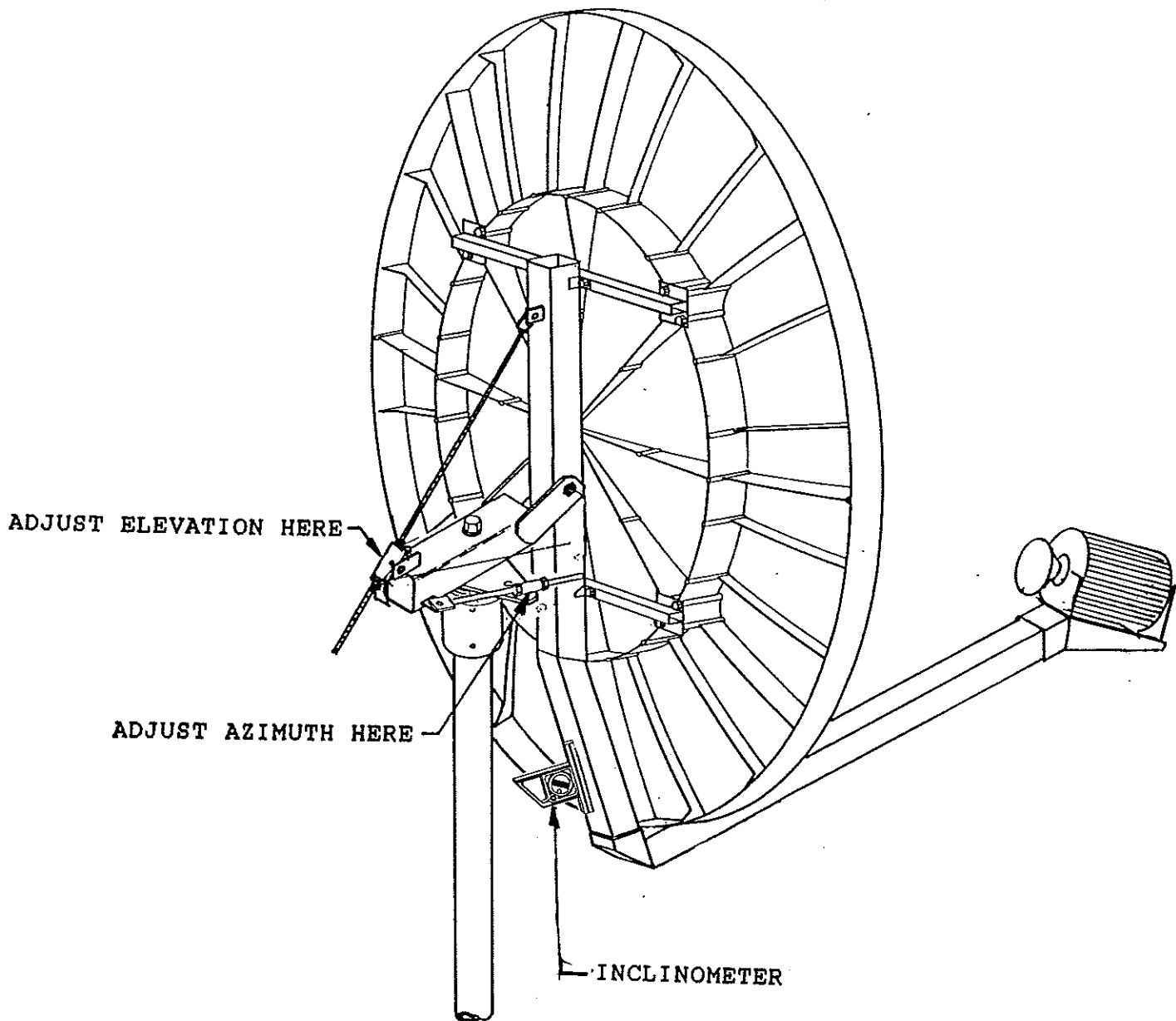


FIGURE 5.1-1

REPOINTING

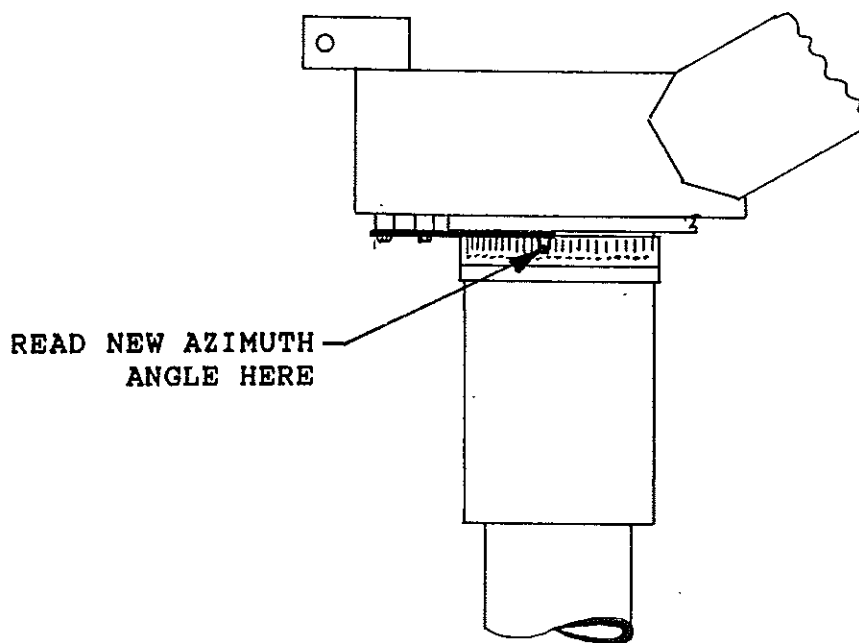
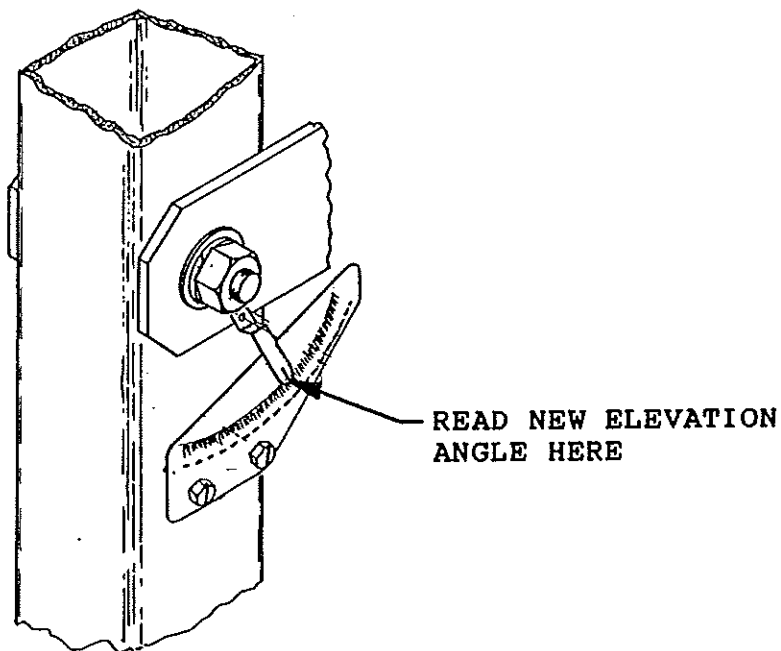


FIGURE 5.2-1

SECTION VI

MAINTENANCE

6.0 MAINTENANCE OVERVIEW

After installation, the antenna requires only periodic inspection. It is anticipated that maintenance, if required, will be minimal and easily handled by a local or in-house maintenance staff. The materials used in the construction of this Earth Station Antenna virtually eliminate any maintenance repairs.

6.1 PERIODIC INSPECTION

It is suggested that a periodic inspection be performed at least every six months.

NOTE: After any very severe weather conditions, inspection of the antenna should be performed to determine if foreign objects have caused damage or if survival specifications have been exceeded.

This inspection should include the following:

- Step 1: Check all bolting locations - all bolts should be tight.
- Step 2: Check all structural members - repair or replace if damaged.
- Step 3: Check the foundation anchor bolts - they must be secure and with no failure signs in foundation.
- Step 4: Check for corrosion - on the reflector structure and the mount.

6.2 REFLECTOR

Prodelin's reflector does not require any maintenance. The composite construction of the reflector is virtually impervious to any damages that could be caused by weather or other atmospheric conditions.

It is only necessary to inspect for any physical damage done by vandalism or very severe weather conditions.

Should any damage be detected to a portion of the reflector, contact the Customer Service Department at Prodelin for recommendations involving reflector repair.

1.8 METER SERIES 1184

6.3 MOUNT AND REFLECTOR SUPPORT STRUCTURE

The mount and reflector support structure supplied with this antenna is of steel construction and has a hot-dipped galvanized finish with mechanical galvanized hardware.

If inspection shows any signs of structural failure, the mount members that are damaged should be repaired or replaced.

Corrosion: Any corrosion on steel members may be repaired with a cold, zinc-rich galvanizing paint.

6.4 FEED AND FEED SUPPORT

The feed support tube and Rx/Tx bracket should be inspected to insure that all hardware is secure. The feed/radio mounting bolts should be tight.

The feed horn window should be inspected to insure that it is intact so that no moisture can collect inside the feed horn. Replace if damaged.