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REV.	ECO	BY	DATE	
А	MTW	RELEASED	JTS	11/17/00
В	MTW	ADDED REF. DIMENSIONS FOR CLARITY	САМ	09/25/01
С	MTW	UPDATED DRAWING AND FILE AS NECESSARY	CAM	10/18/01
D	MTW	CORRECTED WELDING CALLOUT	CAM	01/25/02
Е	MTW	UPDATE ITEM	ACG	10/01/02
F	MTW	UPDATE ASSEMBLY METHOD	ACG	01/23/03
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		Parts List	
ITEM	PART NO.	DESCRIPTION	QTY
1	WT-SPM.01	ACCESS TUBE WELDMENT	1
2	WT-SPM.04	INTERFACE PLATE	1
3	WT-SPM.07	POD COVER WITH NIPPLE	1
4	WT-SPM.15	MANHOLE DOOR w/ LATCH	1
5	WT-SPM.36	ENTRY PORT CAP	6
6	MT-750	5/8" STEP BOLT ASSEMBLY	4
7	GN-05	5/8" GALV. HEX NUT	8
8	GWL-05	5/8" GALV. LOCK WASHER	4
9	GB-05165	5/8" X 1-3/4" GALV. BOLT ASSY	36
10	L1630	D-RING w/ANCHORAGE PLATE (DBI/SALA)	3
11	GB-04125	1/2" X 1-1/4" GALV. BOLT KIT	6
12	GB-04605	1/2" X 6" GALV. BOLT KIT	2
13	GN-YL-04	1/2" GALV. NYLOCK HEX NUT	2

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В	MTW	ADDED REF. DIMENSIONS FOR CLARITY	CAM	09/25/01					
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				Parts List				
ITEM PART NO.				DESCRIPTION				
1	1 WT-SPM.32			LADDER TO POD BRACKET 4				
2	2 WT-SPM.35			LADDER				
3	GB-04165 1			2"X 1-3/4" GALV. BOLT KIT				
4	GWF-	04	1/2" GALV. FLAT WASHER 8					
tary <sup>C</sup> sed	rawn by: CAM	DATE:	/01	PART NUMBER: WT-SPM-B				
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	Parts List						
	ITEM	FEM PART NO		DESCRIPTION		QTY	
	1	WT-SPI	PM.32	LADDER TO POD BRACKET		4	
	2	2 WT-SPM.35		LADDER			
	3	GB-04	165	1/2	2"X 1-3/4"GALV. BOLT KIT	24	
	4	GWF-	GWF-04		1/2" GALV. FLAT WASHER		
These drawings and specifications are the propri property of ANDREW CORPORATION and may be only for the specific purpose authorized in writin	ietary DRAWN BY: used CAM		date: 10/18/01		WT-SPM-B		
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## P/N WT-SPM Series

## Rev. Level A

**Description:** Installation Procedure for MTS Pod Mount

**Contents:** 1) Evaluate the structure for capability to support the new vertical loads and the new overturn figures. This includes the vertical loads on the access tube, and the entire structure including the footings, anchor bolts, bell, knuckle, riser shaft, etc. The structural analysis must be based on the original tank design and should have concerns for the particular geographic location and should comply with all new A.W.W.A. concerns for wind and seismic. It is important to perform an expert tank inspection on the tank even if it appears to be in good shape. Many tanks have been recently painted and the visible rust at critical areas have been repaired but the original steel may have suffered some loss. Areas of concern are the anchor bolts, the knuckle above the condensate plate, the overall shaft, and extremely important to ultrasonic wall thickness, test the access tube at the penetration through the roof. This area is typically screened on the outside and is overlooked by the maintenance crews, and impossible to inspect without an ultrasonic wall thickness tester. Any steel loss must be reported to the structural engineer and should be calculated into his review of the tank. The tank inspection should be performed by a reputable company with experience on elevated tanks.

**2)** The pod is completely assembled on the ground, at a strategic location for crane access to the assembled pod and to the center of the tank.

The crane company is selected by experience in the local market and is mandated that they visit the site with your foreman to discuss the procedure, with concerns regarding access, crane location for access to the tank center without touching the tank, power lines, necessary crew to assemble jib and perform lift safely, as well as many other standard safety concerns.

The weight of the pod is roughly 2000 pounds and this information must be given to the management of the crane company and the operator. It is extremely important that the jib can reach to the center of the tank with enough stick to clear the roof with the straps, rigging, and pod suspended below. If the tank is in service or has water in it it is considered active, and thus the shells are stressed. A crane boom must be a safe distance away from the shell of the tank and be able to reach the access tube. The rooftop of most tanks are designed for approximately 200 pounds local loads and cannot support the pod.

Other areas of concern are 100% tie off or fall protection. The access tube is also the work area and the tie off location for the fall protection which should be considered from a support that is not under where the load will be suspended.

**3)** As in all work on steel structures hazardous paint may be present and should be tested before any work on the structure is performed, OSHA regulation CFR 1926.62 mandates certain procedures for various work including cutting or welding.

**4)** The Hatch cover or manhole cover must be removed from the top of the access tube. If any other items are attached to the top of the access tube they must be removed. If aviation lights are installed, temporary lighting away from the work area must be installed. New aviation lighting can be installed on the top of the new pod. In some areas Federal Aviation Administration may need to be informed about the new height of the tank.

**5)** After the top of the access tube has been prepared a template should be made on top of the access tube. It is important that the template be identical to the interface plate and the template is centered above the access tube. Many manholes are not centered above the access tube but are located above the ladder side of the access tube. It is important that the loads of the new pod are centered above the access tube. The template should be cut to fit flush to the surface of the access tube top. If the manhole is 24-inch diameter the template should be cut slightly larger than this so the fillet weld to the manhole curb does not interfere with the flush mounting to the access tube. The size of coax runs and number of coax runs must be considered and openings for the coax lines need to be marked on the template. Be sure the coax runs do not interfere with the OSHA mandated clearances as per 29 CFR 1910.27. This is important inside of the access tube as well as inside the pod.

**6)** The interface plate now needs to be cut on the ground to match the template made at the top of the access tube. After the interface plate is made it should be recoated according to the original tank manufacturers coating specifications.

**7)** The interface plate can now be installed on top of the access tube with the interior ring of boltholes in the interface plate and field drill the cap of the access tube to match. The interface is bolted using 5/8" A-325 galvanized or stainless bolts. The outer ring of boltholes must also be field drilled but the bolts for these holes are to also bolt the bottom flange of the pod. In most situations the outer ring of bolts penetrate behind the vent screen on the outside of the access tube. Be sure that the vent screen is replaced after the install.

8) The pod is now assembled on the ground.

**9)** The pod can now be lifted to the top of the access tube and bolted in place. The pod door should be located to allow rooftop access without interfering with other rooftop vents or storage area manholes and also should be located to the left or right of the climbing ladder for easier access to the rooftop. The pod interface allows for pod rotation in 30-degree increments for any adjustments made on top of the tank.

**10)** The rooftop of the pod can be loosened and infinitely adjusted for the proper antenna azimuth orientation.

**11)** All bolts and attachments must be tightened and inspected for thru bolting of the pod, the interface plate, and the access tube cover plate.