PREVENTATIVE MAINTENANCE REPORT RFID TRANSPONDER BASED VEHICLE DETECTORS



PLEASE TYPE OR PRINT IN BLUE OR BLACK INK ALL INFORMATION

DEVICE TYPE:		DISTRICT ID:			STATEWIDE ID:
DATE (mm/dd/yyyy):	TIME:		COUNTY:		SERIAL/RFID NUMBER:
STATE ROUTE (S.R.):				DIRECTION:	I
LOCATION (Mile Marker/Segm	ent-Offset):			l	VERIFIED AT SITE: YES NO
LATITUDE/LONGITUDE:					
TIME ARRIVING AT SITE:				TIME LEAVING SITE:	
DESCRIPTION OF PROB	LEM(S):				
CORRECTIVE ACTIONS	TAKEN:				
PROBLEM(S) CORRECTE	D: YES N	0			
PARTS:					
LABOR/EQUIPMENT/TRA	AFFIC CONTROL:				
ADDITIONAL COMMENTS	S:				
	nd the ITS Structur	es Preventati			(General, Device, Cabinet, and Communications completed, and that all checklist items receiving
	Printed Name				Signature
	Date (mm/dd/yyyy,	<u> </u>			Company

DISTRICT ID:	STATEWIDE ID:	DATE:	TIME:	

	General Checklist					
TASK #	TASK	COMPLETED?	CONDITION (Select One)			
G001	Check clearance of tree branches or brush around power and communication lines. Report required tree trimming and/or brush clearing work.	YES NO N/A	Excellent Good Fair* Poor*			
G002	Check that RTVD structure is adequately protected by guiderail. Report damaged guiderail.	YES NO N/A	Excellent Good Fair* Poor*			
G003	Check for damage (lightning, leaning, car impacts, vandalism, etc.). Repair as necessary.	YES NO N/A	Excellent Good Fair* Poor*			
G004	Verify that ITS site plans, ITS system block diagrams, electrical details/wiring diagram, and any other necessary records are located in the cabinet.	YES NO N/A	Excellent Good Fair* Poor*			

Device Checklist				
TASK #	TASK	COMPLETED?	CONDITION (Select One)	
D001	Perform preventative maintenance in accordance with the manufactures recommendations and as follows:	YES NO N/A	Excellent Good Fair* Poor*	
D002	Check for proper clearance of tree branches or brush; schedule any required trim work.	YES NO N/A	Excellent Good Fair* Poor*	
D003	Inspect for general condition, wear, rust, cracks, loose connections, frayed cables, and damage caused by (lightning, weather, car impacts, vandalism, etc.). Repair as necessary.	YES NO N/A	Excellent Good Fair* Poor*	
D004	Inspect for wear, rust, cracks, loose connections, and frayed cables. Repair/replace as necessary.	YES NO N/A	Excellent Good Fair* Poor*	
D005	Note and replace any missing, damaged, rusted, cracked, or bent parts.	YES NO N/A	Excellent Good Fair* Poor*	
D006	Inspect mounting hardware (anchor bolts, pole attachment) for rust, cracks, etc. Repair/replace as necessary.	YES NO N/A	Excellent Good Fair* Poor*	
D007	Check RTVD alignment. Align/tighten unit if necessary.	YES NO N/A	Excellent Good Fair* Poor*	
D008	Inspect RTVD for proper operation and function per manufacturer's instructions.	YES NO N/A	Excellent Good Fair* Poor*	
D009	Calibrate RTVD device per manufacturer's recommendations.	YES NO N/A	Excellent Good Fair* Poor*	
D010	Disconnect power supply from RTVD system. Verify that RTVD system proceeds automatically to full function mode, without any human intervention, when power supply is restored.	YES NO N/A	Excellent Good Fair* Poor*	
D011	Replace any damaged or malfunctioning units.	YES NO N/A	Excellent Good Fair* Poor*	
D012	Visually inspect all exposed grounding systems at the device for corrosion and damage.	YES NO N/A	Excellent Good Fair* Poor*	

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Cabinet Checklist				
TASK #	TASK	COMPLETED?	CONDITION (Select One)	
C001	Check the condition of surface and general cabinet appearance for damage (paint, damage, and graffiti).	YES NO N/A	Excellent Good Fair* Poor*	
C002	Check cabinet door and locking mechanism for proper closure. Adjust or repair if needed. Lubricate hinges and lock.	YES NO N/A	Excellent Good Fair* Poor*	
C003	Inspect and change filters where applicable.	YES NO N/A	Excellent Good Fair* Poor*	
C004	Check weatherproof seal (gasket).	YES NO N/A	Excellent Good Fair* Poor*	
C005	Remove any snow or brush from doorway opening or area surrounding cabinet.	YES NO N/A	Excellent Good Fair* Poor*	
C006	Inspect cabinet mounting hardware (anchor bolts, pole attachment) for rust, cracks, etc. Tighten if necessary.	YES NO N/A	Excellent Good Fair* Poor*	
C007	Check for water accumulations and duct sealant.	YES NO N/A	Excellent Good Fair* Poor*	
C008	Clean and vacuum inside of cabinet and equipment to remove dust.	YES NO N/A	Excellent Good Fair* Poor*	
C009	Check light bulbs and replace where applicable.	YES NO N/A	Excellent Good Fair* Poor*	
C010	Inspect equipment racks/shelves (tighten any loose hardware).	YES NO N/A	Excellent Good Fair* Poor*	
C011	Check operation of fan/air conditioner unit and heater, and replace where applicable.	YES NO N/A	Excellent Good Fair* Poor*	

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Cabinet Checklist				
TASK #	TASK	COMPLETED?	CONDITION (Select One)	
C012	Check radio interference filter (RFI) and lightning arrestor.	YES NO N/A	Excellent Good Fair* Poor*	
C013	Check circuit breaker and fuses.	YES NO N/A	Excellent Good Fair* Poor*	
C014	Check ground fault receptacle.	YES NO N/A	Excellent Good Fair* Poor*	
C015	Check environmental systems.	YES NO N/A	Excellent Good Fair* Poor*	
C016	Inspect all connections, cabling, and physical appearance of the equipment within the cabinets.	YES NO N/A	Excellent Good Fair* Poor*	
C017	Ensure that cables are not stressed.	YES NO N/A	Excellent Good Fair* Poor*	
C018	Hand-tighten all electrical terminations as necessary.	YES NO N/A	Excellent Good Fair* Poor*	
C019	Check and inspect tag reader. Run and save controller diagnostics according to manufacturer's specifications.	YES NO N/A	Excellent Good Fair* Poor*	
C020	Inspect all wires for loose connections, frayed wires, rodent damage, etc. Repair as necessary.	YES NO N/A	Excellent Good Fair* Poor*	
C021	Check incoming power for proper voltage and correct if not within tolerances.	YES NO N/A	Excellent Good Fair* Poor*	
C022	Check function and communications (modem).	YES NO N/A	Excellent Good Fair* Poor*	

DISTRICT ID:	STATEWIDE ID:	DATE:	TIME:
	RFID TRANSPONDER BASED VEHICLE	DETECTORS (R	TVD)
	Cabinet Checklist (co	n't)	
TASK #	TASK	COMPLETED?	CONDITION (Select One)
C023	Visually inspect all exposed grounding systems at the device for corrosion and damage.	YES NO N/A	Excellent Good Fair* Poor*
C024	Check conduit entry to cabinet. Provide duct sealant (or another means) to prevent rodent entry if not already present.	YES NO N/A	Excellent Good Fair* Poor*
	PERFORM THE FOLLOWING FOR LOCATIONS WITH UNINTERRUPTIBLE POWER SUPPLY (UPS):	COMPLETED?	CONDITION (Select One)
C025	Visually inspect general condition of UPS for corrosion, wear, and any other damage. Repair as needed.	YES NO N/A	Excellent Good Fair* Poor*
C026	Clean UPS and battery.	□YES	Excellent

Check all battery terminal connections for security and

apply corrosion preventative compound. Tighten as

Verify functionality of UPS by disconnecting power at

breaker. Verify that UPS maintains operation.

C027

C028

necessary.

Good

Fair*

Poor*

Good

Fair*

Poor*

Good

Fair*

Poor*

Excellent

Excellent

NO

N/A

YES

NO

N/A

YES

NO

N/A

DISTRICT ID:	STATEWIDE ID:	DATE:	TIMF:	

	Communications and Electrical Service Checklist				
TASK #	TASK	COMPLETED?	CONDITION (Select One)		
E001	Check to be sure hand hole covers are secure. Tighten if necessary.	YES NO N/A	Excellent Good Fair* Poor*		
E002	Check pull boxes (damage, covers missing, or damaged). Repair if necessary.	YES NO N/A	Excellent Good Fair* Poor*		
E003	Check conduit entry to junction box. Repair if necessary.	YES NO N/A	Excellent Good Fair* Poor*		
E004	Check conduit runs for settling of trench.	YES NO N/A	Excellent Good Fair* Poor*		
E005	Pump junction box dry if water is present.	YES NO N/A	Excellent Good Fair* Poor*		
E006	Clean garbage from junction box.	YES NO N/A	Excellent Good Fair* Poor*		
E007	Visually inspect lugs for burning corrosion, water infiltration and rodent damage.	YES NO N/A	Excellent Good Fair* Poor*		
E008	Visually inspect cable tags. Replace or reattach if needed.	YES NO N/A	Excellent Good Fair* Poor*		
E009	Visually inspect bushings for rust or damage.	YES NO N/A	Excellent Good Fair* Poor*		
E010	Visually inspect splice kit for integrity and water infiltration. Repair or replace if necessary.	YES NO N/A	Excellent Good Fair* Poor*		
E011	Inspect all equipment grounding conductors and connections for integrity.	YES NO N/A	Excellent Good Fair* Poor*		

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Communications and Electrical Service Checklist (con-t)						
TASK #	TASK	COMPLETED?	CONDITION (Select One)			
E012	Check communications antenna for proper communications.	YES NO N/A	Excellent Good Fair* Poor*			
	PERFORM THE FOLLOWING FOR LOCATIONS WITH DIRECT ELECTRICAL CONNECTIONS:	COMPLETED?	CONDITION (Select One)			
E013	Check meter cabinet/pole/pedestal for damage (lightning, leaning, vehicle damage, vandalism, corrosion, etc).	YES NO N/A	Excellent Good Fair* Poor*			
E014	Check service pole base. Replace base cover and clean out if necessary.	☐ YES ☐ NO ☐ N/A	Excellent Good Fair* Poor*			
E015	Check cabinet/conduit mounting hardware. Replace bolt cover and tighten if necessary.	YES NO N/A	Excellent Good Fair* Poor*			
E016	Check pole base splices for damage, water infiltration, and rodent damage.	☐YES ☐NO ☐N/A	Excellent Good Fair* Poor*			
E017	Visually inspect all exposed grounding systems at the device for corrosion and damage.	□YES □NO □N/A	Excellent Good Fair* Poor*			
E018	Visually inspect the meter socket and disconnect for damage, vandalism, and missing hardware.	☐YES ☐NO ☐N/A	Excellent Good Fair* Poor*			
E019	Check anchor bolts for tightness and corrosion	□YES □NO □N/A	Excellent Good Fair* Poor*			
E020	Check breakers.	□YES □NO □N/A	Excellent Good Fair* Poor*			
E021	Check meter cabinet for damage.	□YES □NO □N/A	Excellent Good Fair* Poor*			

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Communications and Electrical Service Checklist (con't)					
TASK #	TASK	COMPLETED?	CONDITION (Select One)		
E022	Check meter cabinet locking mechanism. Adjust or repair if needed.	YES NO N/A	Excellent Good Fair* Poor*		
	PERFORM THE FOLLOWING FOR LOCATIONS WITH SOLAR POWER ASSEMBLIES:	COMPLETED?	CONDITION (Select One)		
E023	Using acceptable battery analyzer, perform load test and verify passing condition.	☐ YES ☐ NO ☐ N/A	Excellent Good Fair* Poor*		
E024	Check batteries; clean and fill as necessary.	YES NO N/A	Excellent Good Fair* Poor*		
E025	Test battery charging system.	YES NO N/A	Excellent Good Fair* Poor*		
E026	Check all battery terminal connections for security and apply corrosion preventative compound.	YES NO N/A	Excellent Good Fair* Poor*		
E027	Thoroughly clean solar panels that power the battery packs.	YES NO N/A	Excellent Good Fair* Poor*		
E028	Inspect solar panel assembly for damage. Repair or replace if necessary.	YES NO N/A	Excellent Good Fair* Poor*		
E029	Verify that solar panels are arranged in such a way as to allow panels to receive direct sunlight. Report any issues.	YES NO N/A	Excellent Good Fair* Poor*		
E030	Check clearance of tree branches or brush around solar panel assembly, report required tree trimming and/or brush clearing work.	YES NO N/A	Excellent Good Fair* Poor*		

^{*}Document all Fair/Poor results in the Preventative Maintenance Report Form. Repair where possible.