VEHICLE FACTORS GROUP CHAIRMAN'S FACTUAL REPORT

Vehicle Attachment 8 - MTA Preventive Maintenance Work Orders

Baltimore, MD

HWY17MH007

(48 pages)

TRAOS

CM 2580577

COMPLETED

PREVENTIVE MAINTENANCE
W/O # 2550763
BUS # 05090

MTA Maryland

6,000 MILES INTERVAL
Mileage 444,205
DATE 09/15/16

	PPE EQUIPMENT REQUIRED TO COMPLETE PMI		TOOLS AND SUPPLIES REQUIRED TO COMPLETE A PMI
	1) SAFETY GLASSES 2) SAFETY SHOES 3) WORK GLOVES 4) HEARING PROTECTION (SUGGESTED)		1) FLASH LIGHT 2) COMPARTMENT "T" Key 3) AIR GAUGE 4) TIRE DEPTH GAUGE 5) RULER (scaled in 32nds ") 6) CALIPER 7) SMALL STEP LADDER 8) Voltmeter 9) Refractometer

6,000 MILE INSPECTION (Drum Brake & Oil) - **New Flyer** (04000, 05000)
Revised on 12/03/2015

ITEM	DESCRIPTION	INSP BY	PASS/FAIL	DEFECT
1.0	**IN CAB-START UP INSPECTION (Approx: 10 Min)**			
1.1	Inspect for overall cab cleanliness and safety hazards	[redacted]	F	NEEDS SCRPT
1.2	Using master switch. Verify operation of all diagnostic and warning lights, alarms and buzzers		P	
1.3	Verify ABS system check (light)		P	
1.4	Start engine; listen for unusual noises during starting. Inspect shutdown system		P	
1.5	Inspect active engine code light for active faults on dash board. Record (C.E.L, EMISSIONS, ETC)		P	
1.6	Inspect for active transmission codes using selector Pad. Record (Allison transmission only)		P	
1.7	Verify operation of remote mirrors. Right Only		P	
1.8	Verify operation of wipers and washers. Left and Right		P	
1.9	Verify bike rack operation (Put rack back in place after verification)		P	
1.10	Inspect condition of the bike rack		P	
1.11	Do exterior light test by pushing both signal switches at the same time		P	
1.12	Verify driver's two fans, heat control, and auxilary fan		P	
1.13	Verify heater/defroster control		P	
1.14	Verify instrument panel dimmer switch operation and all guage operation/condition		P	
1.15	Verify operation of fast idle		P	
1.16	Inspect steering wheel tilt/telescope operation		P	
1.17	Verify horn operation proper sound		P	
1.18	Verify the operation of the destination sign for "Out of Service"		P	
1.19	Verify the operation of the kneeler		F	SWITCH LOOSE
1.20	Verify the operation of the W/C ramp & clean tracks with air		P	

2.0	YARD & BRAKE TEST - DO ALL CHECKS IN YARD (Approx: 30 Min)			
2.1	Verify shift operation		P	
2.2	Verify hill hold feature		P	
2.3	Verify back up alarm when transmission in reverse		P	
2.4	Inspect air governor cut-in and cut-out pressures. All cut-in at 105 and cut-out at 125 (Record) on all three guages		P	In: 105 PSI Out: 125 PSI In: 105 PSI Out: 120 PSI In: 105 PSI Out: 125 PSI
2.5	Verify steering wheel movement feels normal, no binding or unusual noises		P	
2.6	Verify parking brake holds when applied		P	
2.7	Inspect condition of brake valve handle		P	
2.8	Verify front or rear door do not open when traveling		P	
2.9	Verify dash brake indicator light illuminates each time service brakes are applied		P	
2.10	Verify operation of block heater		P	
2.11	Verify three stops from 20 mph takes less than 23 feet Brake stops should not be done in wet weather. Verify when pavement is dry		P	1st attemp: 21.5 feet 2nd attemp: 20.2 feet 3rd attemp: 21.3 feet
2.12	Inspect operation of hazard switch and verify dash light operation		P	
2.13	Verify interior light master and toggle switch operation		P	
2.14	Verify first bank of lights on curb side when front door is opened		P	
2.15	Verify operation of the following switches: Driver's light, Stop request and Climate control		P	
2.16	Verify proper operation of HVAC system (temperature, fan speed, vent, etc)		P	
2.17	Inspect driver's window for cracks and clouding		P	
2.18	Verify window will slide and latch		P	
2.19	Inspect windshield for chips and cracks		P	
2.20	Inspect condition, mounting, hardware and operation of driver's sun visor		P	
2.21	Verify fare box light (Night run/door open)		F	INOP
2.22	Verify foot switch and dash light operation for both right and left side turn signal		P	
2.23	Verify low beam and high beam operation for both right and left side headlight		P	
2.24	Verify high beam dash light indicator operation		P	
2.25	Verify the operation of the rear exit door and interlock		P	
	RETURN TO SHOP AND PROCEED TO CONDUCT THE FOLLOWING INSPECTION AND TASK			
3.0	**INTERIOR/DRIVER'S COMPARTMENT (Approx: 20 Min)**			

3.1	Clean and inspect brake and accelerator treadles, rollers and clevis pins. Lubricate clevis pin		P	
3.2	Check transmission fluid using transmission selector		POK	
3.3	Inspect condition of driver's seat, belt, ~~buzzer~~, and barrier N/A		F	BACK REST ARM RWOP
3.4	Verify low air indicator light and alarm at 75 PSI on all three guages		P	
3.5	Record low pressure indicator light PSI		P	Front axle: 75 PSI Rear axle: 75 PSI
3.6	Inspect function of parking brake valve 1. Chock Wheels 2. Pressure is at least 120 PSI 3. Lower air pressure 4. Record Psi when valve "pops off" or engages at 60 PSI and below		P	Valve pop off: 45 PSI
3.7	Verify parking brake off alarm		P	
4.0	**INTERIOR/PASSENGER AREA (Approx: 20 Min)**			
4.1	Inspect interior lighting		P	
4.2	Inspect mirrors mounting and condition		P	
4.3	Lubricate upper and lower front door bushings		P	
4.4	Verify the operation of exit door push operation and emergency release (front & rear)		P	
4.5	Inspect all front & rear door glass		P	
4.6	Inspect passenger seats for damage, cleanliness, graffiti and loose mounting hardware		P	
4.7	Inspect driver's area for evidence of water leaks		P	
4.8	Inspect stanchions for loose rails, straps, and hardware cleanliness and damage		P	
4.9	Inspect modesty panels for cleanliness, graffiti and securement		P	
4.10	Inspect floors for cleanliness		(P)	sweep
4.11	Inspect floor joints for proper bonding and connection		P	
4.12	Verify floor lamp(s) operation		P	
4.13	Inspect all window release handles (Latches)		P	
4.14	Inspect operation of slide window latch mechanisms. Inspect operation of all Emergency exit window handles. Test opening/latching windows. All emergency window must open easily, and should be greased with approved lubrication. (B61-0206CS)		P	
4.15	Inspect windows for damage or cracks replace if necessary		P	
4.16	Check all light panels for looseness or separation		(P)	check all light panels

4.17	Inspect stop request chimes (or buttons) and w/c stop request	[redacted]	P	
4.18	Inspect both emergency hatches for cleanliness, instructions, latching and proper operation		P	
4.19	Inspect front door rollers (Do not lubricate)		P	
4.20	Clean return air grill after replacing filter (B96-10010) at rear of bus		P	
5.0	**AUXILLARY COOLANT HEATER (PROHEAT) (Approx: 5 Min)**			
5.1	Inspect all fuel lines in system for leaks, abrasions, kinks and damage		P	
5.2	Inspect all coolant lines in system for leaks, abrasions, kinks and damage		P	
5.3	Inspect coolant pump for operation and leaks		P	
5.4	Inspect wiring harness and connections in system		P	
5.5	Inspect all mounting hardware for integrity		P	
5.6	Inspect exhaust pipe for damage and leaks		P	
6.0	**EXTERIOR (Approx: 30 Min)**			
6.1	Inspect wiper arm linkage		P	
6.2	Lubricate all latches and hinges		P	
6.3	Lubricate exterior mirrors		P	
6.4	Change defroster filter (B96-10009)		P	
6.5	Inspect washer fluid level and fill as necessary		P	replace side acc/door seal (drive)
6.6	Verify all props are operational on all exterior access doors		P	
6.7	Verify all hinges are operational on all exterior access doors		P	
6.8	Check interlock pressure, located in electrical box over the batteries. Verify at shrader valve. Pressure is set at 45 PSI. (+/-). Record (Adjust if necessary)		P	Interlock Pressure: 42 PSI
6.9	Verify all securement locks are operational on all exterior access doors. Lubricate locks with (B61-0206CS)		P	
6.10	Verify all compartment lights are operational		P	
6.11	Verify all engine compartment lights are operational		P	
6.12	Wheels & Tires 1. Check for bent & damaged wheels. 2. Inspect wheel torque indicators. If purple indicators are used, all wheel nut torque must be verified with a torque wrench. (Torque to 425 ft-lbs) 3. Inspect front bearing covers for leaks 4. Check tire pressure any tire lower than 100 PSI is considered a flat and should be changed (Record)		P	Left Front: 112 PSI Left Rear Inner: 116 PSI Left Rear Outer: 115 PSI Right Front: 115 PSI Right Rear Inner: 110 PSI Right Rear Outer: 112 PSI
	PROCEED TO CONDUCT THE FOLLOWING INSPECTION AND TASK ON MID-LEVEL WITH BUS ON LIFT			

6.13	WHEELS & Tires (CONTINUED) Measure and record tread depth for each tire (6/32" min) lowest point on the tire or steel cord showing tire is to be replaced		P	Left Front: 16/32 Left Rear Inner: 8/32 Left Rear Outer: 10/32 Right Front: 15/32 Right Rear Inner: 11/32 Right Rear Outer: 13/32
7.0	**BATTERIES & ELECTRICAL (Approx: 15 Min)**			
7.1	Clean and inspect battery trays and all hold down hardware		P	
7.2	Inspect tray pullout handles		P	
7.3	Record alternator output from battery/charging system test. Bus should be running on fast idle with a full load. (all lights and HVAC on) RECORD using volt meter at + and - terminal for 24V		P	VOLTAGE: 27 V SPEC: MAXIMUM 28 VOLTS
7.4	Inspect battery disconnect switch for corrosion. Check if lugs are tight and clean if necessary		P	
7.5	Inspect all battery and switch cables and wiring for routing and condition		P	
7.6	Inspect electrical box for condition		P	
7.7	Check Vanner equalizer by checking 12V and 24V systems. Batteries should be within 0.1-0.2 volts of each other		P	
8.0	**RADIATOR & COOLING SYSTEM (Approx: 5 Min)**			
8.1	Inspect radiator screen		P	
8.2	Inspect radiator for leaks and dirt. Clean if dirty using pressurized air		P	
8.3	Inspect for bent fins in core		P	
8.4	Inspect EMP fan system. Inspect for cracks, missing or loose blades. Check for codes		P	
8.5	Inspect fan motor, hoses, piping and control valves		P	
8.6	Re-check reverse run feature, check for fault lights		P	
	PROCEED TO CONDUCT THE FOLLOWING INSPECTION AND TASK ON HIGH-LEVEL WITH BUS ON LIFT			
9.0	**CHASSIS/UNDERBODY (Approx: 10 Min)**			
9.1	Inspect frame for damage or corrosion		P	
9.2	Inspect frame for mounting and electrical connections		P	
9.3	Inspect condition of road side and curb side skid plates		(F)	replace c/s skid plate
9.4	Inspect front axle mounting hardware for looseness, wear and damage		P	
9.5	Inspect radius rods for wear or looseness		P	
9.6	Inspect shock absorbers for bushings, mounting brackets, leakage or damage		P	
9.7	Inspect all front axle hoses for condition and routing clearance		P	

9.8	Inspect both front axle air springs for cracks, abrasions or other damage (Use soap solution to check for leaks)	[redacted]	(F)	s/s bellow down
9.9	Inspect leveling valve for proper operation, mounting, looseness, wear, damage or leaks	[redacted]	P	
9.10	Record front axle ride height. Ride height is measured between the axle and the rubber stop mounted to the frame of the vehicle. Front ride height 3.0-inch	[redacted]	(F)	Ride Height: 2.75 inch
9.11	Inspect mud flap mounting for integrity	[redacted]	P	
9.12	Check or replace static straps (Only on rear)	[redacted]	P	
10.0	**FRONT & REAR BRAKE SYSTEM (Approx: 25 Min)**			
10.1	Measure and record brake rod travel,on both road and curb sides. Record the travel, Maximum travel is 1 3/4 inches (Front)	[redacted]	P	RF 1.00 inches LF 1.00 inches
10.2	Measure and record brake rod travel,on both road and curb sides. Record the travel, Maximum travel is 2 inches (Rear)	[redacted]	P	RR 1.30 inches LR 1.30 inches
10.3	Check brake lining for cracks and seperation	[redacted]	P	
10.4	Check brake linning thickness. Good until wear line is no longer visible	[redacted]	P	Front: Replace Yes___ No X Rear: Replace Yes X No___
10.5	Inspect hoses and lines for securement and condition. Check for rubbing on the front tires	[redacted]	P	
10.6	Inspect mounting nuts	[redacted]	P	
10.7	Inspect drums for scoring, heat cracks and rust	[redacted]	(F)	rear cracked / front scorn.
10.8	Check slack adjuster roll pin for excessive looseness and frozen pin	[redacted]	P	
11.0	**STEERING COMPONENTS (Approx: 30 Min)**			
11.1	Inspect center link for wear or damage	[redacted]	P	
11.2	Jack front axle, properly set axle on jack stands, unload axle and inspect kingpins	[redacted]	P	
11.3	Inspect steering knuckle axial play and indicate pin movement. Maximum axial play specificiation is 0.016" Note measurement and if measurement exceeds 0.016", advise supervisor	[redacted]	P	Axial play measurement: 0.015 inch
11.4	Inspect King Pin radial play (side to side). Maximum radial play specificiation is 0.004". Note measurement and replace King Pin if radial play measurement is in excess of 0.004", advise supervisor	[redacted]	P	Radial play measurement: 0.004 inch
11.5	Verify tie rod end cotter pins are in place on both right and left sides. (if applicable)	[redacted]	P	
11.6	Inspect left and right tie rod ends for wear and play by using the **rocking method**. Replace both tie rod ends if any play is found in either tie rod	[redacted]	P	

11.7	Lubricate both tie rod ends. (If equipped)		P	sealed
11.8	Lubricate kingpins, use the 2 fittings one for upper and one for lower		P	
11.9	Lubricate cam shaft bushing and slack adjuster, Being careful not to get grease on linings		P	
11.10	Inspect drag link for wear or damage		P	
11.11	Lubricate drag link forward and rear		P	
11.12	Inspect idler arm for wear or damage		P	
11.13	Inspect Steering hoses/lines for leaks, routing and condition		P	
11.14	Inspect power steering box for leaks		P	
11.15	Inspect power steering box for loose mounting hardware		P	
11.16	Inspect pitman arm for wear and integrity		P	
11.17	Inspect steering U-joints and slip joints for wear and damage		P	
11.18	Lubricate all fittings on miter box, steering u-joints, and applicable components. (ONLY USE HAND GREASE GUN ON MITER BOX FITIINGS)		P	
12.0	**FUEL TANK (Approx: 5 Min)**			
12.1	Inspect fuel tank for leaks		P	
12.2	Inspect fuel fill tube condition from the receptacle to the tank. Inspect for secure mounting and that the tube is not rubbing on anything		P	
12.3	Inspect tank mounting hardware and insulation for damage, looseness or being out of place		P	
12.4	Inspect fuel cap		P	
13.0	**REAR AXLE (Approx: 10 Min)**			
13.1	Inspect mounting hardware for integrity, wear and damage		P	
13.2	Inspect radius rods for wear and damage and looseness		P	
13.3	Inspect shock absorber bushing, mounting brackets, leakage or damage		P	
13.4	Inspect hoses for condition and routing		P	
13.5	Inspect air springs for cracks, abrasions or other damage (Use soap solution to check for leaks)		P	
13.6	Inspect leveling valve for proper operation, mounting, integrity, wear, damage or leaks		(F)	c/s rear leveling valve loose
13.7	Measure and record rear ride height. Ride height is measured between the axle and the rubber stop mounted to the frame of the vehicle rear ride height 3 ¾ inch		P	Ride Height: 3.75 inch

13.8	Inspect mud flap mounting hardware for integrity or damage		P	
13.9	Inspect hubs and axles flanges for leaks		P	
13.10	Inspect condition of the S1 Guard rubber and mounting bracket		P	
14.0	**DIFFERENTIAL (Approx: 30 Min)**			
14.1	Clean differential breather		P	
14.2	Inspect fluid level on the back side of the differential center section and rear wheel hubs		P	
14.3	Inspect for leaks		P	
15.0	**DRIVE SHAFT (Approx: 10 Min)**			
15.1	Inspect u-joints and slip splines for damage and wear. Grease 3 fittings and lubricate U-joints and slip splines		P	
15.2	Inspect yoke flange for wear and integrity		P	
15.3	Inspect bearing straps and bolts for wear or integrity		P	
15.4	Inspect drive shaft straps Check for drive shaft phase and "U" bracket		P	
16.0	**AIR SYSTEM (Approx: 10 Min)**			
16.1	Drain all the air tanks. Note: If excessive water is found, note on defect sheet. Including ping tank		(P)	Ping tank clogged
16.2	Inspect all electrical wiring and connections at air dryer. Four drain ports		P	
16.3	Inspect all lines and fittings for leakage and integrity for air tanks		P	
16.4	Inspect for oil contamination. Excessive oil residue at purge valve		P	
16.5	Inspect mounting for integrity		P	
16.6	Inspect mounting and routing of air lines. Look for chafing, kinks or damage. (Note location of discrepancies on defect column)		P	
	AFTER ROAD TEST AND ENGINE IS WARM			
17.0	**ENGINE COMPARTMENT (Approx: 2.5 Hours)**			
17.1	1. Drain engine oil and change oil filter. B86-8297 2. Take samples of the following components 3. Pre-fill oil filter with motor oil (USING PROPER TOOLS AND PROCEDURES!) 4. Fill engine with 15W-40 engine oil.		P	
17.2	Inspect engine/transmission mounts and cradle attachments		P	
17.3	Change coolant filter (B86-7502)		P	
17.4	Replace primary fuel filter (B86-8751)			N/S

17.5	Change air filter and check air restriction guage. 04000 & 05000 air filter: (B86-10008) Clean the air filter housing	[redacted]	P	
17.6	Replace power steering filter (B85-5001) check & adjust fluid level. Inspect hydraulic hoses & fittings for leaks.	[redacted]	P	
17.7	Inspect for fluid leaks. Be specific on defect sheet about location of leak	[redacted]	(F)	P/S pump oil leak / oil pan gasket (pressure washed after inspection dirty)
17.8	Inspect turbocharger for leaks and loose mounting	[redacted]	P	
17.9	Inspect exterior for fluid leaks and loose mounting hardware	[redacted]	P	
17.10	Inspect hoses, clamps and gaskets	[redacted]	P	
17.11	Inspect mounting hardware and brackets on both the engine and A/C belt guards	[redacted]	P	
17.12	Inspect condition of A/C compressor mounting hardware, wiring harness, connectors and service caps	[redacted]	P	
17.13	Verify all A/C lines are secure	[redacted]	P	
17.14	Inspect A/C compressor shaft seal, cylinder heads, valves, and housing leaks	[redacted]	P	
17.15	Inspect EMP alternator. Inspect air intake ducting for damage (chafing or holes). Repair or replace if damage is noted. Correct support devices to ensure damage will not reoccur. Clean air intake screen if necessary.	[redacted]	P	
17.16	Inspect condition of all engine lines and electrical wiring harnesses	[redacted]	P	
17.17	Inspect supply fuel pump for leaks	[redacted]	P	
17.18	Service spinner oil filter (B86-10044)	[redacted]	P	
17.19	Inspect spinner oil filter for operation	[redacted]	P	
17.20	Fill engine with 15W-40. Operate engine, re-inspect level and top off if necessary	[redacted]		
17.21	Ensure dipstick tube is securely mounted, not rubbing on anything and dipstick seats properly	[redacted]	P	
17.22	Inspect oil filler cap for proper seal, mounting and springs	[redacted]	P	
17.23	Verify transmission dipstick tube is securely mounted and dipstick seals properly	[redacted]	P	
17.24	Inspect control box mounting	[redacted]	P	
17.25	Inspect wiring harness and connectors to rear box	[redacted]	P	
17.26	Verify proper operation of rear run switches	[redacted]	P	
17.27	Inspect lines and electrical wiring harnesses for conditions, clearance, chaffing and that the correct clamps are being used for securement	[redacted]	P	
17.28	Inspect for damaged hydraulic hoses and fittings	[redacted]	P	
17.29	Inspect power steering pump for leaks	[redacted]	(F)	leaking

17.30	Inspect the belts, pulleys and tensioners for wear and damage	[redacted]	(F)	alt belt and a/c belt cracked
17.31	Inspect tension on manual/automatic adjusted belts	[redacted]	(F)	A/C belt pulley (tensioner)
17.32	Inspect condition of coolant surge tank, pressure relief valve and filler cap	[redacted]	P	
17.33	Take sample of coolant and using the appropriate testing equipment, record test results____. Check coolant protection Spec -34 degrees F	[redacted]	P	Test Result: -34
17.34	Inspect condition of coolant hoses, tubing and mounting clamps. Tighten any loose clamps	[redacted]	(F)	tighten coolant clamps
17.35	Inspect coolant sensors and wiring harness to sensor	[redacted]	P	
17.36	Inspect all intake air tubing and hoses for holes, leaks, cracks and dirt build-up at connections	[redacted]	P	
17.37	Inspect for loose or damaged air hose clamps and support brackets	[redacted]	P	
17.38	Inspect exhaust system for restrictions and leaks. (black soot)	[redacted]	P	
17.39	Inspect exhaust system mounting brackets for loose hardware	[redacted]	P	
17.40	Inspect all heat shields for damage	[redacted]	P	
17.41	Inspect tailpipe for damage and loose hardware	[redacted]	P	
17.42	Inspect exhaust bellows for leaks and damage	[redacted]	P	
18.0	**LOWER BUS AND COMPLETE (Approx: 5 Min)**			
18.1	Turn Aux Heater switch to "Enable" or "On"	[redacted]	P	
18.2	Attach the supervisor follow up sheet to PMI sheet	[redacted]	P	
19.0	**INPUT DATA INTO MAXIMO**			

ITEM #	Repairman's Notes/Additional defects found	REPAIRED (YES/NO)	FOLLOW UP W/O NUMBER
	Bus was pressure washed after leak inspection		
	was really oily and dirty. [redacted]		

REPAIRMAN I [redacted] PAYROLL # 28899

REPAIRMAN II [redacted] PAYROLL # 87353

SUPERVISOR [redacted] PAYROLL # 73459

SUPERINTED [redacted] PAYROLL # 05345

SATELLITE STOREROOM
PARTS REQUEST FORM

Requested by:_____ **Date/Time:**_____

WorkOrder#:_____ **Vehicle #:**_____

COMPLETED

W/C # 2465510

Robert Johnston

PREVENTIVE MAINTENANCE
W/O # 2454481
BUS # 05090

MTA Maryland

12,000 MILES INTERVAL
Mileage 437,714
DATE 06/30/16

	PPE EQUIPMENT REQUIRED TO COMPLETE PMI		TOOLS AND SUPPLIES REQUIRED TO COMPLETE A PMI
	1) SAFETY GLASSES 2) SAFETY SHOES 3) WORK GLOVES 4) HEARING PROTECTION (SUGGESTED)		1) FLASH LIGHT 2) COMPARTMENT "T" Key 3) AIR GAUGE 4) TIRE DEPTH GAUGE 5) RULER (scaled in 32nds ") 6) CALIPER 7) SMALL STEP LADDER 8) Voltmeter 9) Refractometer

12,000 MILE INSPECTION (Drum Brake & Oil) - **New Flyer** (04000, 05000)
Revised on 12/03/2015

ITEM	DESCRIPTION	INSP BY	PASS/FAIL	DEFECT
1.0	**WALK AROUND (Approx: 30 Min)**			
1.1	Pressure wash/steam clean the engine	[redacted]	P	
1.2	Clean the radiator per SOP. Reverse run the EMP system		P	
1.3	Walk around the bus looking for body damage. Record any damage		F	Engine door cut through and handle bent
1.4	Check fluid levels, oil, coolant, transmission fluid, and power steering fluid		P	
2.0	**IN CAB-START UP INSPECTION (Approx: 10 Min)**			
2.1	Inspect for overall cab cleanliness and safety hazards		P	
2.2	Using master switch. Verify operation of all diagnostic and warning lights, alarms and buzzers		P	
2.3	Verify ABS system check (light)		P	
2.4	Start engine; listen for unusual noises during starting. Inspect shutdown system		P	
2.5	Inspect active engine code light for active faults on dash board. Record (C.E.L, EMISSIONS, ETC)		P	
2.6	Inspect for active transmission codes using selector Pad. Record		P	
2.7	Verify operation of remote mirrors. Right only		F	Remote mirror inop in some directions
2.8	Verify operation of wipers and washers. Left and right		P	~~S/S wiper inop~~
2.9	Verify bike rack operation (Put rack back in place after verification)		P	
2.10	Inspect condition of the bike rack		P	
2.11	Do exterior light test by pushing both signal switches at the same time		F	Both entrance lights inop
2.12	Verify driver's two fans, heat control, and auxilary fan		P	
2.13	Verify heater/defroster control		P	
2.14	Verify instrument panel dimmer switch operation and all guage operation/condition		P	

2.15	Verify operation of fast idle		P	
2.16	Inspect steering wheel tilt/telescope operation		F	Steering wheel tilt broken
2.17	Verify horn operation proper sound		P	
2.18	Verify the operation of the destination sign for "Out of Service"		P	
2.19	Verify the operation of the kneeler		P	
2.20	Verify the operation of the W/C ramp & clean tracks with air		P	
3.0	**ROAD TEST (SECTION 3 NOT TO EXCEED 45 MINUTES)**			
3.1	Verify shift operation		P	
3.2	Verify hill hold feature		P	
3.3	Verify back up alarm when transmission in reverse		P	
3.4	Inspect air governor cut-in and cut-out pressures. All cut-in at 105 and cut-out at 125 (Record) on all three guages		P	In: 105 PSI Out: 125 PSI In: 105 PSI Out: 125 PSI In: 105 PSI Out: 125 PSI
3.5	Verify steering wheel movement feels normal, no binding or unusual noises		P	
3.6	Verify parking brake holds when applied		P	
3.7	Inspect condition of brake valve handle		P	
3.8	Verify front or rear door do not open when traveling		P	
3.9	Verify dash brake indicator light illuminates each time service brakes are applied		P	
3.10	Verify operation of block heater		P	
3.11	Verify three stops from 20 mph takes less than 23 feet Brake stops should not be done in wet weather. Verify when pavement is dry		P	1st attemp: 19.7 feet 2nd attemp: 19.1 feet 3rd attemp: 20.3 feet
3.12	Inspect operation of hazard switch and verify dash light operation		P	
3.13	Verify interior light master and toggle switch operation		P	
3.14	Verify first bank of lights on curb side when front door is opened		P	
3.15	Verify operation of the following switches: Driver's light, Stop request and Climate control		P	
3.16	Verify proper operation of HVAC system (temperature, fan speed, vent, etc)		P	
3.17	Inspect driver's window for cracks and clouding		P	
3.18	Verify window will slide and latch		P	
3.19	Inspect windshield for chips and cracks		P	
3.20	Inspect condition, mounting, hardware and operation of driver's sun visor		P	
3.21	Verify fare box light (Night run/door open)		F	Farebox light inop
3.22	Verify foot switch and dash light operation for both right and left side turn signal		P	
3.23	Verify low beam and high beam operation for both right and left side headlight		P	

3.24	Verify high beam dash light indicator operation	[redacted]	P	
3.25	Verify the operation of the rear exit door and interlock	[redacted]	P	
	RETURN TO SHOP AND PROCEED TO CONDUCT THE FOLLOWING INSPECTION AND TASK			
4.0	**INTERIOR/DRIVER'S COMPARTMENT (Approx: 20 Min)**			
4.1	Clean and inspect brake and accelerator treadles, rollers and clevis pins. Lubricate clevis pin	[redacted]	P	
4.2	Check transmission fluid using transmission selector	[redacted]	P	
4.3	Inspect condition of driver's seat, belt, buzzer, and barrier	[redacted]	P	
4.4	Verify low air indicator light and alarm at 75 PSI on all three guages	[redacted]	P	
4.5	Record low pressure indicator light PSI	[redacted]	P	Front axle: 75 PSI Rear axle: 75 PSI
4.6	Inspect function of parking brake valve 1. Chock Wheels 2. Pressure is at least 120 PSI 3. Lower air pressure 4. Record Psi when valve "pops off" or engages at 60 PSI and below	[redacted]	P	Valve pop off: 45 PSI
4.7	Verify parking brake off alarm	[redacted]	P	
5.0	**INTERIOR/PASSENGER AREA (Approx: 20 Min)**			
5.1	Inspect interior lighting	[redacted]	F	2 DOME OUT
5.2	Inspect mirrors mounting and condition	[redacted]	P	
5.3	Lubricate upper and lower front door bushings.	[redacted]	P	
5.4	Verify the operation of exit door push operation and emergency release (front & rear)	[redacted]	P	
5.5	Inspect all front & rear door glass	[redacted]	P	
5.6	Inspect passenger seats for damage, cleanliness, graffiti and loose mounting hardware	[redacted]	P	
5.7	Inspect driver's area for evidence of water leaks	[redacted]	P	
5.8	Inspect stanchions for loose rails, straps, and hardware cleanliness and damage	[redacted]	F	STANCHION BROKEN AT C/D
5.9	Inspect modesty panels for cleanliness, graffiti and securement	[redacted]	P	
5.10	Inspect floors for cleanliness	[redacted]	P	
5.11	Inspect floor joints for proper bonding and connection	[redacted]	P	
5.12	Verify floor lamp(s) operation	[redacted]	P	
5.13	Inspect all window release handles (Latches)	[redacted]	P	

5.14	Inspect operation of slide window latch mechanisms. Inspect operation of all Emergency exit window handles. Test opening/latching windows. All emergency window must open easily, and should be greased with approved lubrication. (B61-0206CS)		P	
5.15	Inspect windows for damage or cracks replace if necessary		P	
5.16	Check all light panels for looseness or separation		P	
5.17	Inspect stop request chimes (or buttons) and w/c stop request		P	
5.18	Inspect both emergency hatches for cleanliness, instructions, latching and proper operation		P	
5.19	Inspect front door rollers (Do not lubricate)		P	
5.20	Clean return air grill after replacing filter (B96-10010) at rear of bus		P	
6.0	**AUXILLARY COOLANT HEATER (PROHEAT) (Approx: 5 Min)**			
6.1	Inspect all fuel lines in system for leaks, abrasions, kinks and damage		P	
6.2	Inspect all coolant lines in system for leaks, abrasions, kinks and damage		P	
6.3	Inspect coolant pump for operation and leaks		P	
6.4	Inspect wiring harness and connections in system		P	
6.5	Inspect all mounting hardware for integrity		P	
6.6	Inspect exhaust pipe for damage and leaks		P	
7.0	**EXTERIOR (Approx: 30 Min)**			
7.1	Inspect wiper arm linkage		P	
7.2	Lubricate all latches and hinges		P	
7.3	Lubricate exterior mirrors		P	
7.4	Change defroster filter (B96-10009)		P	
7.5	Inspect washer fluid level and fill as necessary		P	
7.6	Verify all props are operational on all exterior access doors		P	
7.7	Verify all hinges are operational on all exterior access doors		P	
7.8	Check interlock pressure, located in electrical box over the batteries. Verify at shrader valve. Pressure is set at 45 PSI. (+/-). Record (Adjust if necessary)		P	Interlock Pressure: 45 PSI
7.9	Verify all securement locks are operational on all exterior access doors. Lubricate locks with (B61-0206CS)		P	
7.10	Verify all compartment lights are operational		F	INTERLOCK ELECT BOX LIGHT OUT
7.11	Verify all engine compartment lights are operational		P	

7.12	Wheels & Tires 1. Check for bent & damaged wheels. 2. Inspect wheel torque indicators. If purple indicators are used, all wheel nut torque must be verified with a torque wrench. (Torque to 425 ft-lbs) 3. Inspect front bearing covers for leaks 4. Check tire pressure any tire lower than 100 PSI is considered a flat and should be changed (Record)		P	Left Front: 120 PSI Left Rear Inner: 120 PSI Left Rear Outer: 120 PSI Right Front: 120 PSI Right Rear Inner: 120 PSI Right Rear Outer: 120 PSI
	PROCEED TO CONDUCT THE FOLLOWING INSPECTION AND TASK ON MID-LEVEL WITH BUS ON LIFT			
7.13	WHEELS & Tires (CONTINUED) Measure and record tread depth for each tire (6/32" min) lowest point on the tire or steel cord showing tire is to be replaced		F	Left Front: 20/32 RR0 WRB WEAR Left Rear Inner: 13/32 Left Rear Outer: 15/32 Right Front: 16/32 Right Rear Inner: 12/32 Right Rear Outer: 12/32 - F
8.0	**BATTERIES & ELECTRICAL (Approx: 15 Min)**			
8.1	Clean and inspect battery trays and all hold down hardware		P	
8.2	Inspect tray pullout handles		P	
8.3	Record alternator output from battery/charging system test. Bus should be running on fast idle with a full load. (all lights and HVAC on) RECORD using volt meter at + and - terminal for 24V		F	NOID 5 NET NOT FLASHING VOLTAGE: _____V SPEC: MAXIMUM 28 VOLTS
8.4	Inspect battery disconnect switch for corrosion. Check if lugs are tight and clean if necessary		P	
8.5	Inspect all battery and switch cables and wiring for routing and condition		P	
8.6	Inspect electrical box for condition		P	
8.7	Check Vanner equalizer by checking 12V and 24V systems. Batteries should be within 0.1-0.2 volts of each other		P	
9.0	**RADIATOR & COOLING SYSTEM (Approx: 5 Min)**			
9.1	Inspect radiator screen		P	
9.2	Inspect radiator for leaks and dirt. Clean if dirty using pressurized air		P	
9.3	Inspect for bent fins in core		P	
9.4	Inspect EMP fan system. Inspect for cracks, missing or loose blades. Check for codes		P	
9.5	Inspect fan motor, hoses, piping and control valves		P	
9.6	Re-check reverse run feature, check for fault lights		P	
	PROCEED TO CONDUCT THE FOLLOWING INSPECTION AND TASK ON HIGH-LEVEL WITH BUS ON LIFT			
10.0	**CHASSIS/UNDERBODY (Approx: 10 Min)**			

10.1	Inspect frame for damage or corrosion		P	
10.2	Inspect frame for mounting and electrical connections		P	
10.3	Inspect condition of road side and curb side skid plates		P	
10.4	Inspect front axle mounting hardware for looseness, wear and damage		P	
10.5	Inspect radius rods for wear or looseness		P	
10.6	Inspect shock absorbers for bushings, mounting brackets, leakage or damage		P	
10.7	Inspect all front axle hoses for condition and routing clearance		P	
10.8	Inspect both front axle air springs for cracks, abrasions or other damage (Use soap solution to check for leaks)		P	
10.9	Inspect leveling valve for proper operation, mounting, looseness, wear, damage or leaks		P	
10.10	Record front axle ride height. Ride height is measured between the axle and the rubber stop mounted to the frame of the vehicle. Front ride height 3.0-inch		P	Ride Height: 3 inch
10.11	Inspect mud flap mounting for integrity		P	
10.12	Check or replace static straps (Only on rear)		P	
11.0	**FRONT & REAR BRAKE SYSTEM (Approx: 25 Min)**			
11.1	Measure and record brake rod travel,on both road and curb sides. Record the travel, Maximum travel is 1 3/4 inches (Front)		P	RF 1 3/4 inches LF 1 3/4 inches
11.2	Measure and record brake rod travel,on both road and curb sides. Record the travel, Maximum travel is 2 inches (Rear)		P	RR 2 inches LR 2 inches
11.3	Check brake lining for cracks and seperation		P	
11.4	Check brake linning thickness. Good until wear line is no longer visible		P	Front: Replace Yes___ No✓ Rear: Replace Yes___ No✓
11.5	Inspect hoses and lines for securement and condition. Check for rubbing on the front tires		P	
11.6	Inspect mounting nuts		P	
11.7	Inspect drums for scoring, heat cracks and rust		P	
11.8	Check slack adjuster roll pin for excessive looseness and frozen pin		P	
12.0	**STEERING COMPONENTS (Approx: 30 Min)**			
12.1	Inspect center link for wear or damage		P	
12.2	Jack front axle, properly set axle on jack stands, unload axle and inspect kingpins		P	

12.3	Inspect steering knuckle axial play and indicate pin movement. Maximum axial play specificiation is 0.016" Note measurement and if measurement exceeds 0.016", advise supervisor			Axial play measurement: .016 inch
12.4	Inspect King Pin radial play (side to side). Maximum radial play specificiation is 0.004". Note measurement and replace King Pin if radial play measurement is in excess of 0.004", advise supervisor			Radial play measurement: .004 inch
12.5	Verify tie rod end cotter pins are in place on both right and left sides. (if applicable)			
12.6	Inspect left and right tie rod ends for wear and play by using the **rocking method**. Replace both tie rod ends if any play is found in either tie rod			
12.7	Lubricate both tie rod ends. (If equipped)			
12.8	Lubricate kingpins, use the 2 fittings one for upper and one for lower			
12.9	Lubricate cam shaft bushing and slack adjuster, Being careful not to get grease on linings			
12.10	Inspect drag link for wear or damage			
12.11	Lubricate drag link forward and rear			
12.12	Inspect idler arm for wear or damage			
12.13	Inspect Steering hoses/lines for leaks, routing and condition			
12.14	Inspect power steering box for leaks			
12.15	Inspect power steering box for loose mounting hardware			
12.16	Inspect pitman arm for wear and integrity			
12.17	Inspect steering U-joints and slip joints for wear and damage			
12.18	Lubricate all fittings on miter box, steering u-joints, and applicable components. (ONLY USE HAND GREASE GUN ON MITER BOX FITIINGS)			
13.0	**FUEL TANK (Approx: 5 Min)**			
13.1	Inspect fuel tank for leaks			
13.2	Inspect fuel fill tube condition from the receptacle to the tank. Inspect for secure mounting and that the tube is not rubbing on anything			
13.3	Inspect tank mounting hardware and insulation for damage, looseness or being out of place			
13.4	Inspect fuel cap			
14.0	**REAR AXLE (Approx: 10 Min)**			
14.1	Inspect mounting hardware for integrity, wear and damage	[redacted]	P	
14.2	Inspect radius rods for wear and damage and looseness	[redacted]	P	

14.3	Inspect shock absorber bushing, mounting brackets, leakage or damage	[redacted]	P	
14.4	Inspect hoses for condition and routing		P	
14.5	Inspect air springs for cracks, abrasions or other damage (Use soap solution to check for leaks)		P	
14.6	Inspect leveling valve for proper operation, mounting, integrity, wear, damage or leaks		P	
14.7	Measure and record rear ride height. Ride height is measured between the axle and the rubber stop mounted to the frame of the vehicle rear ride height 3 ¾ inch		P	Ride Height: 3.825 inch
14.8	Inspect mud flap mounting hardware for integrity or damage		P	
14.9	Inspect hubs and axles flanges for leaks		P	
14.10	Inspect condition of the S1 Guard rubber and mounting bracket		P	
15.0	**DIFFERENTIAL (Approx: 30 Min)**			
15.1	Clean differential breather		P	
15.2	Inspect fluid level on the back side of the differential center section and rear wheel hubs		F	Fluid low on both outer Hubs
15.3	Inspect for leaks		F	Outer Hubs May have a slight seep
16.0	**DRIVE SHAFT (Approx: 10 Min)**			
16.1	Inspect u-joints and slip splines for damage and wear. Grease 3 fittings and lubricate U-joints and slip splines		P	
16.2	Inspect yoke flange for wear and integrity		P	
16.3	Inspect bearing straps and bolts for wear or integrity		P	
16.4	Inspect drive shaft straps Check for drive shaft phase and "U" bracket		P	
17.0	**AIR SYSTEM (Approx: 10 Min)**			
17.1	Drain all the air tanks. Note: If excessive water is found, note on defect sheet. Including ping tank		P	
17.2	Inspect all electrical wiring and connections at air dryer. Four drain ports		P	
17.3	Inspect all lines and fittings for leakage and integrity for air tanks *All lines under bus Checked*		P	*Not Possible to check all air lines and tank in 10 minutes.
17.4	Inspect for oil contamination. Excessive oil residue at purge valve		P	
17.5	Inspect mounting for integrity		P	
17.6	Inspect mounting and routing of air lines. Look for chafing, kinks or damage. (Note location of discrepancies on defect column)		P	
	AFTER ROAD TEST AND ENGINE IS WARM			
18.0	**ENGINE COMPARTMENT (Approx: 2.5 Hours)**			

18.1	1. Drain engine oil and change oil filter. B86-8297 2. Take samples of the following components 3. Pre-fill oil filter with motor oil (USING PROPER TOOLS AND PROCEDURES!) 4. Fill engine with 15W-40 engine oil.	[redacted]	P	
18.2	Inspect engine/transmission mounts and cradle attachments	[redacted]	F	Front engine Mount bad
18.3	Change coolant filter (B86-7502)	[redacted]	P	
18.4	Replace primary fuel filter (B86-8751) Pre-fill fuel filter	[redacted]	P	
18.5	Change air filter and check air restriction guage. 04000 & 05000 air filter: (B86-10008) Clean the air filter housing	[redacted]	P	
18.6	Replace power steering filter (B85-5001) check & adjust fluid level. Inspect hydraulic hoses & fittings for leaks	[redacted]	P	
18.7	Inspect for fluid leaks. Be specific on defect sheet about location of leak	[redacted]	F	Oil leak at the engine front
18.8	Inspect turbocharger for leaks and loose mounting	[redacted]	P	
18.9	Inspect exterior for fluid leaks and loose mounting hardware	[redacted]	P	
18.10	Inspect hoses, clamps and gaskets	[redacted]	F	Coolant Bracket/Hold down for pipes leak
18.11	Inspect mounting hardware and brackets on both the engine and A/C belt guards	[redacted]	P	
18.12	Inspect condition of A/C compressor mounting hardware, wiring harness, connectors and service caps	[redacted]	F	Service cap missing
18.13	Verify all A/C lines are secure	[redacted]	P	
18.14	Inspect A/C compressor shaft seal, cylinder heads, valves, and housing leaks	[redacted]	P	
18.15	Inspect condition of all engine lines and electrical wiring harnesses	[redacted]	P	
18.16	Inspect supply fuel pump for leaks	[redacted]	P	
18.17	Service spinner oil filter (B86-10044)	[redacted]	P	
18.18	Inspect spinner oil filter for operation	[redacted]	P	
18.19	Fill engine with 15W-40. Operate engine, re-inspect level and top off if necessary	[redacted]	P	
18.20	Ensure dipstick tube is securely mounted, not rubbing on anything and dipstick seats properly	[redacted]	P	
18.21	Inspect oil filler cap for proper seal, mounting and springs	[redacted]	P	
18.22	Verify transmission dipstick tube is securely mounted and dipstick seals properly	[redacted]	P	
18.23	Inspect control box mounting	[redacted]	P	
18.24	Inspect wiring harness and connectors to rear box	[redacted]	P	
18.25	Verify proper operation of rear run switches	[redacted]	P	

18.26	Inspect lines and electrical wiring harnesses for conditions, clearance, chaffing and that the correct clamps are being used for securement	[redacted]	F	No Positive Cable connection Cover Loose Alternator Wiring
18.27	Inspect for damaged hydraulic hoses and fittings	[redacted]	P	
18.28	Inspect power steering pump for leaks	[redacted]	P	
18.29	Inspect the belts, pulleys and tensioners for wear and damage	[redacted]	F	Alternator Belt Cracked
18.30	Inspect tension on manual/automatic adjusted belts	[redacted]	P	
18.31	Inspect condition of coolant surge tank, pressure relief valve and filler cap	[redacted]	F	Top Cap won't Hold pressure
18.32	Take sample of coolant and using the appropriate testing equipment, record test results____. Check coolant protection Spec -34 degrees F	[redacted]	P	Test Result: -40°F
18.33	Inspect condition of coolant hoses, tubing and mounting clamps. Tighten any loose clamps	[redacted]	F	Loose Clamps
18.34	Inspect coolant sensors and wiring harness to sensor	[redacted]	F	loose Wiring to Coolant Sensor
18.35	Inspect all intake air tubing and hoses for holes, leaks, cracks and dirt build-up at connections	[redacted]	P	
18.36	Inspect for loose or damaged air hose clamps and support brackets	[redacted]	P	
18.37	Inspect exhaust system for restrictions and leaks. (black soot)	[redacted]	P	
18.38	Inspect exhaust system mounting brackets for loose hardware	[redacted]	P	
18.39	Inspect all heat shields for damage	[redacted]	F	Heat insulation Missing
18.40	Inspect tailpipe for damage and loose hardware	[redacted]	P	
18.41	Inspect exhaust bellows for leaks and damage	[redacted]	P	
19.0	**LOWER BUS AND COMPLETE (Approx: 5 Min)**			
19.1	Turn Aux Heater switch to "Enable" or "On"	[redacted]	P	
19.2	Attach the supervisor follow up sheet to PMI sheet	[redacted]	P	
20.0	**INPUT DATA INTO MAXIMO**			

ITEM #	Repairman's Notes/Additional defects found	REPAIRED (YES/NO)	FOLLOW UP W/O NUMBER

[redacted] (66530 [redacted]) 40320

REPAIRMAN I [redacted] PAYROLL # 87515

REPAIRMAN II [redacted] PAYROLL # 64402

SUPERVISOR [redacted] PAYROLL # 41626

SUPERINTED [redacted] PAYROLL # 05395

COMPLETED w/c# 2329354

PREVENTIVE MAINTENANCE
W/O # 2313263
BUS # 05090

MTA Maryland

12,000 MILES INTERVAL
Mileage 427,613
DATE 3/17/16

	PPE EQUIPMENT REQUIRED TO COMPLETE PMI		TOOLS AND SUPPLIES REQUIRED TO COMPLETE A PMI
	1) SAFETY GLASSES 2) SAFETY SHOES 3) WORK GLOVES 4) HEARING PROTECTION (SUGGESTED)		1) FLASH LIGHT 2) COMPARTMENT "T" Key 3) AIR GAUGE 4) TIRE DEPTH GAUGE 5) RULER (scaled in 32nds ") 6) CALIPER 7) SMALL STEP LADDER 8) Voltmeter 9) Refractometer

12,000 MILE INSPECTION (Drum Brake & Oil) - **New Flyer** (04000, 05000)
Revised on 12/03/2015

ITEM	DESCRIPTION	INSP BY	PASS/FAIL	DEFECT
1.0	**WALK AROUND (Approx: 30 Min)**			
1.1	Pressure wash/steam clean the engine		P	
1.2	Clean the radiator per SOP. Reverse run the EMP system		P	
1.3	Walk around the bus looking for body damage. Record any damage		P	
1.4	Check fluid levels, oil, coolant, transmission fluid, and power steering fluid		P	
2.0	**IN CAB-START UP INSPECTION (Approx: 10 Min)**			
2.1	Inspect for overall cab cleanliness and safety hazards		P	
2.2	Using master switch. Verify operation of all diagnostic and warning lights, alarms and buzzers		P	[illegible]
2.3	Verify ABS system check (light)		P	
2.4	Start engine; listen for unusual noises during starting. Inspect shutdown system		P	
2.5	Inspect active engine code light for active faults on dash board. Record (C.E.L, EMISSIONS, ETC)		P	
2.6	Inspect for active transmission codes using selector Pad. Record		P	
2.7	Verify operation of remote mirrors. Right only		F	L-R
2.8	Verify operation of wipers and washers. Left and right		P	
2.9	Verify bike rack operation (Put rack back in place after verification)		P	
2.10	Inspect condition of the bike rack		P	
2.11	Do exterior light test by pushing both signal switches at the same time		P	
2.12	Verify driver's two fans, heat control, and auxilary fan		P	
2.13	Verify heater/defroster control		P	
2.14	Verify instrument panel dimmer switch operation and all guage operation/condition		P	

2.15	Verify operation of fast idle	[redacted]	P	
2.16	Inspect steering wheel tilt/telescope operation		P	
2.17	Verify horn operation proper sound		P	
2.18	Verify the operation of the destination sign for "Out of Service"		P	
2.19	Verify the operation of the kneeler		P	
2.20	Verify the operation of the W/C ramp & clean tracks with air		P	
3.0	**ROAD TEST (SECTION 3 NOT TO EXCEED 45 MINUTES)**			
3.1	Verify shift operation		P	
3.2	Verify hill hold feature		P	
3.3	Verify back up alarm when transmission in reverse		P	
3.4	Inspect air governor cut-in and cut-out pressures. All cut-in at 105 and cut-out at 125 (Record) on all three guages		P	In: 105 PSI Out: 125 PSI In: 105 PSI Out: 125 PSI In: 105 PSI Out: 125 PSI
3.5	Verify steering wheel movement feels normal, no binding or unusual noises		P	
3.6	Verify parking brake holds when applied		P	
3.7	Inspect condition of brake valve handle		P	
3.8	Verify front or rear door do not open when traveling		P	
3.9	Verify dash brake indicator light illuminates each time service brakes are applied		P	
3.10	Verify operation of block heater		F	INOP
3.11	Verify three stops from 20 mph takes less than 23 feet Brake stops should not be done in wet weather. Verify when pavement is dry		P	1st attemp: 19.8 feet 2nd attemp: 19.4 feet 3rd attemp: 19.2 feet
3.12	Inspect operation of hazard switch and verify dash light operation		P	
3.13	Verify interior light master and toggle switch operation		F	Rear Domes out
3.14	Verify first bank of lights on curb side when front door is opened		P	
3.15	Verify operation of the following switches: Driver's light, Stop request and Climate control		F	Cam Light
3.16	Verify proper operation of HVAC system (temperature, fan speed, vent, etc)		P	
3.17	Inspect driver's window for cracks and clouding		P	
3.18	Verify window will slide and latch		P	
3.19	Inspect windshield for chips and cracks		P	
3.20	Inspect condition, mounting, hardware and operation of driver's sun visor		P	
3.21	Verify fare box light (Night run/door open)		F	INOP
3.22	Verify foot switch and dash light operation for both right and left side turn signal		P	
3.23	Verify low beam and high beam operation for both right and left side headlight		P	

3.24	Verify high beam dash light indicator operation		P	
3.25	Verify the operation of the rear exit door and interlock		P	
	RETURN TO SHOP AND PROCEED TO CONDUCT THE FOLLOWING INSPECTION AND TASK			
4.0	**INTERIOR/DRIVER'S COMPARTMENT (Approx: 20 Min)**			
4.1	Clean and inspect brake and accelerator treadles, rollers and clevis pins. Lubricate clevis pin		P	
4.2	Check transmission fluid using transmission selector		POK	
4.3	Inspect condition of driver's seat, belt, buzzer, and barrier		P	
4.4	Verify low air indicator light and alarm at 75 PSI on all three guages		P	
4.5	Record low pressure indicator light PSI		P	Front axle: 75 PSI Rear axle: 75 PSI
4.6	Inspect function of parking brake valve 1. Chock Wheels 2. Pressure is at least 120 PSI 3. Lower air pressure 4. Record Psi when valve "pops off" or engages at 60 PSI and below		P	Valve pop off: 145 PSI
4.7	Verify parking brake off alarm		P	
5.0	**INTERIOR/PASSENGER AREA (Approx: 20 Min)**			
5.1	Inspect interior lighting		F	Both Front dome lights out
5.2	Inspect mirrors mounting and condition		P	
5.3	Lubricate upper and lower front door bushings.		P	
5.4	Verify the operation of exit door push operation and emergency release (front & rear)		P	
5.5	Inspect all front & rear door glass		P	
5.6	Inspect passenger seats for damage, cleanliness, graffiti and loose mounting hardware		P	
5.7	Inspect driver's area for evidence of water leaks		P	
5.8	Inspect stanchions for loose rails, straps, and hardware cleanliness and damage		P	
5.9	Inspect modesty panels for cleanliness, graffiti and securement		P	
5.10	Inspect floors for cleanliness		P	
5.11	Inspect floor joints for proper bonding and connection		P	
5.12	Verify floor lamp(s) operation		P	
5.13	Inspect all window release handles (Latches)		P	

5.14	Inspect operation of slide window latch mechanisms. Inspect operation of all Emergency exit window handles. Test opening/latching windows. All emergency window must open easily, and should be greased with approved lubrication. (B61-0206CS)	[redacted]	P	
5.15	Inspect windows for damage or cracks replace if necessary		P	
5.16	Check all light panels for looseness or separation		P	
5.17	Inspect stop request chimes (or buttons) and w/c stop request		P	
5.18	Inspect both emergency hatches for cleanliness, instructions, latching and proper operation		P	
5.19	Inspect front door rollers (Do not lubricate)		P	
5.20	Clean return air grill after replacing filter (B96-10010) at rear of bus		P	
6.0	**AUXILLARY COOLANT HEATER (PROHEAT) (Approx: 5 Min)**			
6.1	Inspect all fuel lines in system for leaks, abrasions, kinks and damage		P	
6.2	Inspect all coolant lines in system for leaks, abrasions, kinks and damage		P	
6.3	Inspect coolant pump for operation and leaks		P	
6.4	Inspect wiring harness and connections in system		P	
6.5	Inspect all mounting hardware for integrity		P	
6.6	Inspect exhaust pipe for damage and leaks		P	
7.0	**EXTERIOR (Approx: 30 Min)**			
7.1	Inspect wiper arm linkage		F	Replace Wiper Blades
7.2	Lubricate all latches and hinges		P	
7.3	Lubricate exterior mirrors		P	
7.4	Change defroster filter (B96-10009)		P	
7.5	Inspect washer fluid level and fill as necessary		P	
7.6	Verify all props are operational on all exterior access doors		P	
7.7	Verify all hinges are operational on all exterior access doors		P	
7.8	Check interlock pressure, located in electrical box over the batteries. Verify at shrader valve. Pressure is set at 45 PSI. (+/-). Record (Adjust if necessary)		P	Interlock Pressure: 45 PSI
7.9	Verify all securement locks are operational on all exterior access doors. Lubricate locks with (B61-0206CS)		P	
7.10	Verify all compartment lights are operational		P	
7.11	Verify all engine compartment lights are operational		P	

7.12	Wheels & Tires 1. Check for bent & damaged wheels. 2. Inspect wheel torque indicators. If purple indicators are used, all wheel nut torque must be verified with a torque wrench. (Torque to 425 ft-lbs) 3. Inspect front bearing covers for leaks 4. Check tire pressure any tire lower than 100 PSI is considered a flat and should be changed (Record)	[redacted]	F	Left Rear tires pressure low Left Front: 115 PSI Left Rear Inner: 90 PSI Left Rear Outer: 90 PSI Right Front: 120 PSI Right Rear Inner: 120 PSI Right Rear Outer: 120 PSI
	PROCEED TO CONDUCT THE FOLLOWING INSPECTION AND TASK ON MID-LEVEL WITH BUS ON LIFT			
7.13	WHEELS & Tires (CONTINUED) Measure and record tread depth for each tire (6/32" min) lowest point on the tire or steel cord showing tire is to be replaced	[redacted]	P	Left Front: 21/32 Left Rear Inner: 15/32 Left Rear Outer: 16/32 Right Front: 20/32 Right Rear Inner: 21/32 Right Rear Outer: 21/32
8.0	**BATTERIES & ELECTRICAL (Approx: 15 Min)**			
8.1	Clean and inspect battery trays and all hold down hardware	[redacted]	P	
8.2	Inspect tray pullout handles	[redacted]	P	
8.3	Record alternator output from battery/charging system test. Bus should be running on fast idle with a full load. (all lights and HVAC on) RECORD using volt meter at + and - terminal for 24V	[redacted]	P	VOLTAGE: 28.6 V SPEC: MAXIMUM 28 VOLTS
8.4	Inspect battery disconnect switch for corrosion. Check if lugs are tight and clean if necessary	[redacted]	P	
8.5	Inspect all battery and switch cables and wiring for routing and condition	[redacted]	P	
8.6	Inspect electrical box for condition	[redacted]	P	
8.7	Check Vanner equalizer by checking 12V and 24V systems. Batteries should be within 0.1-0.2 volts of each other	[redacted]	P	
9.0	**RADIATOR & COOLING SYSTEM (Approx: 5 Min)**			
9.1	Inspect radiator screen	[redacted]	P	
9.2	Inspect radiator for leaks and dirt. Clean if dirty using pressurized air	[redacted]	P	
9.3	Inspect for bent fins in core	[redacted]	P	
9.4	Inspect EMP fan system. Inspect for cracks, missing or loose blades. Check for codes	[redacted]	P	
9.5	Inspect fan motor, hoses, piping and control valves	[redacted]	P	
9.6	Re-check reverse run feature, check for fault lights	[redacted]	P	
	PROCEED TO CONDUCT THE FOLLOWING INSPECTION AND TASK ON HIGH-LEVEL WITH BUS ON LIFT			
10.0	**CHASSIS/UNDERBODY (Approx: 10 Min)**			

10.1	Inspect frame for damage or corrosion		S	P	
10.2	Inspect frame for mounting and electrical connections		S	P	
10.3	Inspect condition of road side and curb side skid plates		S	P	
10.4	Inspect front axle mounting hardware for looseness, wear and damage		S	P	
10.5	Inspect radius rods for wear or looseness		S	P	
10.6	Inspect shock absorbers for bushings, mounting brackets, leakage or damage		S	P	
10.7	Inspect all front axle hoses for condition and routing clearance		S	P	
10.8	Inspect both front axle air springs for cracks, abrasions or other damage (Use soap solution to check for leaks)		S	P	
10.9	Inspect leveling valve for proper operation, mounting, looseness, wear, damage or leaks		S	P	
10.10	Record front axle ride height. Ride height is measured between the axle and the rubber stop mounted to the frame of the vehicle. Front ride height 3.0-inch		S	P	Ride Height: 3.0 inch
10.11	Inspect mud flap mounting for integrity		S	P	
10.12	Check or replace static straps (Only on rear)		S	P	
11.0	**FRONT & REAR BRAKE SYSTEM (Approx: 25 Min)**				
11.1	Measure and record brake rod travel,on both road and curb sides. Record the travel, Maximum travel is 1 3/4 inches (Front)		S	P	RF 1 3/4 inches LF 1 3/4 inches
11.2	Measure and record brake rod travel,on both road and curb sides. Record the travel, Maximum travel is 2 inches (Rear)		S	P	RR 2" inches LR 2" inches
11.3	Check brake lining for cracks and seperation		S	P	
11.4	Check brake linning thickness. Good until wear line is no longer visible		S	P	Front: Replace Yes___ No✓ Rear: Replace Yes___ No✓
11.5	Inspect hoses and lines for securement and condition. Check for rubbing on the front tires		S	P	
11.6	Inspect mounting nuts		S	P	
11.7	Inspect drums for scoring, heat cracks and rust		S	P	
11.8	Check slack adjuster roll pin for excessive looseness and frozen pin		S	P	
12.0	**STEERING COMPONENTS (Approx: 30 Min)**				
12.1	Inspect center link for wear or damage		S	P	
12.2	Jack front axle, properly set axle on jack stands, unload axle and inspect kingpins		S	P	

12.3	Inspect steering knuckle axial play and indicate pin movement. Maximum axial play specificiation is 0.016" Note measurement and if measurement exceeds 0.016", advise supervisor	[redacted]	P	Axial play measurement: 0.016 inch
12.4	Inspect King Pin radial play (side to side). Maximum radial play specificiation is 0.004". Note measurement and replace King Pin if radial play measurement is in excess of 0.004", advise supervisor	[redacted]	P	Radial play measurement: 0.004 inch
12.5	Verify tie rod end cotter pins are in place on both right and left sides. (if applicable)	[redacted]	P	
12.6	Inspect left and right tie rod ends for wear and play by using the **rocking method**. Replace both tie rod ends if any play is found in either tie rod	[redacted]	P	
12.7	Lubricate both tie rod ends. (If equipped)	[redacted]	P	
12.8	Lubricate kingpins, use the 2 fittings one for upper and one for lower	[redacted]	P	
12.9	Lubricate cam shaft bushing and slack adjuster, Being careful not to get grease on linings	[redacted]	P	
12.10	Inspect drag link for wear or damage	[redacted]	P	
12.11	Lubricate drag link forward and rear	[redacted]	P	
12.12	Inspect idler arm for wear or damage	[redacted]	P	
12.13	Inspect Steering hoses/lines for leaks, routing and condition	[redacted]	P	
12.14	Inspect power steering box for leaks	[redacted]	P	
12.15	Inspect power steering box for loose mounting hardware	[redacted]	P	
12.16	Inspect pitman arm for wear and integrity	[redacted]	P	
12.17	Inspect steering U-joints and slip joints for wear and damage	[redacted]	P	
12.18	Lubricate all fittings on miter box, steering u-joints, and applicable components. (ONLY USE HAND GREASE GUN ON MITER BOX FITIINGS)	[redacted]	P	
13.0	**FUEL TANK (Approx: 5 Min)**			
13.1	Inspect fuel tank for leaks	[redacted]	P	
13.2	Inspect fuel fill tube condition from the receptacle to the tank. Inspect for secure mounting and that the tube is not rubbing on anything	[redacted]	P	
13.3	Inspect tank mounting hardware and insulation for damage, looseness or being out of place	[redacted]	P	
13.4	Inspect fuel cap	[redacted]	P	
14.0	**REAR AXLE (Approx: 10 Min)**			
14.1	Inspect mounting hardware for integrity, wear and damage	[redacted]	P	
14.2	Inspect radius rods for wear and damage and looseness	[redacted]	P	

14.3	Inspect shock absorber bushing, mounting brackets, leakage or damage	[redacted]	P	
14.4	Inspect hoses for condition and routing	[redacted]	P	
14.5	Inspect air springs for cracks, abrasions or other damage (Use soap solution to check for leaks)	[redacted]	P	
14.6	Inspect leveling valve for proper operation, mounting, integrity, wear, damage or leaks	[redacted]	P	
14.7	Measure and record rear ride height. Ride height is measured between the axle and the rubber stop mounted to the frame of the vehicle rear ride height 3 ¾ inch	[redacted]	P	Ride Height: 3 3/4 inch
14.8	Inspect mud flap mounting hardware for integrity or damage	[redacted]	P	
14.9	Inspect hubs and axles flanges for leaks	[redacted]	P	
14.10	Inspect condition of the S1 Guard rubber and mounting bracket	[redacted]	P	
15.0	**DIFFERENTIAL (Approx: 30 Min)**			
15.1	Clean differential breather	[redacted]	P	
15.2	Inspect fluid level on the back side of the differential center section and rear wheel hubs	[redacted]	P	
15.3	Inspect for leaks	[redacted]	P	
16.0	**DRIVE SHAFT (Approx: 10 Min)**			
16.1	Inspect u-joints and slip splines for damage and wear. Grease 3 fittings and lubricate U-joints and slip splines	[redacted]	P	
16.2	Inspect yoke flange for wear and integrity	[redacted]	P	
16.3	Inspect bearing straps and bolts for wear or integrity	[redacted]	P	
16.4	Inspect drive shaft straps Check for drive shaft phase and "U" bracket	[redacted]	P	
17.0	**AIR SYSTEM (Approx: 10 Min)**			
17.1	Drain all the air tanks. Note: If excessive water is found, note on defect sheet. Including ping tank	[redacted]	P	
17.2	Inspect all electrical wiring and connections at air dryer. Four drain ports	[redacted]	P	
17.3	Inspect all lines and fittings for leakage and integrity for air tanks	[redacted]	P	
17.4	Inspect for oil contamination. Excessive oil residue at purge valve	[redacted]	P	
17.5	Inspect mounting for integrity	[redacted]	P	
17.6	Inspect mounting and routing of air lines. Look for chafing, kinks or damage. (Note location of discrepancies on defect column)	[redacted]	P	
	AFTER ROAD TEST AND ENGINE IS WARM			
18.0	**ENGINE COMPARTMENT (Approx: 2.5 Hours)**			

18.1	1. Drain engine oil and change oil filter. B86-8297 2. Take samples of the following components 3. Pre-fill oil filter with motor oil (USING PROPER TOOLS AND PROCEDURES!) 4. Fill engine with 15W-40 engine oil.	[redacted]	P	
18.2	Inspect engine/transmission mounts and cradle attachments	[redacted]	P	
18.3	Change coolant filter (B86-7502)	[redacted]	P	
18.4	Replace primary fuel filter (B86-8751) Pre-fill fuel filter	[redacted]	P	
18.5	Change air filter and check air restriction guage. 04000 & 05000 air filter: (B86-10008) Clean the air filter housing	[redacted]	P	
18.6	Replace power steering filter (B85-5001) check & adjust fluid level. Inspect hydraulic hoses & fittings for leaks	[redacted]	P	
18.7	Inspect for fluid leaks. Be specific on defect sheet about location of leak	[redacted]	P	
18.8	Inspect turbocharger for leaks and loose mounting	[redacted]	P	
18.9	Inspect exterior for fluid leaks and loose mounting hardware	[redacted]	P	
18.10	Inspect hoses, clamps and gaskets	[redacted]	P	
18.11	Inspect mounting hardware and brackets on both the engine and A/C belt guards	[redacted]	P	
18.12	Inspect condition of A/C compressor mounting hardware, wiring harness, connectors and service caps	[redacted]	P	
18.13	Verify all A/C lines are secure	[redacted]	P	
18.14	Inspect A/C compressor shaft seal, cylinder heads, valves, and housing leaks	[redacted]	P	
18.15	Inspect condition of all engine lines and electrical wiring harnesses	[redacted]	P	
18.16	Inspect supply fuel pump for leaks	[redacted]	P	
18.17	Service spinner oil filter (B86-10044)	[redacted]	P	
18.18	Inspect spinner oil filter for operation	[redacted]	P	
18.19	Fill engine with 15W-40. Operate engine, re-inspect level and top off if necessary	[redacted]	P	
18.20	Ensure dipstick tube is securely mounted, not rubbing on anything and dipstick seats properly	[redacted]	P	
18.21	Inspect oil filler cap for proper seal, mounting and springs	[redacted]	P	
18.22	Verify transmission dipstick tube is securely mounted and dipstick seals properly	[redacted]	P	
18.23	Inspect control box mounting	[redacted]	P	
18.24	Inspect wiring harness and connectors to rear box	[redacted]	P	
18.25	Verify proper operation of rear run switches	[redacted]	P	

18.26	Inspect lines and electrical wiring harnesses for conditions, clearance, chaffing and that the correct clamps are being used for securement		P	
18.27	Inspect for damaged hydraulic hoses and fittings		P	
18.28	Inspect power steering pump for leaks		P	
18.29	Inspect the belts, pulleys and tensioners for wear and damage		F	Replace AC Belt
18.30	Inspect tension on manual/automatic adjusted belts		P	
18.31	Inspect condition of coolant surge tank, pressure relief valve and filler cap		P	
18.32	Take sample of coolant and using the appropriate testing equipment, record test results -34. Check coolant protection Spec -34 degrees F		P	Test Result: -34
18.33	Inspect condition of coolant hoses, tubing and mounting clamps. Tighten any loose clamps		P	
18.34	Inspect coolant sensors and wiring harness to sensor		P	
18.35	Inspect all intake air tubing and hoses for holes, leaks, cracks and dirt build-up at connections		P	
18.36	Inspect for loose or damaged air hose clamps and support brackets		P	
18.37	Inspect exhaust system for restrictions and leaks. (black soot)		P	
18.38	Inspect exhaust system mounting brackets for loose hardware		P	
18.39	Inspect all heat shields for damage		P	
18.40	Inspect tailpipe for damage and loose hardware		P	
18.41	Inspect exhaust bellows for leaks and damage		P	
19.0	**LOWER BUS AND COMPLETE (Approx: 5 Min)**			
19.1	Turn Aux Heater switch to "Enable" or "On"		P	
19.2	Attach the supervisor follow up sheet to PMI sheet		P	
20.0	**INPUT DATA INTO MAXIMO**			

ITEM #	Repairman's Notes/Additional defects found	REPAIRED (YES/NO)	FOLLOW UP W/O NUMBER

REPAIRMAN I [redacted] PAYROLL # 28899

REPAIRMAN II [redacted] PAYROLL # 15698

SUPERVISOR [redacted] PAYROLL # 00193.

SUPERINTED [redacted] PAYROLL # 57857-00 3/22/16

SATELLITE STOREROOM
PARTS REQUEST FORM

Requested by:_____ **Date/Time:**_____

WorkOrder#:_____ **Vehicle #:**_____

QTY REQ	Description	QTY Delivered	MTA Item #
1	Defroster Filter		B96-10009
1	Return Air Filter		B96-10010
1	Primary Engine Air Filter		B86-10008
1	Engine Oil Filter		B86-8297
1	Coolant Filter		B86-7502
1	Primary Fuel Filter		B86-8751
1	Power Steering Filter		B85-5001
1	Spinner Oil filter		B86-10044

Filled by:_____ **Date/Time:**_____

Received by:_____ **Date/Time:**_____

COMPLETED w/c# 2245034

PREVENTIVE MAINTENANCE
W/O # 223843
BUS # 05090

MTA Maryland

30,000 MILES INTERVAL
Mileage 421,236
DATE 1/8/16

	PPE EQUIPMENT REQUIRED TO COMPLETE PMI		TOOLS AND SUPPLIES REQUIRED TO COMPLETE A PMI
	1) SAFETY GLASSES 2) SAFETY SHOES 3) WORK GLOVES 4) HEARING PROTECTION (SUGGESTED)		1) FLASH LIGHT 2) COMPARTMENT "T" Key 3) AIR GAUGE 4) TIRE DEPTH GAUGE 5) RULER (scaled in 32nds ") 6) CALIPER 7) SMALL STEP LADDER 8) Voltmeter 9) Refractometer

30,000 MILE INSPECTION (Drum Brake & Oil) - **New Flyer** (04000, 05000)
Revised on 12/03/2015

ITEM	DESCRIPTION	INSP BY	PASS/FAIL	DEFECT
1.0	**WALK AROUND (Approx: 30 Min.)**			
1.1	Pressure wash/steam clean the engine	[redacted]	P	
1.2	Clean the radiator per SOP. Reverse run the EMP system	[redacted]	P	
1.3	Walk around the bus looking for body damage. Record any damage	[redacted]	P	
1.4	Check fluid levels, oil, coolant, transmission fluid, and power steering fluid	[redacted]	P	
2.0	**IN CAB-START UP INSPECTION (Approx: 10 Min)**			
2.1	Inspect for overall cab cleanliness and safety hazards	[redacted]	P	
2.2	Using master switch. Verify operation of all diagnostic and warning lights, alarms and buzzers	[redacted]	P	
2.3	Verify ABS system check (light)	[redacted]	P	
2.4	Start engine; listen for unusual noises during starting. Inspect shutdown system	[redacted]	P	
2.5	Inspect active engine code light for active faults on dash board. Record (C.E.L, EMISSIONS, ETC)	[redacted]	P	
2.6	Verify operation of remote mirrors. Right only	[redacted]	P	
2.7	Verify operation of wipers and washers. Left and right	[redacted]	P	
2.8	Verify bike rack operation (Put rack back in place after verification)	[redacted]	P	
2.9	Inspect condition of the bike rack	[redacted]	P	
2.10	Do exterior light test by pushing both signal switches at the same time	[redacted]	F	CIS EXT DOOR LIR TURN BULB
2.11	Verify driver's two fans, heat control, and auxilary fan	[redacted]	F	OUTER INOP
2.12	Verify heater/defroster control	[redacted]	F	FRESH AIR FRZN
2.13	Verify instrument panel dimmer switch operation and all guage operation/condition	[redacted]	P	
2.14	Verify operation of fast idle	[redacted]	P	
2.15	Inspect steering wheel tilt/telescope operation	[redacted]	P	

2.16	Verify horn operation proper sound	[redacted]	P	
2.17	Verify the operation of the destination sign for "Out of Service"	[redacted]	P	
2.18	Verify the operation of the kneeler	[redacted]	P	
2.19	Verify the operation of the W/C ramp & clean tracks with air	[redacted]	P	
3.0	**ROAD TEST (SECTION 3 NOT TO EXCEED 45 MINUTES)**			
3.1	Verify shift operation	[redacted]	P	
3.2	Verify hill hold feature	[redacted]	P	
3.3	Verify back up alarm when transmission in reverse	[redacted]	P	
3.4	Inspect air governor cut-in and cut-out pressures. All cut-in at 105 and cut-out at 125 (Record) on all three guages	[redacted]	P	In: 105 PSI Out: 125 PSI In: 105 PSI Out: 125 PSI In: 105 PSI Out: 125 PSI
3.5	Verify steering wheel movement feels normal, no binding or unusual noises	[redacted]	P	
3.6	Verify parking brake holds when applied	[redacted]	P	
3.7	Inspect condition of brake valve handle	[redacted]	P	
3.8	Verify front or rear door do not open when traveling	[redacted]	P	
3.9	Verify dash brake indicator light illuminates each time service brakes are applied	[redacted]	P	
3.10	Verify operation of block heater	[redacted]	P	
3.11	Verify three stops from 20 mph takes less than 23 feet Brake stops should not be done in wet weather. Verify when pavement is dry	[redacted]	P	1st attemp: _____ feet 2nd attemp: _____ feet 3rd attemp: _____ feet WET
3.12	Inspect operation of hazard switch and verify dash light operation	[redacted]	P	
3.13	Verify interior light master and toggle switch operation	[redacted]	P	
3.14	Verify first bank of lights on curb side when front door is opened	[redacted]	P	
3.15	Verify operation of the following switches: Driver's light, Stop request and Climate control	[redacted]	F	CAMERA LIGHT
3.16	Verify proper operation of HVAC system (temperature, fan speed, vent, etc)	[redacted]	P	
3.17	Inspect driver's window for cracks and clouding	[redacted]	P	
3.18	Verify window will slide and latch	[redacted]	P	
3.19	Inspect windshield for chips and cracks	[redacted]	P	
3.20	Inspect condition, mounting, hardware and operation of driver's sun visor	[redacted]	P	
3.21	Verify fare box light (Night run/door open)	[redacted]	P	
3.22	Verify foot switch and dash light operation for both right and left side turn signal	[redacted]	P	
3.23	Verify low beam and high beam operation for both right and left side headlight	[redacted]	P	
3.24	Verify high beam dash light indicator operation	[redacted]	P	
3.25	Verify the operation of the rear exit door and interlock	[redacted]	P	

	RETURN TO SHOP AND PROCEED TO CONDUCT THE FOLLOWING INSPECTION AND TASK			
4.0	**INTERIOR/DRIVER'S COMPARTMENT (Approx: 20 Min)**			
4.1	Clean and inspect brake and accelerator treadles, rollers and clevis pins. Lubricate clevis pin	[redacted]	P	
4.2	Check transmission fluid using transmission selector	[redacted]	P OK	
4.3	Inspect condition of driver's seat, belt, buzzer, and barrier	[redacted]	P	
4.4	Verify low air indicator light and alarm at 75 PSI on all three guages	[redacted]	P	
4.5	Record low pressure indicator light PSI	[redacted]	P	Front axle: 75 PSI Rear axle: 75 PSI
4.6	Inspect function of parking brake valve 1. Chock Wheels 2. Pressure is at least 120 PSI 3. Lower air pressure 4. Record Psi when valve "pops off" or engages at 60 PSI and below	[redacted]	P	Valve pop off: 45 PSI
4.7	Verify parking brake off alarm	[redacted]	P	
5.0	**INTERIOR/PASSENGER AREA (Approx: 20 Min)**			
5.1	Inspect interior lighting	[redacted]	P	~~Rear Step Light Inop~~
5.2	Inspect mirrors mounting and condition	[redacted]	P	
5.3	Lubricate upper and lower front door bushings	[redacted]	P	
5.4	Verify the operation of exit door push operation and emergency release (front & rear)	[redacted]	P	
5.5	Inspect all front & rear door glass	[redacted]	F	Front Door Lower Corner Glass Crack
5.6	Inspect passenger seats for damage, cleanliness, graffiti and loose mounting hardware	[redacted]	P	
5.7	Inspect driver's area for evidence of water leaks	[redacted]	P	
5.8	Inspect stanchions for loose rails, straps, and hardware cleanliness and damage	[redacted]	P	
5.9	Inspect modesty panels for cleanliness, graffiti and securement	[redacted]	P	
5.10	Inspect floors for cleanliness	[redacted]	P	
5.11	Inspect floor joints for proper bonding and connection	[redacted]	P	
5.12	Verify floor lamp(s) operation	[redacted]	F	Left Floor Lamp Rear Inop
5.13	Inspect all window release handles (Latches)	[redacted]	P	

5.14	Inspect operation of slide window latch mechanisms. Inspect operation of all Emergency exit window handles. Test opening/latching windows. All emergency window must open easily, and should be greased with approved lubrication. (B61-0206CS)	[redacted]	P	
5.15	Inspect windows for damage or cracks replace if necessary		P	
5.16	Check all light panels for looseness or separation		P	
5.17	Inspect stop request chimes (or buttons) and w/c stop request		P	
5.18	Inspect both emergency hatches for cleanliness, instructions, latching and proper operation		P	
5.19	Inspect front door rollers (Do not lubricate)		P	
5.20	Clean return air grill after replacing filter (B96-10010) at rear of bus		P	
6.0	**AUXILLARY COOLANT HEATER (PROHEAT) (Approx: 5 Min)**			
6.1	Inspect all fuel lines in system for leaks, abrasions, kinks and damage		P	
6.2	Inspect all coolant lines in system for leaks, abrasions, kinks and damage		P	
6.3	Inspect coolant pump for operation and leaks		P	
6.4	Inspect wiring harness and connections in system		P	
6.5	Inspect all mounting hardware for integrity		P	
6.6	Inspect exhaust pipe for damage and leaks		P	
7.0	**EXTERIOR (Approx: 30 Min)**			
7.1	Inspect wiper arm linkage		P	
7.2	Lubricate all latches and hinges		P	
7.3	Lubricate exterior mirrors		P	
7.4	Change defroster filter (B96-10009)		P	
7.5	Inspect washer fluid level and fill as necessary		P	
7.6	Verify all props are operational on all exterior access doors		P	
7.7	Verify all hinges are operational on all exterior access doors		P	
7.8	Check interlock pressure, located in electrical box over the batteries. Verify at shrader valve. Pressure is set at 45 PSI. (+/-). Record (Adjust if necessary)		P	Interlock Pressure: 45 PSI
7.9	Verify all securement locks are operational on all exterior access doors. Lubricate locks with (B61-0206CS)		P	
7.10	Verify all compartment lights are operational (4 lights)		P	
7.11	Verify all engine compartment lights are operational		P	

7.12	Wheels & Tires 1. Check for bent & damaged wheels. 2. Inspect all wheel torque indicators (Green & Purple). Torque all wheel nut positions to 425 ft-lbs using a torque wrench. 3. Inspect front bearing covers for leaks 4. Check tire pressure any tire lower than 100 PSI is considered a flat and should be changed (Record)	[redacted]	P	Left Front: 120 PSI Left Rear Inner: 100 PSI Left Rear Outer: 100 PSI Right Front: 120 PSI Right Rear Inner: 100 PSI Right Rear Outer: 100 PSI
	PROCEED TO CONDUCT THE FOLLOWING INSPECTION AND TASK ON MID-LEVEL WITH BUS ON LIFT			
7.13	WHEELS & Tires (CONTINUED) Measure and record tread depth for each tire (6/32" min) lowest point on the tire or steel cord showing tire is to be replaced		P	Left Front: 24/32 Left Rear Inner: 12/32 Left Rear Outer: 12/32 Right Front: 24/32 Right Rear Inner: 10/32 Right Rear Outer: 9/32
8.0	**BATTERIES & ELECTRICAL (Approx: 15 Min)**			
8.1	Clean and inspect battery trays and all hold down hardware		P	
8.2	Inspect tray pullout handles		P	
8.3	Record alternator output from battery/charging system test. Bus should be running on fast idle with a full load. (all lights and HVAC on) RECORD using volt meter at + and - terminal for 24V		P	VOLTAGE: 27.9 V SPEC: MAXIMUM 28 VOLTS
8.4	Inspect battery disconnect switch for corrosion. Check if lugs are tight and clean if necessary		P	
8.5	Inspect all battery and switch cables and wiring for routing and condition		P	
8.6	Inspect electrical box for condition		P	
8.7	Check Vanner equalizer by checking 12V and 24V systems. Batteries should be within 0.1-0.2 volts of each other		P	
9.0	**RADIATOR & COOLING SYSTEM (Approx: 30 Min)**			
9.1	Inspect radiator screen		P	
9.2	Inspect radiator for leaks and dirt. Clean if dirty using pressurized air		P	
9.3	Inspect for bent fins in core		P	
9.4	Inspect EMP fan system. Inspect for cracks, missing or loose blades. Check for codes		P	
9.5	Inspect fan motor, hoses, piping and control valves		P	
9.6	Re-check reverse run feature, check for fault lights		P	
9.7	Pressure test radiator with pressure gauge. Pressure shall be 10 PSI and note any leaks found on cooling system components		P	

	PROCEED TO CONDUCT THE FOLLOWING INSPECTION AND TASK ON HIGH-LEVEL WITH BUS ON LIFT			
10.0	**CHASSIS/UNDERBODY (Approx: 10 Min)**			
10.1	Inspect frame for damage or corrosion		P	
10.2	Inspect frame for mounting and electrical connections		P	
10.3	Inspect condition of road side and curb side skid plates		P	
10.4	Inspect front axle mounting hardware for looseness, wear and damage		P	
10.5	Inspect radius rods for wear or looseness		P	
10.6	Inspect shock absorbers for bushings, mounting brackets, leakage or damage		P	
10.7	Inspect all front axle hoses for condition and routing clearance		P	
10.8	Inspect both front axle air springs for cracks, abrasions or other damage (Use soap solution to check for leaks)		P	
10.9	Inspect leveling valve for proper operation, mounting, looseness, wear, damage or leaks		P	
10.10	Record front axle ride height. Ride height is measured between the axle and the rubber stop mounted to the frame of the vehicle. Front ride height 3.0-inch		P	Ride Height: 3.0 inch
10.11	Inspect mud flap mounting for integrity		P	
10.12	Check or replace static straps (Only on rear)		P	
11.0	**FRONT & REAR BRAKE SYSTEM (Approx: 25 Min)**			
11.1	Measure and record brake rod travel,on both road and curb sides. Record the travel, Maximum travel is 1 3/4 inches (Front)		P	RF 1 1/2 inches LF 1 1/2 inches
11.2	Measure and record brake rod travel,on both road and curb sides. Record the travel, Maximum travel is 2 inches (Rear)		P	RR 1 1/2 inches LR 1 1/2 inches
11.3	Check brake lining for cracks and seperation		P	
11.4	Check brake linning thickness. Good until wear line is no longer visible		P	Front: Replace Yes___ No ✓ Rear: Replace Yes___ No ✓
11.5	Inspect hoses and lines for securement and condition. Check for rubbing on the front tires		P	
11.6	Inspect mounting nuts		P	
11.7	Inspect drums for scoring, heat cracks and rust		P	
11.8	Check slack adjuster roll pin for excessive looseness and frozen pin		P	
12.0	**STEERING COMPONENTS (Approx: 30 Min)**			
12.1	Inspect center link for wear or damage		P	

12.2	Jack front axle, properly set axle on jack stands, unload axle and inspect kingpins		P	
12.3	Inspect steering knuckle axial play and indicate pin movement. Maximum axial play specificiation is 0.016" Note measurement and if measurement exceeds 0.016", advise supervisor		P	Axial play measurement: 0 inch
12.4	Inspect King Pin radial play (side to side). Maximum radial play specificiation is 0.004". Note measurement and replace King Pin if radial play measurement is in excess of 0.004", advise supervisor		P	Radial play measurement: 0 inch
12.5	Verify tie rod end cotter pins are in place on both right and left sides. (if applicable)		P	
12.6	Inspect left and right tie rod ends for wear and play by using the **rocking method**. Replace both tie rod ends if any play is found in either tie rod		P	
12.7	Lubricate both tie rod ends (if equipped)		P	
12.8	Lubricate kingpins, use the 2 fittings one for upper and one for lower		P	
12.9	Lubricate cam shaft bushing and slack adjuster, Being careful not to get grease on linings		P	
12.10	Inspect drag link for wear or damage		P	
12.11	Lubricate drag link forward and rear		P	
12.12	Inspect idler arm for wear or damage		F	Replace drag link stabilizer
12.13	Inspect Steering hoses/lines for leaks, routing and condition		P	wont take grease loose
12.14	Inspect power steering box for leaks		P	
12.15	Inspect power steering box for loose mounting hardware		P	
12.16	Inspect pitman arm for wear and integrity		P	
12.17	Inspect steering U-joints and slip joints for wear and damage		P	
12.18	Lubricate all fittings on miter box, steering u-joints, and applicable components. (ONLY USE HAND GREASE GUN ON MITER BOX FITIINGS)		P	
13.0	**FUEL TANK (Approx: 5 Min)**			
13.1	Inspect fuel tank for leaks		P	
13.2	Inspect fuel fill tube condition from the receptacle to the tank. Inspect for secure mounting and that the tube is not rubbing on anything		P	
13.3	Inspect tank mounting hardware and insulation for damage, looseness or being out of place		P	
13.4	Inspect fuel cap		P	
14.0	**REAR AXLE (Approx: 10 Min)**			
14.1	Inspect mounting hardware for integrity, wear and damage		P	

14.2	Inspect radius rods for wear and damage and looseness		F	Left Rear lower bad
14.3	Inspect shock absorber bushing, mounting brackets, leakage or damage		P	
14.4	Inspect hoses for condition and routing		P	
14.5	Inspect air springs for cracks, abrasions or other damage (Use soap solution to check for leaks)		P	
14.6	Inspect leveling valve for proper operation, mounting, integrity, wear, damage or leaks		F	adjust rear leveling valves
14.7	Measure and record rear ride height. Ride height is measured between the axle and the rubber stop mounted to the frame of the vehicle rear ride height 3 ¾ inch		F	Ride Height: 3" inch
14.8	Inspect mud flap mounting hardware for integrity or damage		P	
14.9	Inspect hubs and axles flanges for leaks		P	
14.10	Inspect condition of the S1 Guard rubber and mounting bracket		P	
15.0	**DIFFERENTIAL (Approx: 30 Min)**			
15.1	Clean differential breather		P	
15.2	Inspect fluid level on the back side of the differential center section and wheel hubs		P	
15.3	Inspect for leaks		P	
16.0	**DRIVE SHAFT (Approx: 10 Min)**			
16.1	Inspect u-joints and slip splines for damage and wear. Grease 3 fittings and lubricate U-joints and slip splines		P	
16.2	Inspect yoke flange for wear and integrity		P	
16.3	Inspect bearing straps and bolts for wear or integrity		P	
16.4	Inspect drive shaft straps Check for drive shaft phase and "U" bracket		P	
17.0	**AIR SYSTEM (Approx: 1 Hour)**			
17.1	Drain all the air tanks. Note: If excessive water is found, note on defect sheet. Including ping tank		P	
17.2	Inspect all electrical wiring and connections at air dryer. Four drain ports		P	
17.3	Inspect all lines and fittings for leakage and integrity for air tanks		P	
17.4	Inspect for oil contamination. Excessive oil residue at purge valve		P	
17.5	Inspect mounting for integrity		P	
17.6	Inspect mounting and routing of air lines. Look for chafing, kinks or damage. (Note location of discrepancies on defect column)		P	
17.7	Replace air dryer cartridges: 04000: B91-8371 05000: B91-0107 (If not equipped with AD-9 Dryer)		P	

	AFTER ROAD TEST AND ENGINE IS WARM			
18.0	**ENGINE COMPARTMENT (Approx: 2.5 Hours)**			
18.1	1. Drain engine oil and change oil filter. B86-8297 2. Take samples of the following components 3. Pre-fill oil filter with motor oil (USING PROPER TOOLS AND PROCEDURES!) 4. Fill engine with 15W-40 engine oil.		P	
18.2	Inspect engine/transmission mounts and cradle attachments		F	Fronts bad
18.3	Change coolant filter (B86-7502)		P	
18.4	Replace primary fuel filter (B86-8751) Pre-fill fuel filter		P	
18.5	Change air filter and check air restriction guage. 04000 & 05000 air filter: (B86-10008) Clean the air filter housing		P	
18.6	Inspect lines and electrical wiring harnesses for conditions, clearance, chaffing and that the correct clamps are being used for securement		P	
18.7	Inspect for fluid leaks. Be specific on defect sheet about location of leak		P	
18.8	Inspect turbocharger for leaks and loose mounting		P	
18.9	Inspect exterior for fluid leaks and loose mounting hardware		P	
18.10	Inspect hoses, clamps and gaskets		P	
18.11	Inspect mounting hardware and brackets on both the engine and A/C belt guards		P	
18.12	Inspect condition of A/C compressor mounting hardware, wiring harness, connectors and service caps		P	
18.13	Verify all A/C lines are secure		P	
18.14	Inspect A/C compressor shaft seal, cylinder heads, valves, and housing leaks		P	
18.15	Inspect EMP alternator. Inspect air intake ducting for damage and clean air intake screen if necessary.		P	
18.16	Inspect condition of all engine lines and electrical wiring harnesses		P	
18.17	Inspect supply fuel pump for leaks		P	
18.18	Service spinner oil filter (B86-10044)		F	Replace Spinner assembly
18.19	Inspect spinner oil filter for operation		F	
18.20	Fill engine with 15W-40. Operate engine, re-inspect level and top off if necessary		P	
18.21	Ensure dipstick tube is securely mounted, not rubbing on anything and dipstick seats properly		P	

18.22	Inspect oil filler cap for proper seal, mounting and springs	G	P	
18.23	Verify transmission dipstick tube is securely mounted and dipstick seals properly	G	P	
18.24	Inspect control box mounting	G	P	
18.25	Inspect wiring harness and connectors to rear box	G	P	
18.26	Verify proper operation of rear run switches	G	P	
18.27	Inspect for damaged hydraulic hoses and fittings	G	P	
18.28	Inspect power steering pump for leaks	G	F	LEAK AROUND HYD. PUMP
18.29	Inspect the belts, pulleys and tensioners for wear and damage	G	P	
18.30	Inspect tension on manual/automatic adjusted belts	G	P	
18.31	Inspect condition of coolant surge tank, pressure relief valve and filler cap	G	P	
18.32	Take sample of coolant and using the appropriate testing equipment, record test results____. Check coolant protection Spec -34 degrees F	G	P	Test Result: -34°
18.33	Inspect condition of coolant hoses, tubing and mounting clamps. Tighten any loose clamps	G	P	
18.34	Inspect coolant sensors and wiring harness to sensor	G	P	
18.35	Inspect all intake air tubing and hoses for holes, leaks, cracks and dirt build-up at connections	G	P	
18.36	Inspect for loose or damaged air hose clamps and support brackets	G	P	
18.37	Inspect exhaust system for restrictions and leaks (black soot)	G	F	EXHAUST LEAK AND BLACK SOOT
18.38	Inspect exhaust system mounting brackets for loose hardware	G	P	
18.39	Inspect all heat shields for damage	G	P	
18.40	Inspect tailpipe for damage and loose hardware	G	P	
18.41	Inspect exhaust bellows for leaks and damage	G	P	
18.42	Replace crankcase filter (B86-8825)	N/A	P	Installed crankcase filter kit.
19.0	**LOWER BUS AND COMPLETE (Approx: 5 Min)**			
19.1	Turn Aux Heater switch to "Enable" or "On"	N/A	P	
19.2	Attach the supervisor follow up sheet to PMI sheet	N/A	P	
20.0	**INPUT DATA INTO MAXIMO**			

ITEM #	Repairman's Notes/Additional defects found	REPAIRED (YES/NO)	FOLLOW UP W/O NUMBER

COOPER 15970 LONG 47975

REPAIRMAN I [redacted] PAYROLL # 28899

REPAIRMAN II [redacted] PAYROLL # 6546O

SUPERVISOR [redacted] PAYROLL # 00193.

SUPERINTED [redacted] PAYROLL # 5785[redacted] 1/12/16

SATELLITE STOREROOM
PARTS REQUEST FORM

Requested by:_____ **Date/Time:**_____

WorkOrder#:_____ **Vehicle #:**_____

QTY REQ	Description	QTY Delivered	MTA Item #
1	Defroster Filter	✓	B96-10009
1	Return Air Filter	✓	B96-10010
1	Primary Engine Air Filter	✓	B86-10008
1	Air Dryer Cartridge		04000: B91-8371 05000: B91-0107 (If not equipped with AD-9 Dryer)
1	Engine Oil Filter	✓	B86-8297
1	Coolant Filter	✓	B86-7502
1	Primary Fuel Filter	✓	B86-8751
1	Spinner Oil filter	✓	B86-10044
1	Crankcase Filter	✓	B86-8825

Filled by:_____ **Date/Time:**_____

Received by:_____ **Date/Time:**_____