

## HEAVY DUTY SHIPBOARD TILT UNIT-SINGLE

(UPGRADED VERSION)



### APPLICATIONS

The STU-3 series shipboard tilt units are modular electromechanical systems for lowering and raising single shipboard communication antennas. These units and the dual antenna variants (STU-4series) have over 90% commonality of components.

### FEATURES

The drive element is a two-stage planetary gearbox. The **STU-3 HD** series uses a 2-horsepowerbrakemotor. The electrical controls are located in the pedestal for local operation, while an optional remote control will operate up to three units at a maximum of 1,200 feet away. A manually operated handcrank provides emergency control in the event of electrical failure. Tilt angles may be preset to any angle from vertical through 115, and powered rotation from vertical to 90 horizontal takes only 20 seconds. All units may be tilted in board to expedite antenna maintenance, removal or installation. Converting from single to dual antenna configuration is accomplished by installing another support arm. Provisions for mounting antenna tuners and couplers area vailable in rotating elements, permitting antenna feed wirelengths to be kept to a minimum. Compression pads are activated at vertical and horizontal limits to reduce shock and vibration loads from being transmitted to the rotating elements. Camoperated limits witches control the vertical and horizontal positioning. An overtravel limit switch removes all power to the drivemotor in the event of limit switch failure. TheSTU-3HD & STU-4HD (HEAVYDUTY) units are designed to withstand loads of 1,000,000 in/lb, and are normally used where green water loads are a major concern. Manual crank versions are also available.

#### OPTIONAL EQUIPMENT

Includes the C-11549 remote control unit and ID-2371 remote indicating unit.

#### SPARE/REFURBISHED PARTS LIST

AntennaProducts Corp is the manufacturer of the Antenna Tilting Group (ATG) Model 0A-9242A(V)3S/R. APC offers a range of spare/refurbished parts for this ATG. A complete list of available items can be found on page 2 & 3 of this document.

### SINGLE ANTENNA

### HEAVY DUTY & LIGHTWEIGHT UNITS

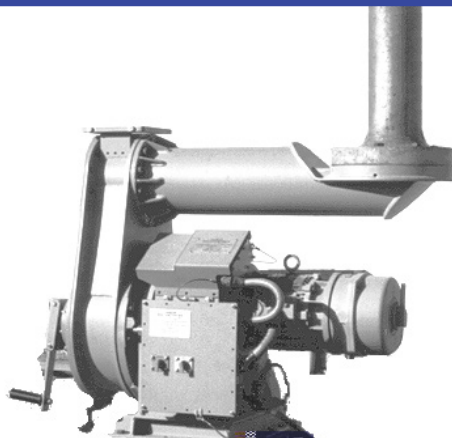
### MODULAR SYSTEM

#### PRODUCT CONFIGURATION

WEIGHT	964 lbs
HEIGHT	
RAISED	39 inches
LOWERED	26.25 inches
DEPTH	
VERTICAL	22 inches
90°	36 inches
TILT ANGLE PRESETS	90°, 105°, 115°
OPERATING SPEED	
POWERED	90° in 19.6 seconds
MANUAL	132 turns -90°
OPERATING CAPACITY	
STATIC LOAD	1,000,000 in/lb
DYNAMIC LOAD	100,000 in/lb
MOTOR	2 HP 440 VAC, Ø Type 1 Shipboard
CONTROLLER	Size 1 conforming to MIL-C-2212 Environmental Qualifications (MIL-E-16400)
SHOCK	MIL-S-901C
VIBRATION	MIL-STD-167-1
MIL-STD-801D	Temperature, Salt Fog, UV, Electrical, Enclosure, Ice, Dust, Humidity, & Inclination

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(UPGRADED VERSION)



(Spare/Refurbished Parts List)



PART NUMBER	DESCRIPTION	LW/HW	AVAILABILITY
1500-0355-XXX (UPGRADED VERSION)	Antenna Tilting Group (0A-9242A) (V) 3/SR Single	HW	New or can refurbish
1000-1454-401	Weldment, Pedestal	HW	New or can refurbish
0003-4989-401	Mast Weldment	HW	New or can refurbish
1000-1458-401	Gear Box Assy	HW	New or can refurbish
1000-1459-401	Hand Crank Assy	LW / HW	New or can refurbish
0003-4678-401	Case, Handcrank	HW	New
0003-4573-301	Spring, Handcrank	LW / HW	New
0003-4574-401	Crank, Handcrank Assy	LW / HW	New
1000-1491-401	Bumper Stop Assy	HW	New or can refurbish
1000-1466-401	Arm, Antenna Support	LW / HW	New or can refurbish
1000-1843-401	Motor Controller Assy (replaces 1000-1449-401)	LW / HW	New or can refurbish
1000-1451-401 (Upgraded Version)	Switch Assy Limit	HW	New or can refurbish
1000-1467-402 (Upgraded Version)	Main Junction Box Assy (replaces 1000-1467-401)	LW / HW	New or can refurbish
1000-1479-401	Mount, Antenna Coupler	LW / HW	New or can refurbish
0003-4930-301	Stop Flange	HW	New
0003-4928-301	Adjustment Arm	LW / HW	New
0003-4048-202	Gear, Drive	HW	New
0003-4049-202	Gear, Idler, Handcrank	HW	New
0003-4050-301	Gear, Internal, Handcrank	LW / HW	New
0003-4052-301	Stud, Idler, Handcrank	LW / HW	New
0003-4996-201	Key, Woodruff	LW / HW	New
0003-4968-301	Screw, Adjustment	LW / HW	New
0004-0503-402	Motor Brake Assy (replaces 0003-4592-301 Motor, Modified)	HW	New or can refurbish
0003-5808-301	Gasket, Motor Mount	LW / HW	New
115X01209X0000	Bearing, Annular Ball	LW / HW	New
3550-0153-004	Bearing, Roller, Needle	HW	New
3550-0151-001	Bearing, Thrust	LW/HW	New
115X22408X0000	Bearing, Annular Ball	HW	New
3550-0152-001	Washer, Thrust	LW/HW	New
3509-0277-001	Grommet, Rubber	LW/HW	New
MS16624-3037	Ring, Retainer	LW/HW	New
MS35756-34	Key Woodruff	LW/HW	New
0003-4597-301	Cam Plate, OTLS	HW	New or can refurbish
0003-4602-401	Cam Assy High Limit Switch	HW	New or can refurbish
0003-4607-301	Cam Assy Low Limit Switch	HW	New or can refurbish
0003-4783-301	Cover Plate, Arm	LW/HW	New
0003-4892-401	Protective Cover	LW/HW	New
0004-0633-201	Ground Strap	LW/HW	New
1000-1495-201	Remote Control Unit (C-11549/SR)	LW/HW	New or can refurbish
1000-1495-202	Remote Indicator Unit (ID-2371/SR)	LW/HW	New or can refurbish
0003-4890-401	Gasket, Junction Box Cover	LW/HW	New
M83461/1-280	Packing, Preformed (O-Ring)	LW/HW	New
0004-2728-201	Bumper Stop Compression Kit- Consists of: 0003-4483-201- Pad (6 ea) 0003-4777-301- Washer (8 ea) MS171598- Spring, Pin (1 ea)	LW/HW	New