Rochester Public Transit
Transit Asset Management Plan
2022

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Goals

The goals of the Rochester Public Transit (RPT), Transit Asset Management (TAM) Plan are to support safe, reliable, and high quality transit services while making maximum use of financial resources. The Federal Transit Administration (FTA) TAM Final Rule - 29 CFR 624 requires all recipients to develop a TAM plan every four years. The purpose of the plan is to provide consistent, systematic and integrated program guidance that will enable RPT to properly maintain and service its assets in support of revenue operations while maintaining them at, or above, the State of Good Repair (SGR). An effective maintenance plan ensures safe, clean and comfortable transit vehicles on the road and maximizes transit vehicle life.

State of Good Repair: the condition at which a capital asset is able to operate at a "full level of performance" – that is, the asset can perform its designed function and does not pose an unacceptable safety risk to users.

Service Provider

RPT is located in Rochester, Minnesota and is the provider of publicly funded transit for the community.

Performance Target

RPT's maintenance policies and procedures reflect compliance with all applicable regulatory requirements as provided by the Federal Transit Administration and the Minnesota Department of Transportation. The goal of this plan is to maintain and/or improve the condition of all transit assets within Rochester, MN including future replacement.

MnDOT's performance targets are listed on Attachment 1 – MnDOT State of Good Repair Transit Asset Management Performance Targets.

Based on the attached tables, RPT's performance target is to maintain 10% or less of its facilities in a condition that has met or exceeded their Useful Life Benchmark (ULB); 10% or less of its vehicles in a condition that has met or exceeded their ULB; and 10% or less of any equipment in a condition that has met or exceeded their ULB. If gaps exist between current condition and performance target, changes in management should be expected to be made that will bring the system's assets to the performance target.

Inventory of Assets

A complete inventory of assets is kept by the City of Rochester's Finance Department. Transit assets that relate to this Plan is attached as Attachment 2 - Equipment Inventory and are organized by the following categories:

FACILITIES:
The inventory contains information regarding the original cost, the year the asset was placed into service, cost basis, and condition rating.

ROLLING STOCK:
RPT maintains an accurate, current inventory of all revenue vehicles within the MnDOT's Black Cat Grants software system. Included in the inventory is make, model, year of vehicle, mileage, the year the vehicle was placed into service, cost basis, and condition rating.

EQUIPMENT:
RPT also maintains an accurate, current inventory of all equipment with an original value of $50,000 or more. This inventory is also maintained in the Black Cat Grants System software. The inventory contains original cost, the year the asset was placed into service, cost basis, and condition rating.

Condition Ratings

MnDOT has established condition ratings to be used for all facilities, revenue vehicles, and equipment. These ratings will be recorded by Office of Transit and Active Transportation Staff or in Black Cat Grants software annually. MnDOT Condition Ratings are listed on Attachment 3 – Asset Condition Rating and Remaining Useful Life.

FACILITIES:
MnDOT's Office of Transit and Active Transportation staff will determine the condition rating of all facilities. This rating will be included in the annual Facility Checklist performed by MnDOT's staff.

ROLLING STOCK:
RPT's contracted transit service operator will perform an annual assessment to establish a condition rating. The condition rating will be recorded in MnDOT's December vehicle statistics report annually.

EQUIPMENT:
An inspection, done annually, will establish the condition rating of equipment based on useful life remaining. This inspection will be performed annually by RPT's staff and records kept on file locally.

Preventative Maintenance and Corrective Maintenance

RPT has established comprehensive maintenance plans for its facilities and rolling stock. The plans encompasses both preventative and corrective maintenance and are on file with MnDOT. MnDOT also reviews and spot checks maintenance records annually. The facility maintenance plan can be found in Attachment 4 - City of Rochester Public Works & Transit Operations Center Facility Maintenance Plan. Our contracted transit service operator's maintenance plan is Attachment 5 – First Transit Maintenance Plan and Combined Maintenance Documents. A vehicle inspection report is listed in Attachment 6 – Vehicle Inspection Report. Plan highlights are contained below.

Preventive Maintenance (PM)

FACILITIES:
Regular preventive maintenance is performed on RPT facilities at the City of Rochester's Public Works and Transit Operations Center. Inspections are performed routinely and any corrective maintenance needed is noted and performed as soon as possible. All inspections are documented.

ROLLING STOCK:
Regular maintenance is performed at pre-scheduled cycles to ensure optimal performance, efficiency, safety and reliability of assigned equipment. Preventive maintenance is based on the manufacturer's suggested recommendations.

During the PM scheduled service, the mechanic will document all defects found and will have all defects listed on the repair order and corrected prior to returning the transit vehicle to service. All preventive maintenance is documented.

EQUIPMENT:
Preventive maintenance is performed on all equipment owned by RPT that has an original value of $50,000 or greater at the manufacturer recommended timeline.

Corrective Maintenance (CM)

FACILITIES:
When corrective maintenance is required, the person responsible for the facility will identify and report the repair needed. All work will be documented, dated, and noted on an annual inspection form.

ROLLING STOCK:
When corrective maintenance is required, drivers/mechanics will insure that repairs needed are identified and reported. RPT's contracted service operator's mechanics will document all work done, dates, and mileage.

EQUIPMENT:
When corrective maintenance is required, the person responsible for the equipment will identify and report the repair needed. All work will be documented and dated.

Maintenance Records

Individual maintenance records will be kept for all facilities. All maintenance performed on the facility will be recorded.

Individual maintenance records will be kept for each revenue vehicle. All maintenance performed on the vehicle will be recorded and maintained for as long as RPT owns the vehicle.

Individual maintenance records will be kept for all equipment. All maintenance performed on the equipment will be recorded and maintained for as long as RPT owns the equipment.

Pre-Trip/Post-Trip Inspections

Drivers perform a comprehensive checklist of essential maintenance elements and record the results on the designated Pre-Trip Inspection form. This is done to ensure that all vehicles are inspected prior to being put into service. Pre-trip inspection sheets are turned in to RPT's contracted service operator's manager and monitored for completion and any noted defects.

Post-trip inspections are performed at the end of the driver's work schedule and contain information regarding the condition of the vehicle when the work day is completed. Post-trip inspection sheets are kept in the vehicle for information for the subsequent driver. Post-trip inspections will contain any necessary repair work needed to be completed. The following driver will determine whether the vehicle repair work warrants not using that vehicle and a spare vehicle will be used until the work is completed.

The Pre-Trip Inspection form includes inspection of wheelchair lifts. In compliance with the requirements of the Americans with Disabilities Act (ADA), monitoring of all wheelchair lifts is included as part of the Pre-Trip Inspection and the Preventive Maintenance process. The lift is cycled as part of the Pre-Trip

Inspection, and maintenance will include replacement of worn components and all adjustments as necessary for peak performance. Attachment 6 – Vehicle Inspection Report is an example of the Vehicle Inspection Report that is being used by RPT.

Vehicle Breakdown

In the event of a transit vehicle breakdown, a spare unit will be provided to replace the disabled vehicle as soon as possible. Backup vehicles are not immediately available in all locations. However, efforts will be made to have a replacement vehicle in place as soon as it is reasonably possible to do so. Having a vehicle available for each scheduled route is a priority for RPT.

Warranty Recovery

Vehicle, parts warranties, equipment and facility components are monitored to make sure that all assets are repaired and maintained under the manufacturer's warranty. Warranties are monitored for expiration and where the item should be serviced, so that problems can be addressed by the appropriate source and any concerns can be taken care of before the warranties expire. All warranty work will be recorded.

Vehicle Servicing

Vehicles will be monitored for interior and exterior cleanliness. This will include daily cleaning as well as periodic more thorough cleaning. Exterior washing will be done as weather conditions allow.

Vehicle Storage

All active rolling stock vehicles are stored inside at the Public Works Transit Operation Center garage.

Emergency Equipment on Vehicles

Emergency equipment is located on all rolling stock and is inspected as part of the Pre-Trip Inspection. Fire extinguishers with an ABC rating are located within easy reach of the bus driver and are tested yearly. Additional emergency equipment on board each vehicle includes: a first aid kit, reflective triangles, blood borne pathogens (body fluid spills) kit, and a seat belt cutter.

Capital Project Implementation

All capital project improvements are taken into consideration on an annual basis. RPT annually updates a 4 year capital project plan to Rochester-Olmsted Council of Governments and MnDOT. MnDOT's Office of Transit and Active Transportation annually provides grant applications for Vehicles, Facilities, Large Capital and Technology. Upon review of all documents, MnDOT's Office of Transit and Active Transportation will consider the request and determine its funding source upon approval. RPT also maintains a ten-year revenue vehicle replacement plan within the Black Cat Grants. Projected vehicle costs and replacement dates are tracked in this replacement plan.

RPT sets its own vehicle replacement schedule; however, the FTA's minimum useful life and the State's ULB are considered and used for vehicle replacement decisions. Occasionally, vehicles remain on the asset

list and are used as back-up vehicles or in transit operations (if mechanically sound and presentable) even though they may have passed their minimal useful life. Likewise, occasionally, a vehicle will need replacement prior to the minimal useful life for various reasons. RPT will work with the Office of Transit and Active Transportation in those cases and reasons will be well-documented. RPT's vehicles will be assigned a condition rating on an annual basis which will also help determine replacement.

Risk Management and Accident/Incident Reporting

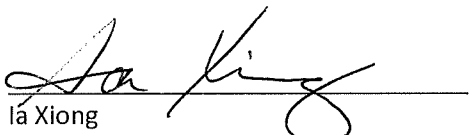
RPT employees and contracted service operator are required to report all accidents and incidents to proper managers (Road Supervisor, Safety Manager, and RPT management) for review and follow up issues such a process changes, retraining, and/or discipline. Report forms are available for this purpose. Notification procedures have been established so that employees know who to contact in case of an accident or emergency. Transit employees are also aware of the drug testing requirements in certain accident situations. Transit employees are also responsible to report any defects in vehicles, facilities or equipment that could cause injury. These defects are documented and corrective maintenance should be performed as soon as possible.

Responsibility for Maintenance Programs

The Maintenance Manager (Contracted Transit Service Provider) is responsible for the administration of the Vehicle Maintenance Program. All reports are under their supervision.

The Manager of Facility Services (City of Rochester) is responsible for the administration of the Facility Maintenance Program. All reports are under their supervision.

The Transit and Parking Systems Manager (City of Rochester) is the designated Accountable Executive of the Transit Asset Management Plan. That person is responsible for the implementation of the TAM Plan.



8-8-22

Ia Xiong
Transit and Parking Systems Manager

Date

MNDOT State of Good Repair
Transit Asset Management Performance Targets

The Office of Transit has established State of Good Repair (SGR) transit performance targets:

Performance Management for all Assets -- Table 1

Assets	Performance Measure	
	TAM Target; No More Than	TAM System Target to Meet
Equipment: All non-revenue service vehicles & equipment assets >$50,000	**10%** exceed Useful Life Benchmark	**90%**
Rolling Stock: All revenue vehicles (Classes 100 to 700)	**10%** exceed Useful Life Benchmark	**90%**
Facilities: Maintenance, administrative, passenger, & parking	**10%** exceed Useful Life Benchmark	**90%**

Useful Life Benchmark for transit vehicles -- Table 2

Category	Typical Characteristics				FTA Minimum Life (Whichever comes first)		MNDOT Useful Life Benchmark (Whichever comes first)	
	Length	Approx. GVW	Seats	Average Cost 2017	Years	Miles	Years	Miles
Heavy-Duty Large Bus Class 700	35 to 60 ft.	33,000 to 40,000	27 to 40	$471,000 - 524,000	12	500,000	13	540,000
Heavy-Duty Small Bus Class 600	30 ft.	26,000 to 33,000	26 to 35	$227,000	10	350,000	11	385,000
Medium & Purpose-Built Bus Class 500	30 ft.	16,000 to 26,000	22 to 30	$138,000 to $174,000	7	200,000	8	230,000
Light-Duty Mid-Sized Bus Class 400	25 to 35 ft.	10,000 to 16,000	16 to 25	$79,000 to $206,000	5	150,000	6	180,000
Light-Duty Small Bus Class 300	16 to 28 ft.	6,000 to 14,000	10 to 22	$68,000	4	100,000	5	125,000

Useful Life Benchmark for transit facilities -- Table 3

Category	Typical Characteristics	Useful Life Benchmark (Years)
	Usage	
Bus Garage	Bus Storage/ Wash	40
Garage-Operations Facility	Storage/Wash/Dispatch/Training/Light Maintenance	40
Garage-Operations-Admin. Facility	Administrative Offices Storage/Wash/Dispatch/Training & Maintenance	40
Transfer Facility	Auto Parking/Restrooms/Passenger Seating	40
Park & Ride	Auto Parking/Passenger Seating	20
Shelters	Seating	20

Attachment 2 - Rochester Public Transit Facilities, Rolling Stock, and Equipment Inventory

Rochester Public Transit
Attachment 2 - Equipment Inventory
2022

Facilities Inventory

Asset #	Unit #	Description	Basis	Service Start Year	Age in Years	Condition Rating
12677	97.00310	PWTOC Building B Transit Garage	$8,399,251.00	2012	9	4.0
12680	97.00325	PWTOC Building E Transit Fleet Garage	$5,168,587.00	2012	9	4.0
17389	97.00326	PWTOC Transit Bus Garage Expansion	$5,688,353.00	2019	2	5
15035	~	Downtown Bus Stops	$2,248,585.00	2010	11	4.0

Useful Life Benchmark Assesment: All equipment listed above meet RPT's Useful Life Benchmark targets

Rolling Stock Inventory

Asset #	Unit #	Description	Basis	Service Start Year	Age in Years	Miles as of 10/31/21	Condition Rating
60.00015	15	Chevrolet ARBOC	$159,876.00	2014	7	232,013	3.5
60.00016	16	Chevrolet ARBOC	$159,876.00	2014	7	227,255	3.5
60.00017	17	Chevrolet ARBOC	$167,369.79	2021	0	44,374	4.8
60.00018	18	Chevrolet ARBOC	$167,369.79	2021	0	38,546	4.8
60.00019	19	Chevrolet ARBOC	$167,369.79	2021	0	28,385	4.8
60.00020	20	Chevrolet ARBOC	$167,369.79	2021	0	44,087	4.8
60.00021	21	Chevrolet ARBOC	$167,369.79	2021	0	38,107	4.8
60.00022	22	Chevrolet ARBOC	$167,369.79	2021	0	49,400	4.8
60.00023	23	Chevrolet ARBOC	$167,369.79	2021	0	48,092	4.8
60.00024	24	Chevrolet ARBOC	$167,369.79	2021	0	45,708	4.8
60.00025	25	Chevrolet ARBOC	$167,369.79	2021	0	39,704	4.9
60.00222	222	Gillig Low Floor Transit Bus	$273,986.00	2003	18	407,068	2.7
60.00223	223	Gillig Low Floor Transit Bus	$273,986.00	2003	18	438,694	2.9
60.00224	224	Gillig Low Floor Transit Bus	$273,986.00	2003	18	437,065	2.7
60.00225	225	Gillig Low Floor Transit Bus	$273,986.00	2003	18	434,065	2.8
60.00226	226	Gillig Low Floor Transit Bus	$273,986.00	2003	18	532,454	2.7
60.00227	227	Gillig Low Floor Transit Bus	$273,986.00	2003	18	454,597	2.7
60.00228	228	Gillig Low Floor Transit Bus	$273,986.00	2003	18	450,384	2.7
60.00229	229	Gillig Low Floor Transit Bus	$273,986.00	2003	18	428,116	2.7
60.00230	230	Gillig Low Floor Transit Bus	$280,341.00	2004	17	485,815	2.9
60.00231	231	Gillig Low Floor Transit Bus	$280,341.00	2004	17	449,430	2.9
60.00232	232	Gillig Low Floor Transit Bus	$280,341.00	2004	17	422,114	2.9
60.00233	233	Gillig Low Floor Transit Bus	$280,341.00	2004	17	369,025	3
60.00234	234	Gillig Low Floor Transit Bus	$280,341.00	2004	17	464,295	2.9
60.00236	236	Gillig Low Floor Transit Bus	$281,607.00	2005	16	465,806	3.2
60.00237	237	Gillig Low Floor Transit Bus	$281,607.00	2005	16	407,135	3.2
60.00238	238	Gillig Low Floor Transit Bus	$281,607.00	2005	16	461,250	3.1
60.00239	239	Gillig Low Floor Transit Bus	$281,607.00	2005	16	435,408	3.2
60.00240	240	Gillig Low Floor Transit Bus	$281,607.00	2005	16	500,712	3.2
60.00241	241	Gillig Low Floor Transit Bus	$281,607.00	2005	16	560,290	3.3
60.00242	242	Gillig Low Floor Transit Bus	$289,734.00	2005	16	381,936	3.2
60.00243	243	Gillig Low Floor Transit Bus	$289,734.00	2005	16	465,474	3.3
60.00244	244	Gillig Low Floor Transit Bus	$289,734.00	2005	16	463,936	3.2
60.00245	245	Gillig Low Floor Transit Bus	$289,734.00	2005	16	467,812	3.4
60.00246	246	Gillig Low Floor Transit Bus	$299,903.00	2007	14	535,461	3.2
60.00247	247	Gillig Low Floor Transit Bus	$299,903.00	2007	14	519,069	3.2
60.00248	248	Gillig Low Floor Transit Bus	$299,903.00	2007	14	539,983	3.2
60.00249	249	Gillig Low Floor Transit Bus	$299,903.00	2007	14	464,444	3.3

Rolling Stock Inventory

Asset #	Unit #	Description	Basis	Service Start Year	Age in Years	Miles as of 10/31/21	Condition Rating
60.00251	251	Gillig Low Floor Transit Bus	$363,648.00	2010	11	60,130	3.9
60.00252	252	Gillig Low Floor Transit Bus	$363,648.00	2010	11	295,315	3.9
60.00253	253	Gillig Low Floor Transit Bus	$363,648.00	2010	11	327,420	3.9
60.00254	254	Gillig Low Floor Transit Bus	$364,364.00	2011	10	304,743	4
60.00255	255	Gillig Low Floor Transit Bus	$395,548.00	2014	7	236,418	4.3
60.00256	256	Gillig Low Floor Transit Bus	$395,548.00	2014	7	246,596	4.3
60.00257	257	Gillig Low Floor Transit Bus	$395,548.00	2014	7	261,373	4.3
60.00258	258	Gillig Low Floor Transit Bus	$395,548.00	2014	7	247,111	4.3
60.00259	259	Gillig Low Floor Transit Bus	$437,843.00	2015	6	258,464	4.3
60.00260	260	Gillig Low Floor Transit Bus	$437,843.00	2015	6	240,075	4.6
60.00261	261	Gillig Low Floor Transit Bus	$437,843.00	2015	6	244,647	4.6
60.00262	262	Gillig Low Floor Transit Bus	$437,843.00	2015	6	254,835	4.6
60.00263	263	Gillig Low Floor Transit Bus	$437,843.00	2015	6	270,132	4.6
60.00264	264	Gillig Low Floor Transit Bus	$437,843.00	2015	6	265,736	4.6
60.00265	265	Gillig Low Floor Transit Bus	$437,843.00	2015	6	263,783	4.6
60.00266	266	Gillig Low Floor Transit Bus	$446,225.00	2017	4	196,724	4.8
60.00267	267	Gillig Low Floor Transit Bus	$446,225.00	2017	4	187,387	4.8
60.00268	268	Gillig Low Floor Transit Bus	$446,225.00	2017	4	202,633	4.8
60.00269	269	Gillig Low Floor Transit Bus	$446,225.00	2017	4	159,964	4.8
60.00270	270	Gillig Low Floor Transit Bus	$446,225.00	2014	7	173,460	4.8
60.00271	271	Gillig Low Floor Transit Bus	$452,852.00	2018	3	121,920	4.9
60.00272	272	Gillig Low Floor Transit Bus	$452,852.00	2018	3	131,867	4.9
60.00273	273	Gillig Low Floor Transit Bus	$452,852.00	2018	3	147,581	4.9
60.00274	274	Gillig Low Floor Transit Bus	$452,852.00	2018	3	138,739	4.9
60.00275	275	Gillig Low Floor Transit Bus	$452,852.00	2018	3	143,932	4.9
60.00276	276	Gillig Low Floor Transit Bus	$452,852.00	2018	3	146,296	4.9
60.00277	277	Gillig Low Floor Transit Bus	$452,852.00	2018	3	131,956	4.9
60.00278	278	Gillig Low Floor Transit Bus	$452,852.00	2018	3	151,028	4.9
60.00279	279	Gillig Low Floor Transit Bus	$452,852.00	2018	3	150,318	4.9
60.00280	280	Gillig Low Floor Transit Bus	$452,852.00	2018	3	146,894	4.9
60.00281	281	Gillig Low Floor Transit Bus	$452,852.00	2018	3	157,999	4.9
60.00282	282	Gillig Low Floor Transit Bus	$452,852.00	2018	3	124,359	4.9
60.00283	283	Gillig Low Floor Transit Bus	$452,852.00	2018	3	150,270	4.9
60.00284	284	Gillig Low Floor Transit Bus	$452,852.00	2018	3	108,415	4.9
60.00285	285	Gillig Low Floor Transit Bus	$452,852.00	2018	3	118,560	4.9
60.00286	286	Gillig Low Floor Transit Bus	$452,852.00	2018	3	130,927	4.9
60.00287	287	Gillig Low Floor Transit Bus	$452,852.00	2018	3	99,008	4.9
-	288	New Flyer 60 Ft Electric Bus	$1,350,137.00	2022	0	0	5
-	289	New Flyer 60 Ft Electric Bus	$1,350,137.00	2022	0	0	5

Fleet average State of Good Repair assesment rating 4.1

Useful Life Benchmark Assesment:

Rolling Stock Age

700 Series Buses that are over the 13 year ULB threshold	27
Number of 700 series buses that are in the fleet	66
Percent of fleet that exceed the ULB	41%
RPT Target is 10% of the fleet not to exceed UBL	
400 Series Buses that are over the 6 year ULB threshold	2
Number of 400 series buses that are in the fleet	11

Percent of fleet that exceed the ULB	18%
RPT Target is 10% of the fleet not to exceed UBL	

Rolling Stock Miles

700 series buses that are over the 540,000 ULB mile threshold	1
Number of 700 series buses that are in the fleet	66
Percent of fleet that exceed the ULB	2%
RPT Target is 10% of the fleet not to exceed UBL	
400 series buses that are over the 180,000 ULB mile threshold	2
Number of 400 series buses that are in the fleet	11
Percent of fleet that exceed the ULB	18%
RPT Target is 10% of the fleet not to exceed UBL	

Equipment Inventory

At this time RPT has no equipment over the reporting threshold of $50,000.

Asset Condition Rating and Remaining Useful Life:

Per the FTA, "it is expected that all assets used in the provision of public transit will be included in the TAM Plan asset inventory. This includes (with the exception of equipment) assets that are owned by a third party or shared resources. The inventory must include all service vehicles, and any other owned equipment assets over $50,000 in acquisition value. Agencies only need to include condition assessment for assets for which they have direct capital responsibility."

ASSET CONDITION MEASUREMENT EXAMPLE- Table 1
Asset Criteria and Scoring System – vehicles and facilities

Asset Rating Score	Asset Age	Asset Condition	Asset Performance	Level of Maintenance	Asset Condition Rating	
	Percent of Useful Life Remaining	(Quality, Required Maintenance)	(Reliability, Ambience, Safety)	Level of PM and CM ✧	Rating	Scoring range
5	Asset new or nearly new	Asset new or like new; no visible defects	Asset meets or exceeds all performance and reliability metrics, industry standards	Only routine PM needed.	Excellent	4.8 to 5.0
4	Asset just under new or nearly new	Asset showing minimal signs of wear; some slight defects or deterioration	Asset generally meets performance and reliability metrics, industry standards	Good working order; requires infrequent CM (more than 6 months between repairs)	Good	4.0 to 4.7
3	Asset nearing or at its midlife point	Some moderately defective or deteriorated components	Occasional performance and reliability issues; may be sub-standard in some areas	Requires frequent minor CM or infrequent > 6 mos. major CMs	Adequate	3.0 to 3.9
2	Asset nearing or at end of its useful life	Increasing number of defects; deteriorating components; growing maintenance needs	Performance and reliability problems becoming more serious; sub-standard elements	Requires frequent CM (less than 6 months between repairs)	Marginal	2.0 to 2.9
1	Asset is past useful life	Asset in need of replacement; may have critically damaged components	Frequent performance and reliability problems; does not meet industry standards	Continued use present excessive CM costs and potential service interruption	Poor	1.0 to 1.9
0	Asset non-operable	Asset non-operable	Asset non-operable	Asset non-operable	Asset non-operable	

In SGR >2.5

SGR 2.5

Not in SGR < 2.5

✧PM- preventative maintenance and CM – corrective maintenance (repairs)

City of Rochester
Public Works & Transit Operations Center
Facility Maintenance Program

POLICY STATEMENT:

The City of Rochester, Public Works & Transit divisions maintains its facility(ies) and equipment to protect its investment in and prolong the useful life of its assets and provide public transit to the highest standards financially feasible. Service of the highest quality to our customers cannot be maintained without the most efficient operating and support program we can provide.

OBJECTIVES:
The facilities and equipment used in support of public transit will be maintained at a minimum to the specifications in the operation and maintenance manuals provided with the facilities and equipment.

- Maintain facilities and equipment in safe operating condition
- Maximize facility and equipment service life
- Meet the requirements of the Transit and Rail Division, Federal Transit Administration, the Americans with Disabilities Act, and state and local regulations
- Provide a safe environment for the public and staff
- Minimize service disruptions
- Ensure that our facility(ies) remain(s) an asset to the community

FACILITY DESCRIPTION:
- Office, Conference & Break Room Areas
- Parking Garages
- Fleet Maintenance Garage & Warehouse
- Stertil Koni Vehicle Lifts
- Overhead Lifts
- Employee Parking Lot
- Fueling Stations (3)
- Manual & Automatic Vehicle Wash Bays Including Wash Reclaim
- Lighting Control & Design
- Generac Generators (4) & UPS
- Geothermal Energy Systems
- Winona Controls HVAC
- HVAC Water to Water Pumps, Heat Pumps, Make Up Air Units, Heat Recovery Units, Boilers, Water Heaters, Waste Oil Heaters
- High Speed Overhead Doors
- Coiling Overhead Doors
- Sectional Overhead Doors
- Campus Electronic Security

ASSIGNMENT of RESPONSIBILITY:

Monty Meyer, Supervisor of Facilities & Fleet is responsible for implementing this maintenance plan.

Monty Meyer, Supervisor of Facilities & Fleet will provide the following routine maintenance and care functions or ensure they are provided by a contractor:

1) **Sectional Overhead Doors** -- Each overhead door will be inspected and lubricated by a qualified contractor (Spring Valley Overhead Doors) semi-annually. In addition the inspector will generate semi-annual visual inspection reports for any needed repairs.
2) **High Speed Overhead Doors** -- Each overhead door will be inspected and lubricated by a qualified contractor (Star Equipment) semi-annually. In addition the inspector will generate semi-annual visual inspection reports for any needed repairs
3) **Coiling Overhead Doors** -- Each overhead door will be inspected and lubricated by a qualified contractor (Crawford Overhead Doors) semi-annually. In addition the inspector will generate semi-annual visual inspection reports for any needed repairs
4) **Plumbing** – A qualified contractor will inspect all plumbing and associated fixtures semi-annually to ensure there are no leaks and that fixtures are operating properly. Any corrosion or poor operation will be noted and scheduled for repair/replacement.
5) **HVAC** – [Water to Water Pumps, Heat Pumps, Make Up Air Units, Heat Recovery Units, Boilers, Water Heaters Geothermal Energy Systems] These systems will be serviced according to the Egan Company service Plan. All units will be maintained to operate at peak efficiency by Egan Company through a maintenance contract. In addition, each system will be inspected monthly by the Egan Companies and have air filters cleaned, replaced and dated as appropriate. Outdoor units will be inspected for general operation, debris build up or any other blockages, etc. [The waste oil heaters will also be serviced by Egan Company according to the above criteria and for additional repairs.]
6) **Generators & UPS** -- The back-up power systems will be inspected through a maintenance agreement with Titan Energy Service to ensure proper operation and to verify the unit is serviced twice annually as per the contract. Automatic start test are run weekly.
7) **Painting & Exterior Care** -- The exterior of the building will be inspected monthly and needed repairs noted and requested. This inspection shall include, but not be limited to: doors, sidewalks, windows, flashings, roof, vents, all extrusions, caulking, signage and general appearance issues.
8) **Landscaping** -- A facility inspector will ensure that all landscaped areas are maintained to include trimming, grass cutting, weeding, mulch and live growth replacement when needed. Fences shall also be inspected.
9) **Parking Lots** -- The parking lots will inspected for large cracks, holes, crumbling, etc. The inspector will help determine when re-striping and sealing need to be completed. Ice and snow removal from parking lots and walkways shall be coordinated by A facility inspector and supplies prepared before the season.

10) **Roof** -- A facility inspector will inspect all ceilings monthly to look for any stains or other signs of roof failure and inspect outside gutters. Inspecting gutters during hard rains will be important to finding faults.
11) **Eye Washes –** A facility inspector will test and purge weekly.
12) **Fire Extinguishers** – A facility inspector will check them and document monthly. A qualified contractor will inspection annually.
13) **Fire Sprinkler System** – is monitored by a qualified contractor (Custom Communications) and inspected annually by a qualified contractor (Viking Sprinkler.)
14) **Vehicle Lifts** -- All Mechanics will visually inspect the lifts daily. Midwest Lift Works will inspect, document, and make necessary repairs annually.
15) **Overhead Lift Cranes** – All Mechanics will visually inspect the cranes daily. Midwest Overhead Cranes will inspect, document, and make necessary repairs annually.
16) **Bus Washing Supplies** -- A facility inspector will inspect monthly and arrange for repairing or replacing bus washing equipment and supplies.
17) **Sheds** – A facility inspector will use the sheds when appropriate to store needed items and twice per year clean out and reorganize them.
18) **Equipment** – A facility inspector shall maintain all needed tools and equipment. A physical inventory of the grounds and maintenance equipment will be prepared annually and maintained throughout the year.
19) **General** -- Semi-Annually, an assigned facility inspector will walk the facility(ies) using the checklist in Appendix A and note any and all repairs to both minor and major equipment items and provide the Supervisor of Facilities & Fleet a written report of any item needing service or repair.

FACILITY MAINTENANCE RECORD KEEPING:

A log of needed non-urgent repairs shall be maintained and appropriate staff notified periodically to incorporate repair costs into budgetary planning. Records of any non-planned, non-urgent maintenance needs are kept at electronic file by the Office Services Coordinator.

The Facilities & Fleet division maintains all permanent records for facility maintenance and inspections. Records are stored in an electronic folder for each calendar year and completed checklists are included in that folder along with documentation of all preventive and repair maintenance performed.

CITY STAFF FACILITY and EQUIPMENT MAINTENANCE INFORMATION:

Monty Meyer	Supervisor of Facilities & Fleet	(507) 328-2438
Derrick Sanford	Facilities System Technician	(507) 328-2469

Service Start	
Prepare fleet for next day's revenue service	December 30, 2016
Follow-up meetings with Rochester Public Transit on any open issues	Ongoing
Initiate service under new contract	**January 1, 2017**

With our dedication to excellent employee relations and our partnership with the ATU Local 1005, who represents our drivers and dispatchers, as well as our commitment to maintaining the compensation packages in place for all current and future employees, First Transit offers assurance that the workforce will transition to the new contract without issue.

2A-4 Maintenance Program & Equipment

First Transit's Maintenance Goal: to continue to provide customer service excellence by moving unscheduled maintenance into scheduled, providing a smoother passenger experience and cost savings to the City of Rochester.

Our industry-leading preventive maintenance program drives down road failures, moves repairs from unscheduled to scheduled, and focuses on promoting efficiencies. Our innovative maintenance practices, delivered by the most qualified technicians in the industry, provide City of Rochester with unparalleled maintenance operations. Our maintenance operations provide our clients with the most knowledgeable and innovative maintenance program in the transit industry:

71,948

Miles between roadcalls for the RPT fleet maintained by First Transit 2016 to date – an outstanding achievement!

First Transit works very hard to minimize Rochester's maintenance costs through the following measures:

Implementing Proactive, Scheduled Maintenance Practices and Programs	• Proper maintenance planning and integration of innovative technology • Preventive Maintenance Practices
Leveraging Best Practices for Unscheduled Maintenance Mitigation	• Road call management and reduction • Driver Vehicle Condition Reports
Providing Industry-Leading Employee Management and Development	• Stringent hiring standards • ASE and Cengage/Delmar Training • Employee Incentives
Ensuring Quality Control and Efficiencies for City of Rochester	• Lean Maintenance Program • Fleet Inspection Process • Annual Shop Audit • Desktop Audits • Customer FirstBase Desktop

First Transit is proud that the Rochester location achieved ASE Blue Seal Certified in 2015, the industry-wide symbol of the quality maintenance services and highly trained maintenance personnel. We are committed to retaining this prestigious certification. In fact, one of our technicians is double master ASE-certified and the other three all have at least one ASE certification.

Maintenance Planning

Proper maintenance planning is a critical step in ensuring that vehicles are ready for service and technicians' time is used effectively. First Transit's world-class maintenance programs focus on providing City of Rochester with proactive maintenance that eliminates waste and gives our technicians vehicle history at their fingertips. Through our maintenance programs, **our technicians are empowered to get the repairs right the first time.** First Transit uses maintenance planning tools to set efficient schedules and monitor technicians' time effectively.

Supervisors typically plan weekly schedules based on when vehicles are scheduled for maintenance and an analysis of vehicles needing other repairs. Schedules are then adjusted on a shift-by-shift basis to account for changes in the schedule. Our computer systems log vehicle miles, which is the basis for all PM inspections. The frequency of these inspections can be customized to meet City of Rochester's requirements. Our Quality Control program monitors each vehicle's service goals using **Statistical Process Controls**, monitoring the statistics of our preventive maintenance program to achieve continuous improvement and maintenance excellence.

Preventive Maintenance Program

The backbone of First Transit's maintenance operation is our strong Preventive Maintenance (PM) Program. Our outstanding PM program protects City of Rochester's capital investment in the fleet, keep the fleet operational and available, and provide a high level of reliability and safety to our passengers and clients.

Good maintenance management decisions are based on accurate and reliable information. To ensure accurate and reliable data, we use **JD Edwards software provided by the City** that is designed to enhance equipment management capability. The system focuses on properly structured information to improve the quality and productivity of our equipment maintenance services.

Preventive Maintenance Inspection

Every First Transit vehicle undergoes thorough PM inspections to remain in top condition. Systems are inspected for wear and tear and any necessary adjustments are made in accordance with OEM specifications.

We categorize PM inspections into three designations: **A**, **B**, and **C inspections**. Our intervals and procedures for the City of Rochester service are reflected in the following table:

City of Rochester Fixed Route PM Inspection

Inspection	Interval	Details
A	3,000 miles	Engine service, comprehensive vehicle inspection, check brake lining, wheelchair lift inspection and services, check video system

Inspection	Interval	Details
B	6,000 miles	A-inspection plus Engine service, including engine oil, filter change, oil sample, hydraulic and fuel filters change
C	24,000 miles	A- and B-inspections plus coolant and air filters, fire risk assessment, water filter, service crankcase, change transmission fluid
D	48,000 miles	A-, B- and C- inspections plus transmission service with oil sample, change rear axle lube, change DEF filter and service air dryer, HVAC inspection and servicing

Our experienced Maintenance Manager Roger Ritchie oversees the PM inspection process, developing weekly schedules to take vehicles out of service for maintenance. Along with our maintenance manager, our supervisors will ensure that the fleet is adequately staffed and outfitted to provide uninterrupted service to our passengers and clients.

The Preventive Maintenance Process

First Transit motivates all employees who have contact with vehicles to be a part of our preventive maintenance process. Particularly, utility and other workers who have daily contact with vehicles are trained to check vehicles for any potential maintenance needs. By identifying issues during service island inspections, First Transit eliminates last-minute changes that can result in service delays.

PM TASKS

Our technicians are responsible for ensuring all systems are in safe operating condition before a vehicle returns to service. The PM process includes, but is not limited to, providing inspection and necessary repairs to the following systems:

- **Air Conditioning and Heating**: The entire system undergoes detailed inspection and cleaning to ensure optimum performance prior to peak air conditioning and heating seasons and repairs are made in accordance with all applicable regulations, including those outlined in the Clean Air Act of 1990.
- **Brake Systems**: Any defects or other safety-related system issues are corrected with OEM quality parts and tested prior to the vehicle being placed back into service.

- **Tires**: Only brand tires (Michelin, Bridgestone, and Bandag) and retreads are used on our vehicles. The PM process for tires includes (as necessary): tire mounting and dismounting, wheel inspection, wheel and tire installation, in-shop tire and wheel installation, and tire tread depth inspections.
- **Wheel Chair Ramps and Lifts**: Technicians lube the lift and perform a comprehensive inspection of the entire system, including the platform, sensors, barrier, securement devices, and controls, paying particular attention for structural deficiencies and hydraulic leaks. All lifts and ramps are cycled daily before vehicles enter service.
- **Fluid Replacement and Lubrication**: All lubrication, oil, and filter change intervals are performed in accordance with OEM and City of Rochester specifications. Additionally, we regularly check engine oil, transmission fluid, coolant, and differential fluid levels.
- **Communication Systems**: Any unit not working is reported immediately and the vehicle is taken out of service. Defective units under warranty are repaired by a manufacturer-approved shop to adhere to warranty requirements. Items not under warranty are repaired by qualified employees or vendors.

PM FOLLOW UP PROCESSES

After the PM inspection is complete, any necessary follow-up repairs are assigned to specialized technicians. Only after final follow-up repairs are made will vehicles be released into revenue service.

Corporate Purchasing Agreements

First Transit is able to reduce maintenance costs through leveraging our corporate buying power. As a maintenance contractor at a majority of our over 320 operating locations, First Transit has a relationship with parts vendors providing us with buying power – and an ability to bring City of Rochester quality parts at a lower cost.

We have established Corporate Purchase Agreements (CPA's) with more than 100 vendors that represent 120,000 unique parts.

This relationship with CPA's ensures that we can get quality parts, best service, and competitive pricing. Our CPAs with major parts suppliers include Ford, Chrysler, General Motors, Cummins, Detroit Diesel, Freightliner, International/ Navistar, Bridgestone, Firestone, Goodyear, Michelin, Bandag, AutoZone, Fleet Pride, NAPA, Barnes, Imperial Supplies, and others that provide significant pricing advantages. Most of the National CPA vendors we use provide parts and services through their network of local dealers. We will utilize other local vendors, whenever it is advantageous and meets your needs, to provide parts and services.

Our goal is to control costs while providing an inventory of high quality parts for our technicians to use as necessary to maintain City of Rochester's fleet.

Maintenance Quality Assurance

First Transit's quality assurance program in our maintenance shops increases fleet availability and reduces operational costs. Our region and corporate maintenance support teams ensure quality assurance processes are stringently followed to protect the long-term investment in the fleet.

FLEET RE-INSPECTION

As a matter of protocol, our Rochester maintenance manager audits, at a minimum, five percent of his fleet every month. The results are documented in a master workbook summarizing all data from the individual QCC inspections. This monthly audit documents:

- Overall vehicle condition and trends
- Proper maintenance documentation
- Training or staffing requirements

The manager first audits the vehicle, using an extensive 40-point check sheet and a standards guide and rates the vehicle based on the inspection. Any items that require immediate attention are placed out of service until the repairs are completed.

Next, the manager audits driver inspection reports and PM inspections. The manager checks that all of the defects for the past 14 days have been addressed or scheduled, then verifies that all repairs have been signed off by a technician.

The final step is to review the vehicle's past three PM inspections. This verifies the inspections were performed on time and ensures that defects identified during the inspection have been properly repaired. In addition, the audit helps identify possible areas for technician training.

ANNUAL SHOP AUDITS

Our internal audit process ensures that the Rochester location is in compliance with all best practices, policies, and procedures. It also establishes a company-wide standardized benchmark for quality, competence, and consistency. Individual locations are measured against these benchmarks to review our operations, vehicle safety and reliability.

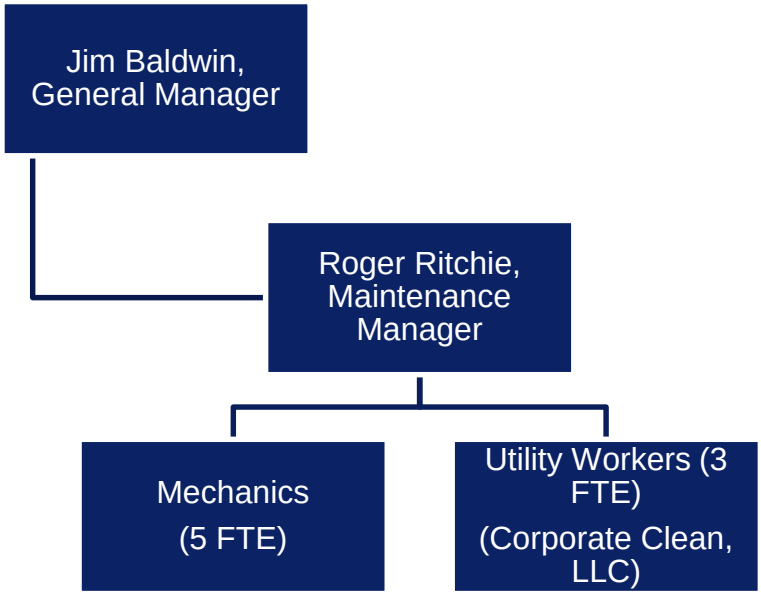
The annual internal audit process is conducted by our region staff, completing a thorough review of all aspects of the operation. The audit includes:

- Hands-on inspection of 10 percent of the vehicles
- Review of warehousing efficiency, inventory, and stocking levels
- Compliance with preventive maintenance policies and standard operating procedures
- No deferred maintenance

At the end of each audit, action plans are developed with a timeline to correct any identified deficiencies. Once defects have been corrected, the location is subject to a re-inspection of those items to ensure quality maintenance operations.

2A-4-1 Maintenance Organizational Chart

As part of the sample maintenance plan submitted in response to this RFP, Contractor is required to submit an organizational chart for the maintenance department (RFP Section 2.7.4). A narrative shall be provided explaining how the organizational structure, its functions, personnel distribution, and numbers of positions (e.g., A mechanics, B mechanics, C mechanics, utility workers, parts clerks, service writers, bus cleaners, fare collection equipment system technicians) best meets the maintenance needs of the City's fleet and assets.



ON-SITE MAINTENANCE PERSONNEL

As outlined in our Staffing Plan, we remain committed to providing a fully staffed maintenance department to keep Rochester Public Transit vehicles safe, clean, and operating efficiently. Our proposed staff includes:

Position	Staffing Level
Maintenance Manager	1
“A” Level Technician	3
”B” Level Technician	1
“C” Level Technician	1
Utility Workers	3 FT, (2.5 for fixed route and .5 for paratransit) provided by Corporate Clean, LLC, our DBE subcontractor

First Transit’s Maintenance Manager, Roger Ritchie is on duty during the primary day shift, and remains on-call through the last shift.

First Transit's current schedules and shift assignments ae in place now for the Rochester Public Transit contract, and take advantage of the individual skill sets of our technicians, who make up our Blue Seal shop.

First Transit remains committed to providing a fully staffed and top flight maintenance department to keep Rochester Public Transit vehicles safe, clean, and operating efficiently.

Specific schedules and shift assignments are developed based upon the qualifications of the maintenance employees, service schedules, and available leadership personnel. Below are the types of personnel that will be utilized to service the Rochester Public Transit fleet:

MECHANICS

Maintenance Manager	• Oversee exceptional quality and efficiency of maintenance • Schedule and administer fleet maintenance, coordinating vehicle availability with dispatch and operations • Assist in troubleshooting equipment issues • Ensures proper training of maintenance technicians
"A" Mechanic	• Identify and resolve mechanical issues • Perform safety inspections and ensure vehicles are in good repair in accordance with manufacturer, Rochester Public Transit, and First Transit standards
"B" Mechanic	• Preventative maintenance, diagnosis, service and repair of steering, suspension, brakes, engines, transmissions, differentials, electrical, wheelchair lifts, and air conditioning systems
"C" Mechanic	• General preventative maintenance, including tire repair and replacement, lube/oil/filter servicing, brake repair and general minor maintenance repairs • Fueling and inventory control, as needed
Utility Workers	• Responsible for all fueling, fluid level checks and vehicle cleaning

	• Ensure all Vehicle Wash/Fuel Logs are properly filled out and submitted in a timely manner and that all work areas are cleaned on a daily basis

2A-4-2 Credentials, Training and Staffing Levels

Contractor is required to submit minimum qualifications credentials required by Contractor for maintenance staff and describe provide training programs for maintenance staff. The Contractor shall submit their proposed staffing levels, mechanic to fleet ratio and all appropriate justifications with their proposal.

First Transit provides unmatched technician training that ha lead to higher quality repairs for the Rochester Public Transit fleet. We require each technician to participate in at least 40 hours of training each year to increase skills and knowledge of industry technology advancements. A highly trained technician performs higher quality repairs in a more efficient manner—resulting in a better maintained fleet and reduced vehicle downtime.

Our industry-leading training and incentive programs are based on the following training procedures:

- **Basic Skills Assessment**: A concept that individualizes technician training based on the Rochester Public Transit fleet, the skills of the individual technician, and contract obligations.
- **ASE Certification:** A requirement above and beyond industry standards that exemplifies our commitment to industry best practices. Our dedication to the ASE Certification process is illustrated by our incentive program tied to the certification process. Our Rochester technicians have all achieved ASE certifications, with one of the technicians a double master ASE-certified technician. We are proud that the Rochester shop was recently declared an ASE Certified Blue Seal Shop.

ASE Certified

*Our Rochester technicians currently hold a combined **25 ASE Certifications**, a testament to their expertise, skill and commitment to excellence.*

Our systematic approach to technical training and development is critical to superior maintenance performance. In addition to ASE training, our technicians also receive classroom instruction and on-

the-job training provided by our suppliers such as AC/Delco and Ford Motor Company, for example. **Our well-trained technicians make the repairs right the first time.**

BASIC SKILLS ASSESSMENT

All First Transit technicians undergo a basic skills assessment upon hire to determine their individual skills and suitability for the Rochester Public Transit contract. First Transit has partnered with **Cengage Learning/Delmar** – a leading provider of innovative teaching and learning solutions worldwide – to create an interactive learning experience for our technicians.

Assessment

Our comprehensive online skills assessment allows technicians and managers to objectively baseline knowledge in specific areas. Each assessment measures technical competency to a detailed level of theory, application, and diagnostic ability in a number of technical areas.

Training

After the initial assessment, technicians are assigned to training modules based on their identified needs. Each self-paced module contains critical content that is reinforced through interactive graphics and animations. The training is available at any time, so technicians can work through the materials at their convenience. Each course contains an average of 8.5 hours of training materials and can be completed in either English or Spanish.

Certification & Monitoring

Each section within the module is completed with final review questions and each module is requires a course review and exam before completion. These tests combine helpful remediation while addressing the unique needs of the technician with text-based theory for enhanced learning and retention. A variety of study options are available, including practice questions, sample ASE-style tests, and a timed test duplicating the actual ASE Exam.

Managers and supervisors may log into the system at any time to monitor technician activity within the training program. Supervisors and managers can produce a Course Usage Report to track of hours dedicated to the training curriculum to encourage technicians to continue progressing through their customized training program.

Paid Training

First Transit invests in our employees through paid ASE Certification training

ASE CERTIFICATION

Our technicians attend training and certification testing provided by the National Institute for Automotive Service Excellence. The ASE training program has a series of more than 18 tests that measures skill level in vehicle maintenance and repair. These tests are grouped by specialty including front-end alignment, brakes, air conditioning, electrical, engine repair, etc.

We understand the value that ASE certification provides not only to Rochester Public Transit but also to the career development of our valued technicians. This is why we require our technicians to become Automotive Service Excellence (ASE) certified. First Transit has technicians with over 2,700 ASE certifications at our contract locations across the United States. All Rochester technicians have some sort of ASE certification, with one technician earning double master ASE certifications.

ASE certification of our technicians and Blue Seal shop designation for the location means that Rochester Public Transit always receives the best service quality each time a vehicle is maintained by First Transit—reducing unnecessary repairs to the fleet and vehicle downtime.

ASE BONUS PROGRAM

First Transit's commitment to training and the ASE certification program is made tangible through our ASE Incentive Program. Offering access to all ASE testing at no cost to the employee, there are two ways that employees can earn per hour bonuses on each hour they work.

- While working to earn his/her first Master Technician Certification, the employee will receive a $.15 per hour bonus for each ASE test successfully completed – Upon earning his/her first Master Technician Certification, the employee will receive an additional $.15 per hour bonus
- While working to earn his/her second Master Technician Certification, the employee will receive a $.05 per hour bonus in addition to his/her regular rate

for each ASE test successfully completed – Upon earning his/her second Master Technician Certification, the employee will receive an additional $.05 per hour bonus

- Blue Seal Certification pays an additional $0.15 per hour to any technician who has at least one ASE test passed. The Blue Seal Shop bonus insures that employees who contribute toward the team based certification are rewarded for the recognition of their contribution to the Blue Seal Shop certification.

Please see a detailed chart of our ASE Bonus program structure included in the **Attachments** to this proposal.

MAINTENANCE TRAINING SUPPORT

First Transit employs two full-time travelling maintenance trainers who are highly experienced in all aspects of vehicle maintenance. These persons will visit the Rochester Public Transit location maintenance personnel to facilitate additional training for the team.

Additionally, we provide an additional benefit from our relationships with original equipment manufacturers (OEM) and national parts suppliers. Trainers including AC/Delco, Cengage Learning/Delmar, Noregon Diagnostics, General Motors, Ford, etc. visit our locations sites to instruct technicians in a variety of areas such as electrical and manufacturer specific training. The purpose of vendor training is to improve the skill set of technicians for improved service delivery.

2A-4-3 Maintenance Support Equipment

Describe the availability of sufficient maintenance support equipment to comply satisfactorily with all requirements of this RFP, including the requirement for a maintenance service vehicle.

In addition to providing maintenance equipment, First Transit will also provide a shop support vehicle equipped with an air compressor, salt spreader and other support tools. Examples of other shop equipment we will provide to augment those tools provided by the City include:

- ¾” impact wrench
- Toe in gauge (check alignment toe in)
- Belt tension gauge
- King pin press
- Ball joint press

- Fluke digital multimeter
- Tire dolly

First Transit will remain proactive in ensuring our Maintenance Manager Roger Ritchie and the technicians and subcontractor utility workers are supplied the necessary safety equipment and safety tools to successfully do their jobs. We also greatly appreciate the close partnership our local staff have developed with City maintenance staff in the use of many shared tools at the City maintenance facility.

As an incumbent provider of maintenance services for Rochester Public Transit, First Transit already has the support equipment in place to satisfy the requirements of this RFP, as well as a maintenance service vehicle.

2A-4-4 Subcontractors

A list of all subcontractors contemplated for use in the maintenance department is to be submitted with the proposal

While First Transit will utilize some maintenance vendors such as tow companies, we are not proposing to utilize any subcontractors to do the actual maintenance work on the buses. However, as noted elsewhere in our proposal, First Transit does plan to use a DBE vendor to service the fixed route and paratransit buses on a daily basis including fueling, cleaning and probing the fareboxes. Subject to City approval under a new contract, First Transit plans to utilize the Corporate Clean, LLC Company to perform the utility worker functions.

2A-4-5 Fleet Management Software 2A-4-5 Fleet Management Software

The Contractor will describe their experience with fleet management software including a description of software used and reports and processes developed to adequately track the performance of a fleet.

First Transit has years of extensive experience with all types of fleet maintenance software, including the JD Edwards software provided by the City of Rochester. We have become expert users of this important tool, ensuring that the capabilities of the system are maximized.

Nationwide, First Transit most typically utilizes the FirstBase Maintenance Information System

(FirstBase) software platform for vehicle maintenance files, reporting, and task supervision utilizing our Paperless Shop system. A transit-specific software designed for the unique requirements of a bus fleet, FirstBase captures and supplies critical data to support day-to-day management decisions. This provides our maintenance team with the information needed to keep each Rochester Public Transit vehicle in 'like new' condition.

FirstBase is a flexible system that simultaneously tracks and monitors the following maintenance activities:

- Preventive maintenance
- Repairs
- Parts inventory
- Technician productivity
- Vendors for outside repair
- Fuel and oil consumption and efficiency
- Overhead costs
- Training Records
- Data validation checks at data input
- Status reporting
- Completed work orders
- Work orders in progress
- Delays and reasons for delays
- Tailored reporting
- Exception reports

FirstBase includes multiple levels of concise reporting that assists technicians and management personnel with daily maintenance and supervisory tasks. It tracks our entire maintenance operation, searchable by fleet or individual vehicle, and consolidates tasks into the following reports:

- Low-level reports support technician activities
- Second-tier reports provide summary information for line management
- Third-tier reports supports higher-level management reviews and decision making

We implement FirstBase in all of our maintenance shops to allow our region and corporate teams to develop trend analysis reports across similar contracts and vehicle types. Roger Ritchie will review monthly reports to compare statistics between First Transit locations and to identify any recurring maintenance trends that will be addressed.

We generate database reports to identify problematic systems, repeat repairs, problem drivers, problem vehicles, and miles between road calls for each vehicle. First Transit's MIS system reports provide the following information on each vehicle:

- Monthly PM reports
- Total maintenance costs to date
- Inventory analyses
- Work analyses

- Special billing reports
- Number of work orders
- Number of service calls
- Number of vehicles receiving PM
- Downtime by vehicle category
- Summary and detail reports on work orders
- Exception reports
- Employee performance measurement
- Vehicle replacement analyses and recommendations
- Development of vehicle and equipment specifications
- Total cumulative and detail records of all subcontract work

2A-4-6 On-Board Video System

The proposal shall include a description of how the Contractor intends to maintain and ensure proper operational condition of all on-board video recording equipment

First Transit will continue to maintain the Safety Vision video systems in accordance with manufacturer specifications and service intervals in the City's buses.

Video systems are checked during each Preventive Maintenance inspection, inspecting hardware components as well as verifying that each camera is operational and the DVR is recording. Any parts found to be defective are replaced with OEM components.

2A-4-7 Vehicle Cleaning

The proposal shall describe the interior and exterior vehicle-cleaning program, including a staffing plan.

A clean vehicle adds to the positive image we want to convey to our passengers and the Rochester communities we serve. To preserve the favorable view of First Transit and the Rochester Public Transit, all vehicles operating in our fleet are cleaned on a daily basis by our DBE partner, Corporate Clean LLC. Corporate Clean LLC is a locally owned, Minnesota company with 20 years of experience. First Transit will provide in depth training to the Corporate Clean employees and ensure that their performance meets the strict standards of First Transit and the City.

Our vehicles undergo the following cleaning and washing procedures:

- Wash and scrub exterior
- Dust interiors
- Remove all trash from inside vehicle
- Clean interior windows
- Clean side panels, as needed
- Remove any graffiti/insect remains
- Mop floor and step wells

- Sweep floor to remove dirt, etc.
- Clean all stanchions and grab bars
- Wipe clean dash
- Repair or replace broken, cut, torn or vandalized components

All cleaning activities will be conducted at intervals required by the City of Rochester contract and/or in accordance with First Transit cleanliness standards ensuring that buses are clean and present a positive image to our public.

Task	Daily	Weekly	Other
Exterior			
Wash Exterior of Vehicle		**Twice (or more often as needed)**	
Clean wheels & rims (hand scrub rims)		**Twice (or more often as needed)**	
Interior			
Sweep (vacuum) floor	**X**		
Mop floor		**Once (or more often as needed)**	
Body Fluid Removal	**IMMEDIATE**		
Pick up paper, gum, debris & empty trash	**X**		
Clean Side Panels/Ceilings		**Once (or more often as needed)**	
Clean Seat Frames/Backs		**Once (or more often as needed)**	
Empty trash	**X**		
Clean inside of all windows (including windshield, mirrors)		**Once (or more often as needed)**	
Operator's Compartment (fare box, dash controls, dash board, front dash board, above driver area, etc.) Treat dashboard (ONLY) with anti-static spray	**X**		
Report all damaged seats	**X**		
Remove graffiti			**IMMEDIATE**

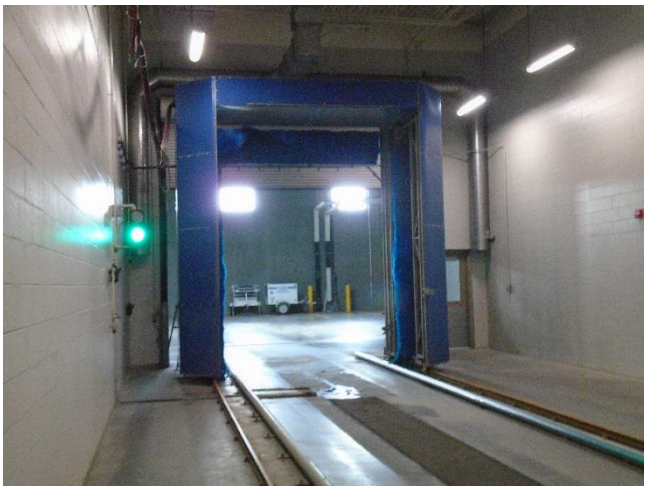
Inspect accident kit to ensure it is fully stocked and properly attached in the driver's compartment	**X**		
DETAIL Clean (At least every six months, more often when needed)			
Wash exterior of the vehicle			**Semi-Yearly**
Clean ceiling, grab rails, sidewalls, widows, ledges & dash/dusting, sweep and vacuum			**Semi-Yearly**
Sweep and vacuum interior thoroughly; remove gum and other substances that may be stuck to the floor, sidewalls, ceiling or seats			**Semi-Yearly**
Remove any and all foreign materials from the seats and other interior areas of the vehicle and clean the vehicle thoroughly, using industrial cleaner, aerosol all-purpose cleaner, aerosol or mixed concentrated window cleaners			**Semi-Yearly**
Remove all side and rear double and triple seat cushions, not requiring tools, for cleaning underneath; replace seats			**Semi-Yearly**
Wash and polish wheels			**Semi-Yearly**
Clean interiors of dome lights			**Semi-Yearly**
Protective coating applied to dash, tires, bumpers and rubber fender walls			**Semi-Yearly**

GRAFFITI AND VEHICLE REPAIR

We have a zero tolerance policy for graffiti, and have instituted a program to detect and remove it from the interior and exterior of all vehicles. Our drivers and maintenance

teams are committed to providing our passengers with clean, well-maintained, and graffiti-free vehicles.

Drivers perform pre-trip and post-trip inspections, paying close attention to dents, scratches, and graffiti that may negatively impact the appearance of the vehicles. Any blemishes are noted on inspection reports and forwarded to dispatcher/supervisors who update maintenance with any necessary work orders related to the drivers' findings.



2A-4-8 Service Calls

The proposal shall describe the approach to service call management and resource allocations to support the plan.

We are committed to maintaining on-time performance and exceptional service every day. When vehicles experience mechanical failures, we react with a sense of urgency but never lose focus on the safety of our passengers, drivers, and staff. Replacement vehicles help us resume normal route operations as soon as possible, while mechanical or body repairs are made quickly and thoroughly.

First Transit's driver and technician training programs have helped create greater attention to detail during day-to-day operations. Our highly trained drivers are the first line of defense against unscheduled maintenance. Thorough pre-trip vehicle inspections, careful monitoring of bus performance during service, and final post-trip inspections often detect minor faults before they become high priority maintenance issues.

Additionally, First Transit technicians are trained to efficiently perform preventive maintenance, and to take the important step of completing all possible repairs before the vehicle is returned to service. First Transit does not defer maintenance—reducing operating costs and leading to fewer vehicle defects.

In the event of a road call, the following procedures take place:

Step	Task
1	The dispatcher records all pertinent information on a service interruption report. This information is then passed on to the maintenance foreperson, who records it on a road call form. Information includes: • Driver name • Time of the incident • Location of vehicle and direction it was driving • Any input from the driver regarding the service failure • Remedial actions taken by the driver and results of those actions • Pertinent safety information
2	If the vehicle is stalled, a tow will be dispatched rather than a mechanic. If repairs can be made, the maintenance supervisor issues the road call form to an available mechanic, who will depart the bus yard no later than ten minutes after notification.
3	Once the mechanic arrives at the scene, the problem is verified and a road call report is filled out, providing a brief description of the defects and the location of the vehicle. The mechanic will determine the extent of the maintenance work needed and will make repairs, if possible. The mechanic and maintenance foreperson then decide on which of the following actions to take: • Return the vehicle to service if no defect is found, document the facts on the report and notify operations. • Return the vehicle to service if the mechanic succeeds in rectifying the problem in the field. • Switch out the vehicle in the event the repair would be too time consuming or unable to be repaired on the spot. When a vehicle is replaced, a work order will be generated immediately detailing the necessary repairs required for the vehicle to be made operational again. The vehicle will remain out-of-service until the repairs are made. Upon completion of repair the vehicle will be made available for service and parked. Upon returning to the yard the road call form will be completed and filed in a designated location for review by the Maintenance Manager.

Step	Task
4	Monthly road call reports are prepared by the maintenance clerk and are reviewed to identify areas of concern. A copy of the mechanics repair order will be attached to the service interruption report assist in the investigation process.

There are occasions when mechanical failures do not pose a safety risk to drivers and passengers. In those situations, the following steps are taken:

- The driver informs dispatch of the problem while continuing the route
- Dispatch arranges an exchange with a spare vehicle. Standby vehicles are scheduled and staged strategically every weekday as a contingency plan to minimize lost service

A failure analysis review is conducted on every road call performed. We will maintain accurate records of all service calls whether the vehicle is changed-out or repaired upon return.

2A-4-9 Pre-Trip Inspection

The proposal shall include a sample of the vehicle operator pre-trip inspection form or an electronic format meeting State requirements to be used and a detailed explanation of how this form will be utilized.

The daily vehicle inspections conducted by our operators are critical to achieving and maintaining First Transit and Rochester Public Transit standards of excellence. The importance of the operator's role within the maintenance process is emphasized in driver training and refresher courses. The operator's responsibilities include:

- The initial pre-trip inspection and the legal requirement to complete the daily vehicle inspection accurately and electronically
- The documentation of any abnormal noise, vibration or smell during operation, recorded in the driver's report
- The post-trip inspection, completed as the operator shuts down the unit and does a final interior and exterior inspection

If the unit cannot be repaired, maintenance will notify dispatch and a pre-tripped bus will be placed into service.

Supervisors oversee the PM inspection process, developing weekly schedules to take vehicles out of service for maintenance. Along with maintenance managers, our

supervisors will ensure that the fleet is adequately staffed and outfitted to provide uninterrupted service to our passengers and clients.

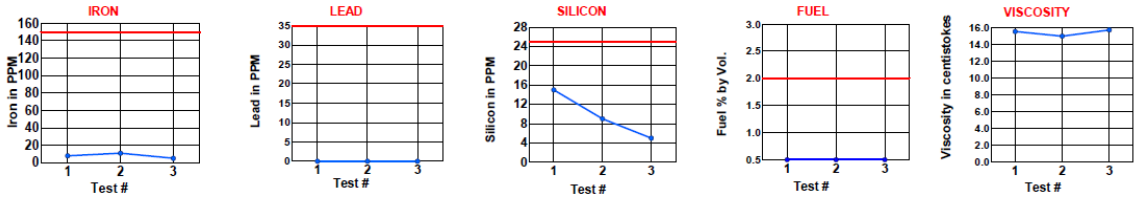
A sample of our driver inspection form has been included as an **Attachment**.

2A-4-10 Oil Analysis Program

Contractor's proposal shall provide a detailed explanation of their standard oil analysis program and how that program will comply with the City's minimum requirements.

Our technicians capture an oil sample drawn from the filler tubes 500 miles before the 6,000 mile interval for preventive maintenance oil changes, with the sample sent to the designated laboratory for analysis. Results are sent to Maintenance Manager Roger Ritchie for review, and corrective action if needed. If a discrepancy is found, the vehicle is pulled from service and the engine is diagnosed to determine the cause of the issue. Additionally, a sample of transmission fluid will be taken and sent out for analysis at an interval of 24,000 miles.

These reports are an important part of our PM program to identify engine problems before they turn into a catastrophic failure. Oil samples are a vital tool in identifying components that are about to fail, to proactively maintain the Rochester Public Transit fleet. Roger will read samples weekly, to ensure the thorough preventive maintenance is conducted.



As an example, an oil sample of a vehicle returned with an analysis evidencing high aluminum content. Upon investigation, the timing chains and guides were worn and aluminum particles were contaminating the oil. Had this issue not been addressed, a catastrophic failure would have occurred, which would require the replacement of the entire engine. Instead, the worn parts were replaced at minimal cost, which saved the engine, as well as the time, labor, and cost associated with such a repair.

As an **Attachment**, we have provided two oil sample reports pulled from the same vehicle. The first is a good sample, requiring no additional maintenance, while the other was a poor sample, which was proactively corrected to ensure both the safety of the vehicle for our passengers and cost-effective maintenance for our client.

2A-4-11 Warranty

The proposal shall explain the Contractor's approach to monitoring warranty, and their plan for obtaining maximum warranty coverage, especially in regard to crediting the City for warranty reimbursement. The explanation of the approach in this Segment is an overview of the process, which differs from the detailed plan that is submitted by the successful Contractor 60 days after award of the Contract.

We will continue to administer the warranty program, both for vehicles and parts, associated with management and repair of Rochester Public Transit's fleet. Such work will be reimbursed directly to the City of Rochester by the equipment manufacturer.

The Annual Services Schedule will be used to note any required warranty service and check that our technicians perform the service. This system will automatically notify our General Manager as to the expiration date of each warranty.

Manufacturer recalls or modifications to equipment will be used for updating and scheduling. Firstbase MIS will be used to monitor the vehicle during its warranty period and ensure that the vehicle performs at maximum efficiency and meets all manufacturers' safety requirements, as well as preventing subsequent costly "out-of-warranty" repairs.

2A-4-12 Additional Requirements

Contractor's proposal shall also detail, at a minimum, how Contractor will provide the following:

a) All tools and equipment necessary to perform the preventive maintenance and repair activities required by the Contract (The Facilities' shop has space for such tools, including mechanic-owned tool boxes.) (RFP Section 2.4.8)

As the incumbent maintenance provider, First Transit already has all the tools and equipment in place necessary to perform all preventative maintenance and repairs needed by the Rochester Public Transit fleet.

b) All tools and equipment necessary to perform periodic service and adjustments and make mechanical repairs

As the incumbent maintenance provider, First Transit already has all the tools and equipment in place necessary to perform periodic service, adjustments, and make mechanical repairs needed by the Rochester Public Transit fleet.

First Transit

Injury Prevention
If you cannot do it safely, don't do it

PMI AND SERVICING WORKSHEET - Heavy Duty	TYPE OF PM PERFORMED			
	A	B	C	

Date:	Unit No:	Asset No. NA	ECM Miles:	Odometer Meter:	Location Code:55436	W.O. #:

All items must be checked with reference to the detail included in SOP M002 and PM Manual and marked ✓= Serviceable, X = Defective, O = Repaired during Inspection and N/A = Not Applicable. The technician releasing the bus must print and sign their name and the Supervisor must sign the inspection sheet. Please complete in **BLUE / BLACK** ink and in capitals in accordance with SOP M002 and PM Manual.

The Fire Risk Assessment procedures have been added to the PMI and Servicing sheet, as indicated by the symbol "🔥", in order to condense and simplify the inspection process.

SECTION 1 – Preparation and Drive On (In Lot) Inspection		Defect. Cat. Ref.	✓ Box
1.0	Safety Inspection – Exterior Walk Around	-	
1.1	Check Driver's Pre-trip or DVIR/EVIR & Authorization Forms 🔥	-	
1.2	Check Condition of Operator's Area	3.12	
1.3	Check All Warning Light and Alarms 🔥	7.13 7.14	
1.4	Check Auto Trans Neutral Safety Switch 🔥	13.0	
1.5	Start Engine and Listen for Unusual Noises 🔥	7.01	
1.6	Check Starter Protection Circuit	13.0	
1.7	Check Low Air Warning Light and Buzzer	-	
1.8	Check Instruments and Horns 🔥	7.05 7.14 7.13	
1.9	Check Fast Idle	-	
1.10	Check Air Compressor Governor Setting 🔥	4.08	
1.11	Check Reverse Warning System	7.07	
1.12	Check Air Pressure Leakage 🔥	4.00	
1.13	Check Air Dryer Drain Valve 🔥	4.00	
1.14	Check Steering Wheel, Column and Operation	11.0 11.01 11.02	
1.15	Inspect Windshields, Mirror and Sun Visor Condition 🔥	3.05 3.34	
1.16	Check Wiper and Washer Operation	3.35	
1.17	Check Public Address (PA) System	-	
1.18	Check Door Operation	3.32	
1.19	Check Door Interlock System	3.32	
1.20	Check the Kneel System and Deploy Ramp	-	
1.21	Check Fare Box Operation and Mounting (If Applicable)	-	
1.22	Check Operation of All Other Accessories	-	
1.23	Wash Engine/Chassis	-	
1.24	Road Test: Check for Proper Operation 🔥	-	
1.25	Check/Record Oil Pressure / @1500 rpm _____ 🔥 Check/Record Water Temperature / _____ °	7.13	
1.26	Perform Brake Test	-	

SECTION 2 – Interior Circle Inspection		Cat. Ref.	✓ Box
2.1	Check Passenger Doors – Open and Close	3.32	
2.2	Inspect Seats, Hand Rails and Floor Covering	3.16 3.17 3.18	
2.3	Check Interior Lights – installation, security and wiring 🔥	7.08	
2.4	Check Interior Electrical Panels 🔥	7.12 7.13	
2.5	Check Stop Request System	-	
2.6	Check for Physical Damage, Water Leaks, and Graffiti	3.16 3.17 3.18	
2.7	Check for Informational and Instructional Decals	-	
2.8	Check Emergency Windows, Instructional Decal and Glass Condition	3.26 3.27	
2.9	Check Emergency Hatches	3.26	
2.10	Check HVAC System	16.08	
2.11	Check All Safety Equipment	3.15	
2.12	Check Wiring Under Dash 🔥	7.12 7.13 7.14-	

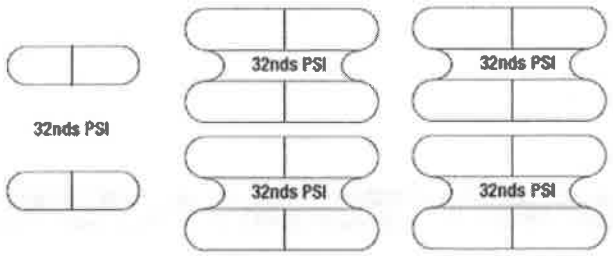
SECTION 3 – Exterior Circle Inspection		Cat. Ref.	✓ Box
3.1	Check Destination Sign and Run Box Operation & Mounting	3.25	
3.2	Inspect Mirror and Mountings 🔥	3.22	
3.3	Check for Physical Damage and Decals	3.01 3.21 3.29 3.81	
3.4	Check Exterior Compartment Doors	3.31	
3.5	Check Exterior Electrical Panels 🔥	7.12 7.13	
3.6	Check Fuel Tank Cap 🔥	9.06	
3.7	Check Lights and Reflectors 🔥	7.07 7.10 7.11	
3.8	Battery Inspection 🔥 Record Voltage here: _____	7.09	
3.9	Check Corrosion on Battery Cables and Hold-Downs 🔥	7.09	
3.10	Check License Plate, Permits and State Inspection Decals 🔥	-	
3.11	Check Wiper Blade and Arm Condition	3.35	
3.12	Check Bicycle Rack	-	

SECTION 4 – Engine Compartment Inspection		Cat. Ref.	✓ Box
4.1	Check Engine Compartment Condition for PMI / Fire Risk 🔥	-	
4.2	Check Engine Compartment Door and Lubricate	3.01 3.31	
4.3	Check Engine Compartment Lights and Gauges 🔥	-	
4.4	Test Coolant Condition Using Test Strips and Record Results; Inhibitor Test – Pass / Fail Freeze Point _____ ° F	-	
4.5	Record Antifreeze Protection Level Using Refractometer Refractometer Reading _____ ° F / C	-	
4.6	Pressure Test Cooling System and Check for Leaks	-	
4.7	Check Coolant Recovery System Condition and for Leaks 🔥	7.03	
4.8	Check Coolant Hose Condition 🔥	-	
4.9	Check Fan, Shroud and Radiator	8.27	
4.10	Check Alternator Mount, Condition & Wring Connections/Routing 🔥	7.03	
4.11	Check Transmission for Leaks	10 13.00	
4.12	Check All Belts for Condition, Alignment and Tension 🔥	8.27	
4.13	Check Exhaust System and Fire Insulation 🔥	8.20	
4.14	Check All Electrical Cables 🔥	7.12	
4.15	Check Filter Minder and Record Reading 🔥	8.18	
4.16	Check Intake System	8.18	
4.17	Inspect Operation of Fire Alarm (CPM Only) 🔥	-	
4.18	Inspect Turbocharger and Blower 🔥	10 8.18	
4.19	Inspect Air Compressor Mounting and Lines 🔥	4.07	
4.20	Check Air Supply Plumbing 🔥	-	
4.21	Check Power Steering and Hydraulic Fluid 🔥	10 11.08 11.09	
4.22	Check All Engine or Belt Drive Systems 🔥	8.27	
4.23	Check for Oil Leaks 🔥	10	
4.24	Check Compressor Oil Level and Check for Leaks	-	
4.25	Check A/C Compressor and Mounting	-	
4.26	Check A/C Hose Condition, Routing, Security and for Leaks	-	

SECTION 5 – Steering System Inspection	Cat. Ref.	✓ Box

5.1	Check Entire Steering System	10 11.00 1.01 1.02 1.03	

SECTION 6 – Tires and Wheel Inspection		Cat. Ref.	✓ Box
6.1	Inspect for Cuts and Tears	15.00	
6.2	Check and Record Air Pressure (use form below) ⚠	15.00	
6.3	Check Valve Stems and Caps	15.00	
6.4	Check and Record Tread Depth (use form below)	15.00	
6.5	Check for Mismatched Tread or Casing Design	15.00	
6.6	Check Sidewall Wear	15.00	
6.7	Check Dual Mating With Square	15.00	
6.8	Check Wheels for Cracks and Loose Lugs	15.00 15.01 15.02	
6.9	Check Tires for Irregular or Alignment Wear	15.00	
6.10	Check Outer Hubs Oil Level and for Leaks ⚠	10 15.00	
6.11	Check King Pins	1.01	
6.12	Check for Loose or Noisy Wheel Bearings ⚠	15.02 15.03	



SECTION 7 – Under Vehicle Inspection		Cat. Ref.	✓ Box
7.1	Check Ride Height	12.06	
7.2	Check Air Reservoir Discharge	4.19	
7.3	Check One-way Check Valves	4.19	
7.4	Check Low Air Warning /Double Check Valve - Primary	4.14 4.16 4.17	
7.5	Check Spring Brake Inversion Valve	4.20	
7.6	Check Air Pressure Build-Up Time and Record _____ PSIG in _____ Minutes	4.07	
7.7	Check Low Air Warning /Double Check Valve - Secondary	4.14 4.16 4.17	
7.8	Check Vibration Damper	-	
7.9	Check Engine and Transmission Mounts	8.18	
7.10	Check Starter for Proper Installation, Cable Routing and Security ⚠	7.01	
7.11	Check Bottom of Engine for Oil Leaks ⚠	10	
7.12	Check Transmission and Breather ⚠	10	
7.13	Check Differential Breather and Fluid ⚠	10	
7.14	Check Exhaust System ⚠		
7.15	Check Driveline, U-joint and Slip Yokes	14.01	
7.16	Check All body Mounts and Chassis Frame	3.59	
7.17	Check Major Ground Straps for Security, Corrosion and Correct Length ⚠	7.12	
7.18	Check Fuel Tank ⚠	9.06	
7.19	Check Suspension Components	12.00	
7.20	Check Brake Lining - LF _____ RF _____ - LR _____ RR _____	4.01 4.04	
7.21	Check Inner Wheel Seals for Leaks ⚠	10 15.02 15.03	
7.22	Determine If Auto Slack Adjuster Are Working and Record - LF_____RF_____ - LR_____RR_____	4.03 4.21 4.30	
7.23	Check Brake Chamber Plugs and Air Valves	4.00 4.03	
7.24	Check Brake Hoses ⚠	4.00 4.20	

SECTION 8 – PMI Report Completion		Cat. Ref.	✓ Box
8.1	Completion of PMI Report	-	

SECTION 9 – Completion of PMI		Cat. Ref.	✓ Box
9.1	Vehicle Returned to Predetermined Location	-	

NOTES:

"A" PMI SERVICING ITEMS (6,000 MILES or 180 DAYS)			
SECTION A – PM Servicing		Tech's initials	✓ Box

A.1	Check Video System		
A.2	Lubricate Chassis		
A.3	Check and Lubricate door Linkages		
A.4	Clean A/C Filters		
A.5	Drain Water From Fuel Water Separator (where applicable)		
A.6	Wheelchair Lift Inspection and Servicing		
A.7	Complete engine diagnostics and clear codes as completed		

"A" PMI SERVICING ITEMS (6,000 MILES or 180 DAYS) SECTION A - PM Servicing		Tech's Initial	✓ Box
A.1	Change Engine Oil and Filter ⚠ Take Oil Sample		
A 2	Change Primary Fuel Filter		
A.3	Change Secondary Fuel Filter		
A 4	Change Hydraulic filter		

"B" PMI SERVICING ITEMS (24,000 MILES or 12 MONTHS) SECTION B – PM Servicing		Tech's Initial	✓ Box
B.1	Check Toe-in and Record Reading		
B.2	Change Water Filter		
B.3	Service Crankcase Breather on 2010 and newer ⚠		
B.4	Change Auto Transmission Fluid (Synthetic Fluid Only) ⚠		
B.5	Change Power Steering Fluid and Filter (Synthetic Fluid Only) ⚠		
B.6	Drain Water (If Any) From Fuel Tank		

"C" PMI SERVICING ITEM (48,000 MILES OR 24 MONTHS)		Tech's Initial	✓ Box
C.1	Perform HVAC Inspection and Servicing		
C.2	Change Transmission Fluid (Synthetic) oil sample		
C.3	Change Rear Axle Fluid. (Synthetic)		
C.4	Rebuild Air Dryer.		
C.5	Wash out Heater and A/C cores		
C.6	Change Webasto Filter, Service Webasto.		

A/C HVAC Inspection and Service (Annual March- June)			
A/C	**Perform HVAC Inspection and Servicing**		

Preventive Maintenance Inspection (Sections 1 - 9 only):
I confirm that I have inspected this vehicle to the items listed on this form and against the criteria as detailed in First Transit PMI documentation. The items in the above inspection have been found satisfactory other than for the items marked with an "**X**". This signature certifies that the Inspection documented on this form "Meets or Exceeds" First Transit requirements of "US FMCSR Part 396.17-25'. Defects found have been recorded for repair in the Defect Worksheet.

Preventive Maintenance Inspection Servicing (Sections A - D only):
I further confirm that all servicing items were completed in accordance with manufacturer and First Transit policies.

PRINT VEHICLE INSPECTOR'S NAME HERE

SIGNATURE OF VEHICLE INSPECTOR

SIGNATURE OF SUPERVISOR

NOTES:

FOLLOW UP WORKSHEET

Unit #: _____ PMI WO#: _____	All defects must be categorized as;	R = Safety/DOT out-of-service Y = Deferrable until no later than next PMI G = Advisory defect (i.e. paint, decals, cosmetic, etc.)

Item No.	PMI Ref No.	M E B Defect Details:	Follow Up WO #	Circle Defect Cat. Ref.
1.				R Y G
Description of Repairs:			Initial	Date
Item No.	PMI Ref No.	M E B Defect Details:	Follow Up WO #	Circle Defect Cat. Ref.
2.				R Y G
Description of Repairs:			Initial	Date
Item No.	PMI Ref No.	M E B Defect Details:	Follow Up WO #	Circle Defect Cat. Ref.
3.				R Y G
Description of Repairs:			Initial	Date
Item No.	PMI Ref No.	M E B Defect Details:	Follow Up WO #	Circle Defect Cat. Ref.
4.				R Y G
Description of Repairs:			Initial	Date
Item No.	PMI Ref No.	M E B Defect Details:	Follow Up WO #	Circle Defect Cat. Ref.
5.				R Y G
Description of Repairs:			Initial	Date
Item No.	PMI Ref No.	M E B Defect Details:	Follow Up WO #	Circle Defect Cat. Ref.
6.				R Y G
Description of Repairs:			Initial	Date
Item No.	PMI Ref No.	M E B Defect Details:	Follow Up WO #	Circle Defect Cat. Ref.
7.				R Y G
Description of Repairs:			Initial	Date
Item No.	PMI Ref No.	M E B Defect Details:	Follow Up WO #	Circle Defect Cat. Ref.
8.				R Y G
Description of Repairs:			Initial	Date

INSPECTOR NOTE: Type of Defect M = Mechanical, E = Electrical and B = Body Defects. Select and group types of Defects together

I confirm that all defects are repaired in accordance with First Transit policies.

Technician's Signature:		Date:	
Approved By:	Continuation Sheet Used:	YES: ☐	NO: ☐
Supervisor's Signature		Date:	

First Transit

Injury Prevention
If you cannot do it safely, don't do it

PMI AND SERVICING WORKSHEET - Light Duty & Medium Duty	TYPE OF PM PERFORMED			
	A	B	C	DOT

Date:	Unit No:	Asset No. NA	Current Odometer:	Hour Meter:	Location Code:55436	W.O. #:

All items must be checked with reference to the detail included in SOP M002 and PM Manual and marked ✓= Serviceable, X = Defective, ⊗ indicates minor repair completed during inspection and N/A = Not Applicable. The technician releasing the bus must print and sign their name and the Supervisor must sign the inspection sheet. Please complete in **BLUE / BLACK** ink and in capitals in accordance with SOP M002 and PM Manual.

Fire Risk Assessment has been added to the PMI and Servicing sheet and indicated by the symbol "⚠" in an effort to condense and simplify the combined inspection process.
Complete the PMI (Sections 1 through 8) before starting any PM Servicing procedure (Sections B through F).

SECTION 1 – Preparation and Drive On (In Lot) Inspection		Defect. Cat. Re6.	✓ Box
1.0	Safety Inspection	-	
1.1	Check Driver's Pre-trip or DVIR/EVIR & Authorization Forms ⚠	-	
1.2	Check All Warning Lights and Alarms ⚠	-	
1.3	Check Automatic Transmission Neutral Start Operation ⚠	13.0	
1.4	Check Service Brakes	4.01 4.02 4.22 4.50	
1.5	Start Engine and Listen for Any Unusual Noises ⚠	7.01	
1.6	Check Instruments and Horns ⚠	7.05 7.13	
1.7	Check Fast Idle	-	
1.8	Check Starter Protection Circuit	13.0	
1.9	Check Reverse Warning System	-	
1.10	Check Parking Brake	4.27	
1.11	Check HVAC Switches and Other Controls	-	
1.12	Inspect Windshields, Mirror and Sun Visor Condition ⚠	3.05 3.34	
1.13	Check Wiper and Washer Operation ⚠	3.35	
1.14	Road Test: Check for Proper Operation	-	
1.15	Perform Brake Test	-	
1.16	Check/Record Oil Pressure / @1500 rpm _____ ⚠ Check/Record Water Temperature / _____ ° ⚠	7.13	
1.17	Check Door Operation ⚠	3.32	
1.18	Check Operation of All Other Accessories ⚠	-	

SECTION 2 – Interior Circle Inspection			
2.1	Check Condition of Operator's Area	3.12	
2.2	Check Accelerator and Brake Pedals	-	
2.3	Check Wiring Under Dash ⚠	-	
2.4	Check Interior Lights ⚠	7.08	
2.5	Check Interior Electrical Panels ⚠	-	
2.6	Check Stop Request System	-	
2.7	Check Fare Box Mounting (If Applicable)	-	
2.8	Check Seats, Seat Belts, Hand Rails and Floor Covering	3.16 3.17 3.18	
2.9	Check for Physical Damage, Water Leaks, and Graffiti	-	
2.10	Check Emergency Windows and Glass Condition	3.26 3.27	
2.11	Check Emergency Hatches	3.26	
2.12	Check All Safety Equipment	3.15	

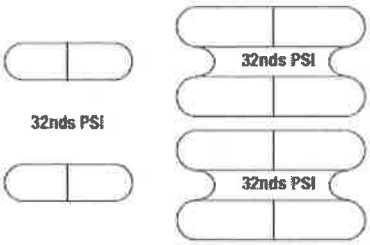
SECTION 3 – Exterior Circle Inspection			
3.1	Check Passenger Doors	3.32	
3.2	Inspect Step-well and Hand Rails	3.04 3.16	
3.3	Check Wheelchair Lift Operation		
3.4	Check Destination Sign and Run Box ⚠	3.25	
3.5	Inspect Mirror and Mountings ⚠	3.22	
3.6	Check for Physical Damage and Decals	3.01 3.21 3.29 3.81	
3.7	Check Wiper Blade and Arm Condition	3.35	
3.8	Check Exterior Compartment Doors	3.31	
3.9	Check Fuel Tank Cap ⚠	9.06	
3.10	Check Lights and Reflectors	7.07 7.10 7.11	
3.11	Check License Plate, Permits and State Inspection Decals	-	

SECTION 4 – Engine Compartment Inspection			✓ Box
4.1	Check Engine Compartment/Condition for Fire Risk ⚠	3.01 3.31	
4.2	Check Hood	-	
4.3	Check Fan, Shroud and Radiator	8.27	
4.4	Test Coolant System Using Test Strips and Record Results: Inhibitor Test – Pass / Fail Freeze Point_____ ° F	-	
4.5	Check Coolant Recovery System Condition & for Leaks ⚠	-	
4.6	Record Antifreeze Protection Level Using Refractometer Refractometer Reading_____ ° F / C	-	
4.7	Pressure Test Cooling System and Check for Leaks	-	
4.8	Check Coolant Hose Condition ⚠	-	
4.9	Check Alternator Mount and Condition ⚠	7.03	
4.10	Check Fuel Control and Transmission Connections ⚠	13	
4.11	Check Master Cylinder Fluid Level ⚠	10	
4.12	Check All Belts for Condition, Alignment and Tension ⚠	8.27	
4.13	Check Exhaust System ⚠	8.20	
4.14	Check Intake System ⚠	8.18	
4.15	Inspect Turbocharger ⚠	10 8.18	
4.16	Inspect Power Steering and Hydraulic Fluid ⚠	10 11.08 11.09	
4.17	Check All Engine or Belt Driven Components. ⚠		
4.18	Check for Leaks. ⚠		
4.19	Perform Battery Inspection. ⚠		
4.20	Check Battery Box Corrosion, Cables and Hold-Downs. ⚠	7.09	

SECTION 5 – Steering System Inspection			
5.1	Check Entire Steering System	10 11.00 1.01 1.02 1.03	

SECTION 6 – Tires and Wheel Inspection			

6.1	Check and Record Air Pressure (use form below) ⚠	15.00	
6.2	Check Valve Stems and Caps	15.00	
6.3	Check and Record Tread Depth (use form below)	15.00	
6.4	Check for Mismatched Tread or Casing Design	15.00	
6.5	Check Sidewall Wear	15.00	
6.6	Inspect for Cuts and Tears	15.00	
6.7	Check Dual Mating With Square	15.00	
6.8	Check Wheels for Cracks and Loose Lugs	15.01 15.02	
6.9	Check Tires for Irregular or Alignment Wear	15.00	
6.10	Check Outer Hubs for Leaks ⚠	10 15.00	



SECTION 7 – Under Vehicle Inspection			
7.1	Check Vibration Damper	-	
7.2	Check Engine and Transmission Mounts	8.18	
7.3	Check Starter ⚠	7.01	
7.4	Check Bottom of Engine for Fluid Leaks ⚠	10	
7.5	Check Transmission for Leaks ⚠	10	
7.6	Check Differential Breather and Fluid ⚠	10	
7.7	Check Exhaust System ⚠	8.20	
7.8	Check Driveline, U-joint and Slip Yokes	14.01	
7.9	Check All Body Mounts and Chassis Frame	3.59	
7.10	Check Security, Integrity and Length of Ground Straps ⚠	9.06	
7.11	Check Fuel Tank ⚠	9.06	
7.12	Check Suspension Components	12.00	
7.13	Check Brake Pad Thickness and Rotor for Wear ⚠ - LF _____/_____ RF _____/_____ - LR _____/_____ RR _____/_____	4.27	
7.14	Check Brake Hoses ⚠	10 4.22	
7.15	Check King Pins	1.01	
7.16	Check for Loose or Noisy Wheel Bearings ⚠	15.02 15.03	

SECTION 8 – PMI Report Completion			
8.1	Completion of PMI Report	-	

SECTION 9 – Completion of PMI			
9.1	Vehicle Returned to predetermined location	-	

"A" PMI SERVICING ITEMS SECTION A – PM Servicing		Tech's initials	✓ Box
A.1	Change Oil Filters ⚠		
A.2	Drain Engine Oil ⚠		
A.3	Check Transmission Fluid ⚠	10	
A.4	Lubricate Chassis		
A.5	Replace or Clean A/C Filters		
A.6	Drain Water from Fuel Water Separator (where applicable)		
A.7	Change Primary Fuel Filter ⚠		
A.8	Lube all pivoting Mechanisms		

"B" PMI SERVICING ITEMS (12 MONTH) SECTION B PM Servicing		Tech's Initial	✓ Box
B.1	Service Crankcase Breather		
B.2	Change Water Separator – Secondary Fuel Filters ⚠		
B.3	Change Automatic Transmission Fluid ⚠		
B.4	Change Power Steering Fluid and Filter ⚠		
B.5	Complete Engine Diagnostics and Clear Codes when Completed		

"C" PMI SERVICING ITEMS (24 MONTH) SECTION C – PM Servicing		Tech's Initial	✓ Box
C.1	Check and Lubricate Door Linkages		
C.2	Check Toe-In and Record Reading		
C.3	Service Davco Type Water Separators (Secondary Fuel Filter) ⚠		
C.4	1ST "C" PMI ONLY: Tune Up Per Engine Mfg's Specifications		
C.5	Change Differential Fluid ⚠		

Preventive Maintenance Inspection (Sections 1 - 9 only):
I confirm that I have inspected this vehicle to the items listed on this form and against the criteria as detailed in First Transit PMI documentation. The items in the above inspection have been found satisfactory other than for the items marked with an "**X**". This signature certifies that the Inspection documented on this form "Meets or Exceeds" First Transit requirements of "US FMCSR Part 396.17-25". Defects found have been recorded for repair in the Defect Worksheet.

Preventive Maintenance Inspection Servicing (Sections A - D only):
I further confirm that all servicing items were completed in accordance with manufacturer and First Transit policies.

PRINT VEHICLE INSPECTOR'S NAME HERE

SIGNATURE OF VEHICLE INSPECTOR

SIGNATURE OF SUPERVISOR

Notes:

FOLLOW UP WORKSHEET

Unit #: _____ PMI WO#: _____	All defects must be categorized as;	**R** = Safety/DOT out-of-service **Y** = Deferrable until no later than next PMI **G** = Advisory defect (i.e. paint, decals, cosmetic, etc.)

Item No.	PMI Ref No.	M E B Defect Details:	Follow Up WO #	Circle Defect Cat. Ref.
1.				R Y G
Description of Repairs:			Initial	Date
Item No.	**PMI Ref No.**	**M E B Defect Details:**	**Follow Up WO #**	**Circle Defect Cat. Ref.**
2.				R Y G
Description of Repairs:			Initial	Date
Item No.	**PMI Ref No.**	**M E B Defect Details:**	**Follow Up WO #**	**Circle Defect Cat. Ref.**
3.				R Y G
Description of Repairs:			Initial	Date
Item No.	**PMI Ref No.**	**M E B Defect Details:**	**Follow Up WO #**	**Circle Defect Cat. Ref.**
4.				R Y G
Description of Repairs:			Initial	Date
Item No.	**PMI Ref No.**	**M E B Defect Details:**	**Follow Up WO #**	**Circle Defect Cat. Ref.**
5.				R Y G
Description of Repairs:			Initial	Date
Item No.	**PMI Ref No.**	**M E B Defect Details:**	**Follow Up WO #**	**Circle Defect Cat. Ref.**
6.				R Y G
Description of Repairs:			Initial	Date
Item No.	**PMI Ref No.**	**M E B Defect Details:**	**Follow Up WO #**	**Circle Defect Cat. Ref.**
7.				R Y G
Description of Repairs:			Initial	Date
Item No.	**PMI Ref No.**	**M E B Defect Details:**	**Follow Up WO #**	**Circle Defect Cat. Ref.**
8.				R Y G
Description of Repairs:			Initial	Date

INSPECTOR NOTE: Type of Defect M = Mechanical, E = Electrical and B = Body Defects. Select and group types of Defects together

I confirm that all defects are repaired in accordance with First Transit policies.

Technician's Signature:		**Date:**	
Approved By:	**Continuation Sheet Used:**	**YES:** ☐	**NO:** ☐
Supervisor's Signature		**Date:**	

2016 40' GILLIG

MAINTENANCE SCHEDULE

Engine (ISL)

Air intake piping - Check	Daily
Cooling fans - Check	Daily
Crankcase breather tube - Check	Daily
Air tanks and reservoirs - Check	Daily
Coolant level - Check	Daily
Racor fuel/water separator fuel filter - Drain	Daily
Lubricating oil level - Check	Daily
DEF (diesel exhaust fluid) level - Check	Daily
After-treatment exhaust piping - Check	Daily
Air cleaner restriction indicator - Check	Daily*
Engine oil and filter - Change	Every 6,000 miles**
Radiator - Inspect for leaks, dirt, debris	Every 6,000 miles
Hoses and hose clamps - Check	Every 6,000 miles
Surge tank and pressure relief cap - Check	Every 6,000 miles
Charge air piping - Check	Every 6000 Miles ~~Every 7,500 miles~~
Charge air cooler - Check	Every 6000 Miles ~~Every 7,500 miles~~
Mounting hardware - Check	Every 10,000 miles
Racor fuel filter element - Change	Every 6000 Miles ~~Every 10,000 miles~~ (or every 2nd oil change). See "Fuel Filter(s)" in Engine chapter
Standard secondary fuel filter - Change	Every 6000 Miles ~~Every 15,000 miles~~
Coolant SCA concentration level - Check	Every 15,000 miles (or every 6 months)
Coolant filter - Change	Every 24000 miles ~~Every 15,000 miles~~
Adjustable floor pedals - Service	Every 25,000 miles (See "Adjustable Floor Pedals" in the Engine chapter.)
Belt tensioners, automatic - Check	Every 6000 Miles ~~Every 30,000 miles~~
Drive belts - Check	Every 6000 Miles ~~Every 30,000 miles~~

(Continued on next page)

Engine (ISL, Continued)

Engine / engine compartment - Steam clean ..... Every 6000 Miles ~~Every 60,000 miles or as needed~~

Engine mounts - Check ..... Every 60,000 miles

Crankcase breather element - Change ..... Every 48000 miles ~~Every 60,000 miles~~

Vibration damper - Inspect ..... Every 60,000 miles

Air compressor discharge lines - Clean ..... Every 60,000 miles

Radiator hoses - Check ..... Every 60,000 miles

Cooling system - Change‡ ..... Every 80,000 miles

Coolant - Test for replacement limits ..... Every 150,000 miles (or yearly)

Engine brake assembly - Adjust ..... Every 150,000 miles

Overhead set - Adjust§ ..... Every 150,000 miles

DPF (diesel particulate filter) - Clean ..... Every 200,000 miles¶. See "Exhaust System" in the Engine chapter.

After-treatment DEF dosing unit filter - Change ..... Every 48000 miles

**Replace the primary air filter element according to the air restriction indicator. Replace the safety filter once to every three primary filter changes.*

***Interval varies according to operating conditions. Refer to the Cummins ISL* **Operation and Maintenance Manual.**

† Charge air cooler should be cleaned more often in areas with severe corrosion problems.

‡ Extended coolant drain/flush/fill intervals may be followed when certain requirements are met. For information on these requirements, refer to the "Cummins Coolant Requirements and Maintenance" service bulletin included on your GILLIG documentation CD.

§ Reset valve lash, if needed, to nominal specifications.

¶ DPF (Diesel Particulate Filter) cleaning is required at 150,000 miles if CI-4 (CES 20078) engine oil is used.

Exhaust

Check for exhaust restrictions and leaks.....Every 12,000 miles

Check for loose exhaust fasteners and straps.....Every 12,000 miles

Visually inspect exhaust bellows and alignment .....Every 12,000 miles

Remove bellows for complete inspection and realignment .....Every 50,000 miles or 1 year, whichever comes first

Clean DPF (diesel particulate filter) .....Every 200,000 miles*. See "Exhaust System" in the Engine chapter.

Change after-treatment DEF dosing unit filter.....Every 200,000 miles

Replace exhaust bellows .....Every 250,000 miles

**** DPF (Diesel Particulate Filter) cleaning is required at 150,000 miles if CI-4 (CES 20078) engine oil is used.***

Transmission (ZF)

The transmission fluid and filter change interval varies depending on the maximum transmission sump temperature encountered during bus operation. Please refer to ZF *List of Lubricants TE-ML 20*, available at www.zf.com, for the specific brands and types of transmission fluids approved for each class.

Maximum transmission sump temperature 212°F:

Change transmission fluid *and filter* ..... Every 48000 Miles ~~Every 149,000 miles or every 3 years~~, whichever comes first.*
Class 20E or 20F fluid is required.

Maximum transmission sump temperature 221°F:

Change transmission fluid *and filter* ..... Every 111,500 miles or every 3 years, whichever comes first.*
Class 20E or 20F fluid is required.

Maximum transmission sump temperature 230°F:

Change transmission fluid *and filter* ..... Every 74,500 miles or every 3 years, whichever comes first.*
Class 20F fluid is required.

Inspect transmission mounts ..... Every 48000 Miles ~~Every 60,000 miles~~

** Intervals may change after publication of this manual. Please refer to* **List of Lubricants TE-ML 20***, available at www.zf.com, to ensure that you use the current manufacturer-recommended intervals. Local conditions, severity of operation, or duty cycle may require more frequent fluid/filter change intervals!*

Driveline

Lubricate U-joints and slip splines ..... Every 6000 Miles ~~Every 8,000 miles~~

Check driveline fastener torque ..... Every 24,000 miles

Hydraulic System

Replace hydraulic fluid filter element ..... Every 6,000 miles

Replace hydraulic fluid ..... Every 24000 miles ~~Every 18,000 miles~~

Check hydraulic pump mounting bolts ..... Every 24,000 miles

Drive Axle (71163)

Check gear oil in drive axle*	Every 6000 Miles ~~Every 3,000 miles~~
Change gear oil in drive axle*†	
~~City service~~	~~Every 25,000 miles or annually~~ (whichever comes first)
City service with synthetic oil	Every 48000 miles ~~100,000~~ miles or every 2 years (whichever comes first)
~~Highway service~~	~~Every 100,000 miles or annually~~ (whichever comes first)
~~Highway service with synthetic oil~~	~~Every 250,000 miles or every 4~~ years (whichever comes first)
Inspect seals and gaskets for leaks	Every 6,000 miles
Check axle mounting fastener torque	Every 24,000 miles
Check axle flange nut torque	Every 24,000 miles
Inspect and Grease wheel end hub bearings	Every 30,000 miles or annually (whichever comes first)
Clean differential breather	Every 42,000 mile

** No break-in oil change is needed. Check magnetic drain plugs, breathers, seals, and temperature indicators during regularly-scheduled oil checks and changes.*

† Fill Meritor axles with Meritor-specified lubricants only! See Specifications chapter for more information.

Steering/Front Axle (FH-946)

Check pitman arm for wear or damage	Every 6,000 miles
Grease drag link and steering arms	~~Every 10,000 miles~~ Every 6000 Miles
Lubricate steering column U-joints and shaft	Every 12,000 miles
Check steering gear mounting bolt torque	Every 12,000 miles
Check tie rod ends for wear and loose nuts	~~Every 12,000 miles~~ Every 6000 Miles
Check steering arms for wear or damage	~~Every 12,000 miles~~ Every 6000 Miles
Check drag link anti-tilt bushing/seal for wear or damage	Every 12,000 miles
Check steering gear mounting plate for damage	Every 12,000 miles
Lubricate steering intermediate shaft	~~Every 12,000 miles~~ Every 6000 Miles
Check for excessive hub end play*	Every 15,000 miles or every 6 months
Grease behind output shaft dirt-and-water seal	Every 24,000 miles
Inspect steering shaft seal	Every 24,000 miles
Grease wheel bearings	Every 30,000 miles
Grease tie rod arm ends	Every 50,000 miles
Grease knuckle pins (king pins)	~~Every 50,000 miles~~ Every 6000 Miles
Check for excessive hub end play*	Every 100,000 miles or annually

** Refer to Meritor Maintenance Manual* **MM-0409** *for inspection procedure and specifications.*

Wheels

Check wheel stud nut torque	First 100 miles, then every 10,000 miles

Brakes

Inspect brake air hoses for leaks or damage	Every 6,000 miles
Check brake chamber for air leaks and corrosion	Every 6,000 miles
Check brake pads and rotors for signs of damage and wear	Every 6,000 miles
Visually check the caliper housing, bridge, and carrier for damage or loose or missing fasteners	Every 6,000 miles
Check torque plate for signs of wear, damage, loose or missing fasteners	Every 6,000 miles
Check automatic brake adjuster operation	~~Every 12,000 miles~~ Every 6000 Miles
Perform brake valve preventive maintenance	Every 25,000 miles
Service adjustable floor pedals	Every 25,000 miles (See "Adjustable Floor Pedals" in the Engine chapter.)
Disassemble, clean, and inspect brake valve	Every 100,000 miles

Rear Suspension

Re-torque suspension fasteners ..... First 5,000 miles, then every 50,000 miles
Check suspension ride height ..... Every 6,000 miles
Check air springs for wear and damage ..... Every 24,000 miles
Check shocks and bushings for leaks and wear ..... ~~Every 24,000 miles~~ Every 6000 Miles
Check for loose or damaged mounting parts ..... ~~Every 24,000 miles~~ Every 6000 Miles
Check kneeling system operation ..... ~~Every 24,000 mile~~ Every 6000 Miles
Inspect suspension bushings and all suspension components
for damage, looseness, and wear or cracks* ..... Every 50,000 miles

**** Immediately replace parts if any damage or wear is detected.***

Front Suspension

Re-torque suspension fasteners ..... First 5,000 miles, then every 50,000 miles
Check air springs for wear and damage ..... Every 24,000 miles
Check shocks and bushings for leaks and wear ..... Every 24,000 miles
Check external bump stops for wear and damage ..... Every 24,000 miles
Check for proper ride height ..... Every 24,000 miles
Check for loose or damaged mounting parts ..... Every 24,000 miles
Test height control valve operation ..... Every 24,000 miles
Test kneeling system operation (if equipped) ..... Every 24,000 miles
Inspect suspension components for damage, looseness,
and wear or cracks* ..... Every 50,000 miles

**** Immediately replace parts if any damage or wear is detected.***

Air System

Check air compressor mounting fasteners ..... Every 6,000 miles

Check air tank mounting fasteners ..... Every 6,000 miles

Perform brake valve preventive maintenance ..... Every 25,000 miles

Inspect air compressor lines ..... Every 42,000 miles

Check compressor discharge and inlet for carbon ..... Every 42,000 miles*

Check compressor operation ..... Every 42,000 miles*

Check all air lines and fittings for leaks ..... Every 42,000 miles

Test governor operation and check for leakage ..... Every 50,000 miles

Disassemble and clean PPV's ..... Every 50,000 miles

Disassemble, clean, inspect single check valves ..... Every 50,000 miles

Rebuild PP-1 parking brake valve ..... Every 50,000 miles

Rebuild QR-1, SR-1, R-12DC, R-14, double check valves ..... Every 100,000 miles

Rebuild air compressor ..... Every 200,000 miles

**** Duty cycles higher than 25% require more frequent compressor inspection.***

Air Dryer (SKF HCT-2000)

Drain reservoirs, if oil or moisture is present, perform functionality tests ..... Every 30 days

Test air dryer operation and check for leaks ..... Every 25,000 miles

Check air dryer mounting fasteners ..... Every 25,000 miles

Rebuild using OEM kit ..... Every 14–18 months

Check condition of safety valve, replace as needed ..... Every two years or as needed

Check continuity of heater with an ohmmeter, replace if no continuity is present ..... Every two years or as needed

Electrical

NOTICE

The following preventive maintenance intervals may not include all systems that may be on your specific vehicle.

See the chart in "Adjusting Maintenance Intervals" at the beginning of this chapter to convert mileage intervals to time intervals.

Misc. Components & Functions

Check doors, sensitive edge and interlock systems, and ramp	Daily
Check ramp external flasher and alarm during function	Daily
Perform exterior lighting test	Daily
Test light bar indicators and lights on dash	Daily
Check stop request and PA systems	Daily
Check kneeling system	Daily
Check dash controls for proper operation	Daily
Check gauges	Daily
Check for system error codes: engine, trans., ABS, com fault, etc	Daily
Check interior lights and hazard lights operation	Daily
Check throttle and brake pedal for dirt, debris, corrosion, and function	Every 6,000 miles
Check power cable connections	Every 6,000 miles
Check engine compartment lights for function and lenses	Every 6,000 miles
Test linear heat detector wires in engine compartment	Every 6,000 miles
Check emergency exit operation of doors	Every 6,000 miles
Perform obstruction and extraction tests on sensitive edge*	Every 4 months
Check lubricated battery tray slides and rollers	Every 12,000 miles
Check and adjust headlight aim	Every 60,000 miles

* See "Sensitive Edge Strip" in the Body and Interior chapter.

Jump Start Connections

Verify the boot is in place	Every 6,000 miles
Inspect jump start cables for routing, chafing, and loose or broken clamps	Every 6,000 miles
Inspect jump start housing for damage and cracks*	Every 6,000 miles
Inspect jump start terminal ends for corrosion	Every 6,000 miles
Clean terminal ends and apply an anti-corrosion protectant	Annually

* If any cracks or chips in the housing are found, replace housing immediately.

Electrical (Continued)

Batteries

Check cables*, hold downs, and boots	Every 6,000 miles
Check open circuit voltage with DMM & service any that are low (<12.4 VDC) & check system	Every 6,000 miles
Clean batteries of dirt and acid	Every 6,000 miles
Inspect for bulging case, damaged terminals	Every 6,000 miles
Check battery connection torques*	Every 12,000 miles
Test conductance with Midtronic tester per manufacturer's procedures	Every 12,000 miles
Check voltage regulator settings	Every 24,000 miles

* See torque values in the "Power Cables" schematic in the *Electrical Schematics Manual*.

Electric Cooling System Fans

Inspect fan blades and radiator core for debris	Daily
Inspect protective caps and retaining rings	Every 6 months
Inspect Power and Ground stud connections for corrosion	Every 6 months
Remove Power and Ground cables and inspect for damage or corrosion, clean and reapply dielectric grease or liquid electric tape and re-torque cables*	Every 6 months

*Never attempt to service electric fans without understanding troubleshooting and servicing instructions.

Starter

Inspect cables for damage or corrosion	Every 6,000 miles
Remove cables, reapply Kopr-Shield, and re-torque cables*	Every 36,000 miles
Inspect bolts, cable support clamp, and brushes	Every 36,000 miles
Check starter engagement protection circuit	Every 36,000 miles
Check pinion teeth for damage	Every 120,000 miles†
Service starting motor	Every 120,000 miles†

* See torque values in the "Power Cables" schematic in the *Electrical Schematics Manual*.

† Every 120,000 miles or every 30,000 starts. If you detect *any* chips or damage on the ring gear, replace the ring gear at the same time you replace the starter motor.

Electrical (Continued)

Alternator

Inspect cables for damage or corrosion .....Every 6,000 miles
Inspect support brackets at alternator, and torque bolts* .....Every 6,000 miles
Check alternator for dirt buildup and grime .....Every 6,000 miles
Remove cables, reapply Kopr-Shield, and re-torque cables* .....Every 36,000 miles
Change bearings and complete teardown check .....at Engine overhaul

* See torque values in the "Power Cables" schematic in the *Electrical Schematics Manual*.

Rear Main Fuse Panel (Flag)

Inspect cables for damage or corrosion .....Every 6,000 miles
Remove cables, reapply Kopr-Shield, and re-torque cables and fuses* .....Every 36,000 miles

* Verify that no washers are in the current path.

AC/Heater Unit

Inspect power and ground cables .....Every 6,000 miles
Inspect all electrical connections inside of return air. .....Every 6,000 miles
Remove cables, reapply Kopr-Shield, and re-torque cables and fuses .....Every 36,000 miles
Remove cables, reapply Kopr-Shield, and re-torque cables at motors .....Every 36,000 miles

Chassis and Engine Harnesses

Inspect for dirt and salt buildup in chassis and clean.....Every 12,000 miles
Check clamps, chafing .....Every 12,000 miles
Inspect for heat damage around hot areas, such as the turbo, muffler, etc.....Every 12,000 miles
Clean grounds, reinstall with Kopr-Shield, and torque.....Every 36,000 miles

Battery Equalizer

Inspect for dirt and corrosion .....Every 6,000 miles
Remove cables, clean, apply Kopr-Shield & check torque connections .....Every 36,000 miles

Battery Disconnect Switch

Inspect for dirt and corrosion .....Every 6,000 miles
Remove cables, clean, apply Kopr-Shield & check torque connections .....Every 36,000 miles
Check micro-switch for function .....Every 36,000 miles
Check battery switch for function and for continuity in open and close .....Every 36,000 miles

Electrical (Continued)

Front Main Fuse Panel (Flag)

Inspect cables for damage or corrosion .....Every 6,000 miles

Remove cables, reapply Kopr-Shield, and re-torque cables and fuses*. Verify that no washers are in the current path .....Every 36,000 miles

* See torque values in the "Power Cables" schematic in the *Electrical Schematics Manual*.

Rear Main I/O Panel Inside

Inspect power and ground cables, fuses, and circuit breakers .....Every 6,000 miles

Re-torque cables .....Every 36,000 miles

Front Main I/O Panel Inside

Inspect power and ground cables, fuses, and circuit breakers .....Every 6,000 miles

Re-torque cables .....Every 36,000 miles

Exit Door I/O Panel

Inspect power and ground cables, fuses, and circuit breakers .....Every 6,000 miles

Front Console I/O Panel

Inspect power and ground cables, fuses, and circuit breakers .....Every 6,000 miles

Driver's Heater / Fans / Booster Fan

Inspect power and ground cables, switches, fuses, and circuit breakers .....Every 60,000 miles

Inspect/replace brushes if equipped .....Every 80,000 miles

Ceiling Harnesses

Check clamps, chafing, lamp sockets, ballast, etc. .....Every 60,000 miles

Console and Dash

Check clamps, chafing, lamp sockets, switches, etc. .....Every 60,000 miles

Body and Chassis

Lubricate wiper arm pivot posts .....Every 6,000 miles

Inspect body for fluid leaks.....Every 6,000 miles

Wash underbody and inspect for damage and corrosion.....~~Every 12,000 miles or as needed~~Every 6000 Miles

Inspect fenders and splash aprons.....Every 24,000 miles

Check wiper arm adjustment .....Every 24,000 miles

Inspect welds on frame, brackets, etc. .....Every 30,000 miles

Check bumper mounting fastener torque.....Every 42,000 miles

Check floor covering seam sealing .....Every year

Reseal floor covering .....Every 3 years or as needed

** Washing and inspection of the underbody should be done more often in areas with severe corrosion problems. If your city, county, or state uses magnesium chloride as a de-icer, it is ESSENTIAL that the underbody and engine compartment be washed and inspected frequently. GILLIG does not warrant its vehicles (structure, body, metal components, electrical and electronic components, etc.) against corrosion/deterioration caused by magnesium chloride or similar de-icers unless the preventive maintenance described in Chapter 11 is adhered to, including the annual reporting to GILLIG. See your specific warranty documents for details.*

Doors

Check door panel alignment .....Every 6,000 miles

Inspect door seals for leaks or damage .....Every 6,000 miles

Inspect door sensitive edge .....Every 6,000 miles

Test emergency door release mechanisms .....Every 12,000 miles

Check door motor and base plate fasteners.....Every 18,000 miles

Inspect lower door shaft pivot bearings - Check for excessive radial play (>0.06 inch) of pivot bearing within door shaft*.....Every 250,000 miles

Check for excessive radial play (>0.06 inch) of pivot bearing within pivot housing (door or bracket)* .....Every 250,000 miles

** Replace pivot assembly if play is excessive.*

Wheelchair Ramp (Lift-U LU18 Fold-Out)*

Clean ramp platform surface† ..... As needed and every 6,000 miles
Clean rising floor surface† ..... As needed and every 6,000 miles
Clean drive platform assembly (under the rising floor)† ..... As needed and every 6,000 miles
Check ramp platform surfaces (both sides) ..... Every 6,000 miles
Check rising floor surface ..... Every 6,000 miles
Check curb-side lugs, bearings, and curb-side rollers ..... Every 6,000 miles
Check chain/counterbalance assembly ..... Every 6,000 miles
Check drive train, sprockets, and couplings ..... Every 6,000 miles
Check stow latch mechanism and solenoid linkage ..... Every 6,000 miles
Check stow limit switch ..... Every 6,000 miles
Check all electrical cables ..... Every 6,000 miles
Check structural integrity of frame and ramp assembly ..... Every 6,000 miles
Clean and lubricate drive chain and chain/counterbalance assy.‡ ..... Every 6,000 miles
Lubricate stow latch bushings with thin coating of anti-seize ..... Every 6,000 miles
Check for rust§ ..... Every 6,000 miles

** Refer to the "General Maintenance" section of your Lift-U* **Technical Reference Manual.**

† To achieve maximum performance and reliability and to aid passenger safety, some ramp components need to be cleaned on a regular basis in addition to being cleaned during the routine maintenance intervals. Avoid direct pressure washing. Pressure washing forces water into the electrical drive motor, clutch, latch solenoid, electrical cable assemblies, and components, causing corrosion and/or electrical short circuiting that may damage these or other components and cause the ramp to malfunction.

‡ Part Number: 82-18635-000 corrosion control grease

§ Refer to "Rust Prevention" in the "General Maintenance" section of your Lift-U manual.

Air Conditioning

Check refrigerant charge	Every 6,000 miles
Visually inspect refrigerant hoses & tubing	Every 6,000 miles
Visually inspect for refrigerant or oil leaks	Every 6,000 miles
Check dry eyes in bottom receiver sight glass and/or liquid line sight glass for moisture	Every 6,000 miles
Visually inspect clutch armature for wear	Every 6,000 miles
Inspect compressor drive belt & check tension	Every 6,000 miles
Check compressor oil level & color	Every 6,000 miles
Visually inspect unit for loose, damaged, or broken parts	Every 6,000 miles
Clean or replace return air filter‡	Every 6,000 miles or every 3 Months, whichever comes first
Inspect condenser & evap coils for cleanliness	Every 6,000 miles
Install service gauge manifold set & check system pressures, temperatures, & suction line	Every 18,000 miles
Check clutch air gap (X426, X430 only)	Every 18,000 miles
Check evap/heater blower & condenser fan motor speed, voltage, & amps*	Every 24,000 miles
Lubricate evaporator fan shaft bearings*	Every 24,000 miles
Inspect evap/heater blower & condenser fan motor brushes, commutator, bearings*	Every 24,000 miles
Check EPR valve operation*	Every 48,000 miles
Replace liquid line dehydrator*	Every 48,000 miles
Check hot water control valve (if installed)*	Every 48,000 miles
Steam clean compressor & clutch*	Every 48,000 miles
Check clutch coil resistance & voltage*	Every 48,000 miles
Lubricate clutch bushing*	Every 48,000 miles
Check high & low pressure cutouts*	Every 48,000 miles
Check compressor oil for acidity*	Every 48,000 miles
Check compressor efficiency*	Every 48,000 miles
Check compressor oil pump pressure*	Every 48,000 miles
Check thermostat cycle sequence on all modes*	Every 48,000 miles
Clean control panel area & return air sensor with compressed air*	Every 48,000 miles
Check heater booster pump motor operation*	Every 48,000 miles

Air Conditioning (continued)

Inspect wires/terminals for damage/corrosion* ..... Every 48,000 miles

Check condenser pressure switch/condenser motor hi/low speed operation (if equipped)* ..... Every 48,000 miles

Check freeze thermostat (if equipped)* ..... Every 48,000 miles

Clean condenser/evaporator drains & check drain hose check valves (kazoos)* ..... Every 48,000 miles

Visually inspect engine coolant hose & hose clamp on heater coil system* ..... Every 48,000 miles

Clean condenser & evaporator coils* ..... Every 48,000 miles

Check engine coolant for antifreeze protection down to 30° to prevent heater coil freeze* ..... Every 48,000 miles

Tighten compressor, A/C unit, & fan motor mounting hardware* ..... Every 48,000 miles

Check condenser air seals & air deflector (if installed)* ..... Every 48,000 miles

Check evaporator blower shaft coupling adjustment/alignment (if installed)* ..... Every 48,000 miles

Replace booster pump bearings ..... Every 6 years

**** This service item should be done every year before the hot season, regardless of mileage.***

‡ Local conditions, severity of operation, or duty cycle may require more frequent filter cleaning intervals!

Spheros Coolant Heater

Clean enclosure box with compressed air & inspect all components for wear/damage† ..... Every 48,000 miles

Check Spheros wiring harness for damage† ..... Every 48,000 miles

Check exhaust system for restrictions or corrosion. Replace pipe or muffler if necessary† ..... Every 48,000 miles

Replace Spheros fuel filter and inspect fuel line† ..... Every 48,000 miles

Clean flame detector (photo eye)† ..... Every 48,000 miles

Pull out combustion chamber and inspect/clean heat exchanger. Replace nozzle if necessary† ..... Every 48,000 miles

Check water & fuel connections for leakage† ..... Every 48,000 miles

Tighten hose clamps (if necessary)† ..... Every 48,000 miles

† This service item should be done every year before the cold season, regardless of mileage.

Injury Prevention
If you cannot do it safely, don't do it

First Transit

Standard Operating Procedure **Number: P022**	**Description:** **Minor Warranty in FirstBase**
Effective Date: April 2011 **Issue:** **Last Revision Date:**	**Document: 1 Page of 6**

Initials											
Date											

Important: Responsible Personnel Are Required to Initial and Date the Receipt of this document

➢ GOAL

The goal of this SOP is to ensure that all vehicles are maintained in a SAFE, RELIABLE and CLEAN CONDITION. Vehicles must be available to meet all operational requirements at optimum cost and in accordance with First Transit Operating Procedures and all relevant legislation.

Any variances from these standards must be approved prior to implementation by the First Transit Senior Vice President of Maintenance.

This policy should be read and administered in conjunction with The FirstGroup America Environmental Maintenance Manual, First Transit Safety Manual Policies, Procedures, and Guidelines, First Transit Preventive Maintenance Manual, and requirement as stated in the Vehicle Manufacturer's Manual.

➢ RESPONSIBILITY

Maintenance or Parts Room Managers are responsible executing and maintaining the parts stores according to First Transit policy.

➢ PURPOSE

This SOP is established a policy for minor warranty claims using FirstBase.Info[SM].

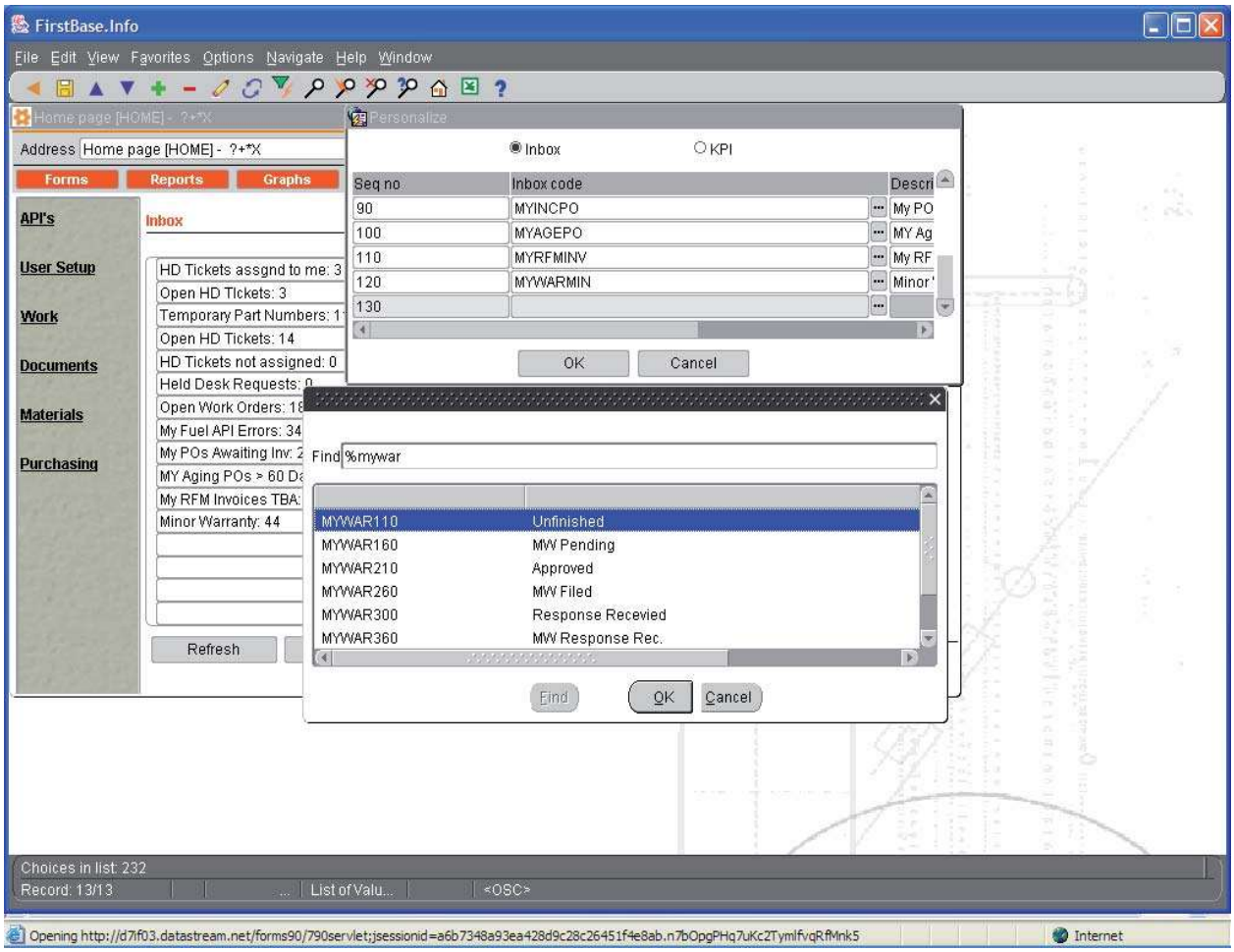
➢ SCOPE

This procedure applies to all First Transit locations that maintain company stores on their premises.

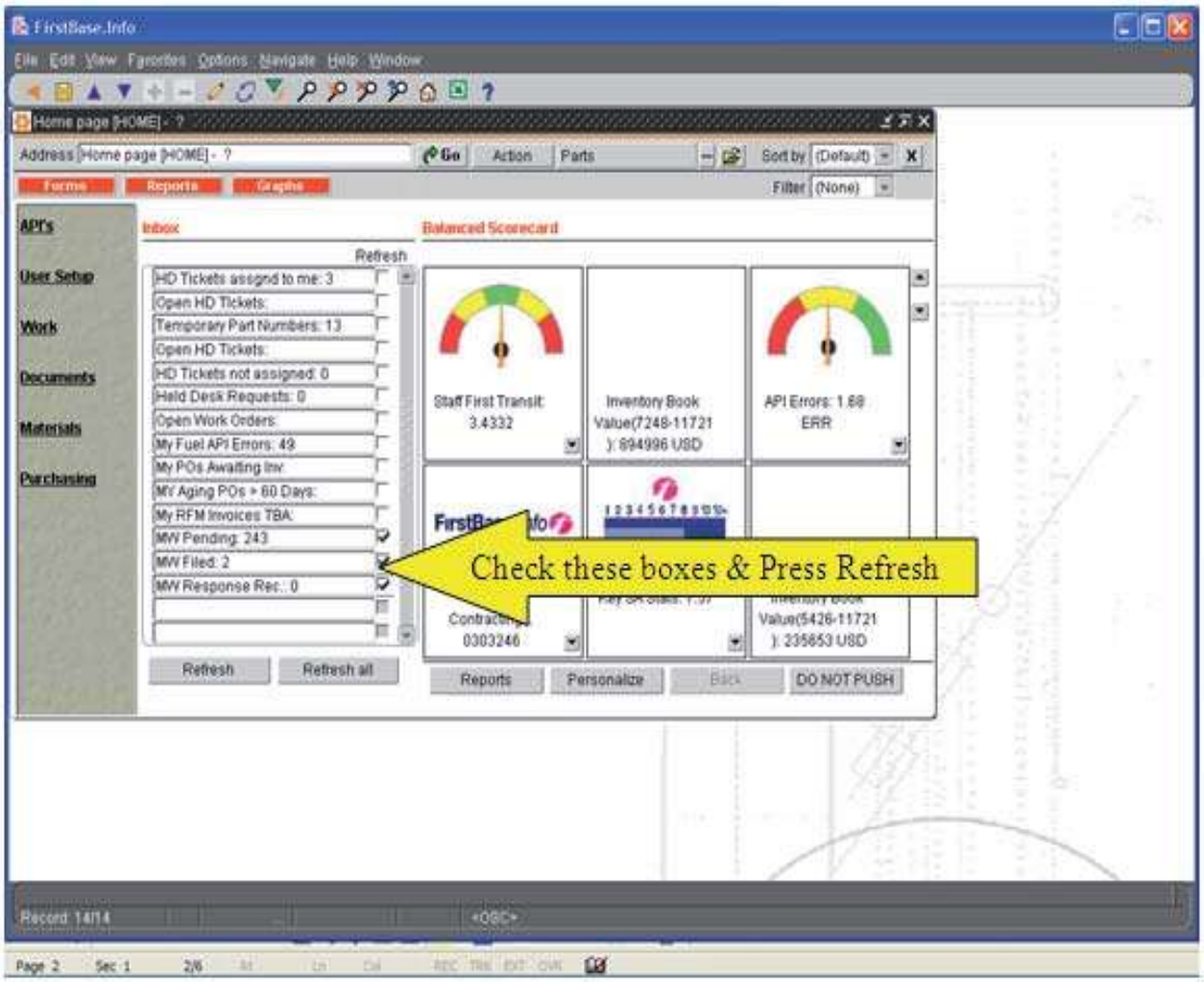
➢ PROCEDURE

Minor Warranty is warranty on replacement parts that fail prior to there useful life.

1. Create inboxes in FirstBase.Info℠ (FirstBase) to monitor minor warranty. Add the following inboxes from the home screen under the personalize button.
   a. MYWAR161 MW Pending - Shop
   b. MYWAR260 MW Filed - Shop
   c. MYWAR361 Response Received - Shop



2. Uncheck the auto refresh check box so the inbox won't calculate every visit back to the home page.
3. To view Minor Warranty counts in the Minor Warranty inboxes check the boxes to the right of the inbox and press the refresh button.

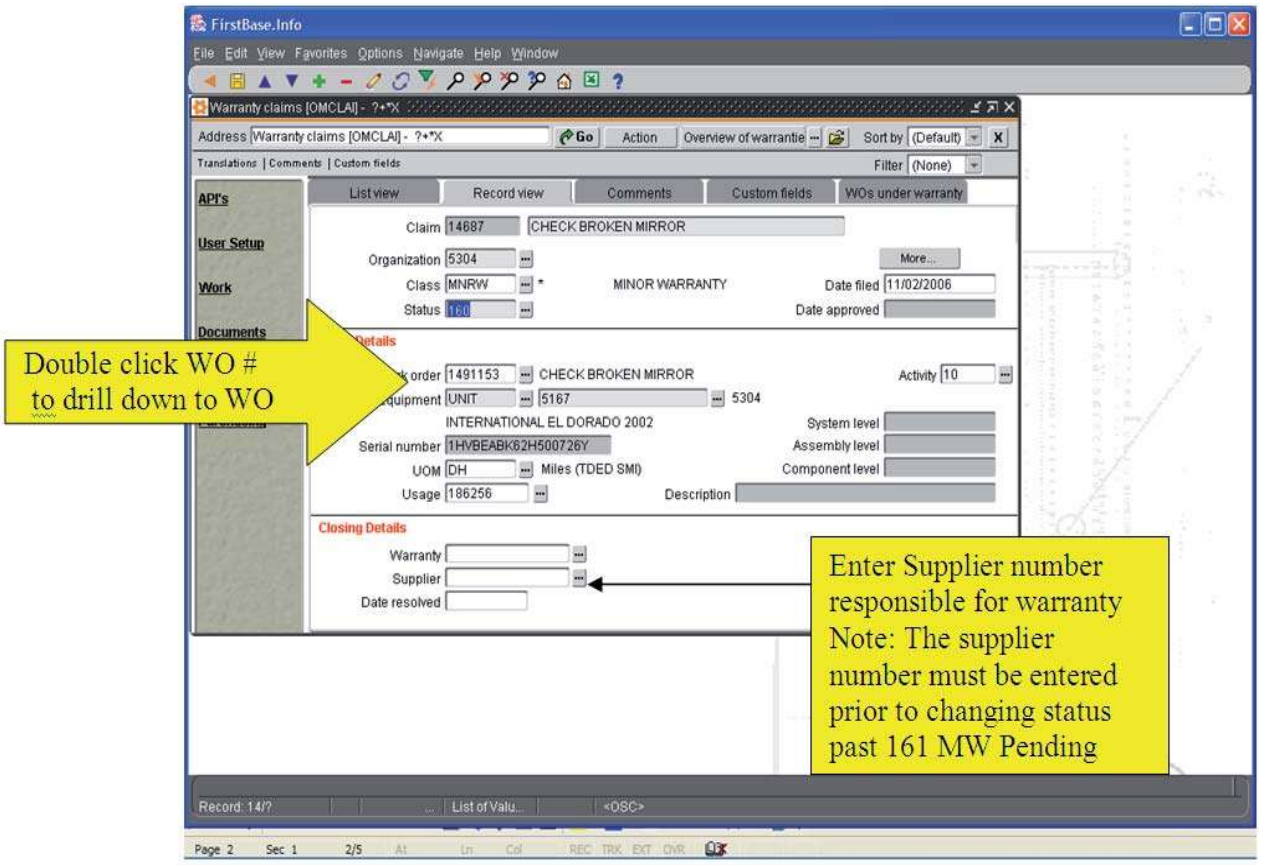


4. After the inboxes are refreshed the count in the MW Pending are possible warranties that need Maintenance Manger attention. Double click this inbox and you will be taken to pending Minor Warranty claims (OMCLAI) for locations that are assigned to you.

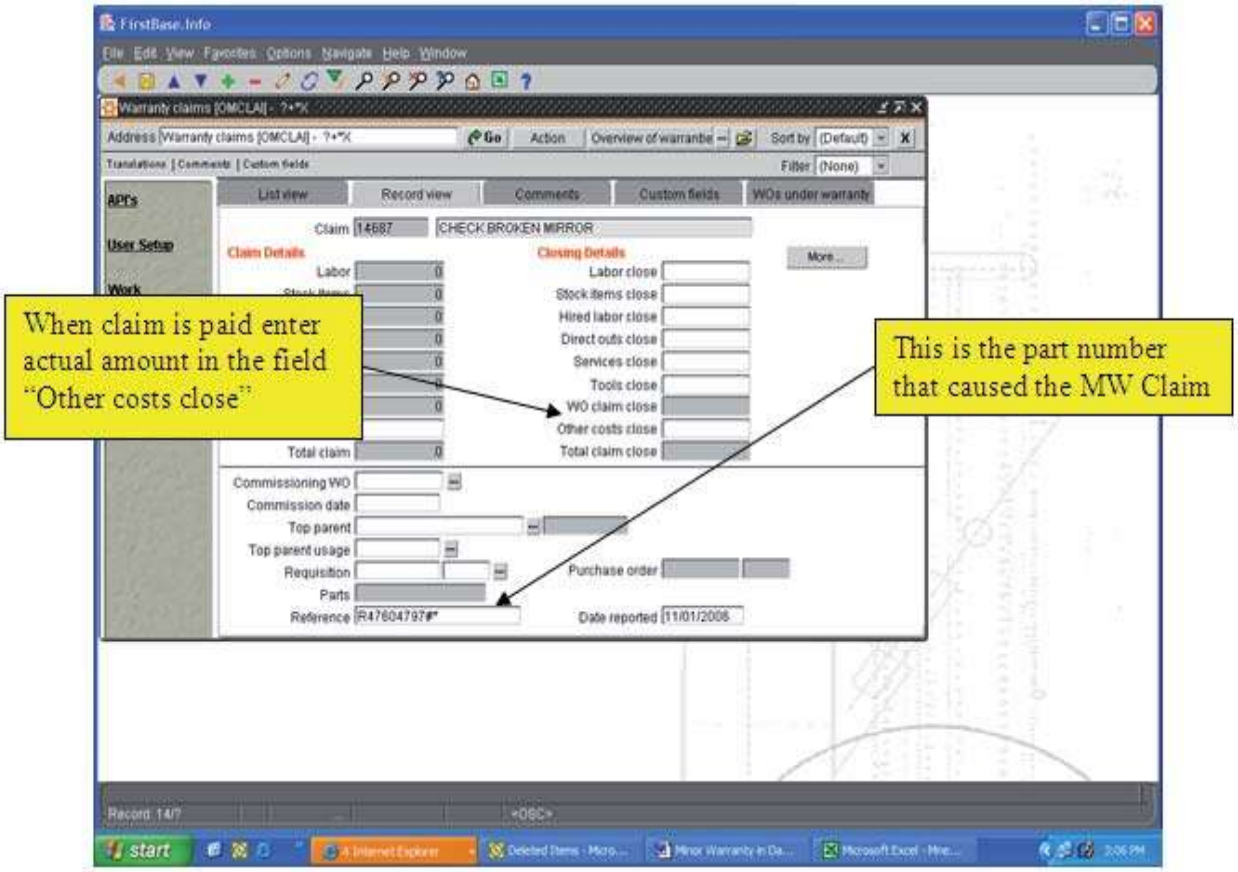
5. Review the MW Pending claims for possible warranties. If you find claims that should not be warranty insert the reason under the comments tab and change the status to “961 Invalid Claim”.

   PLEASE NOTE: In order for this process to work properly parts should be associated to the proper activity number. **Do not dump all the parts in activity number 10. Separate parts by activity.**

6. If more information is needed about the claim from the work order double click on the work order number and the system will drill down to the work order. To return back to the claim screen use the F11 key or the back arrow.



7. Click on the “More” button to see second page of the screen.



8. After determination is made that a claim is valid work with vendor to received payment for the claim. Payment can be a credit, check or exchange part. Also ask for credit for labor spent to exchange part. Once the vendor is contacted change the status of the claim to “MW Filed”. In the comments section document the person talked to and the action to be taken by the vendor.
9. After vendor contacts you with the action that is going to be taken change status to “360 Response Received - Shop. Fill in comments as to the action the vendor is going to take to settle the claim.
10. When payment is received list the value received on the “More” screen. Even if the value is an exchange part enter the value of the part. This number will be used to determine the dollar value of Minor Warranty you are receiving.
11. After all payments are received the claim needs to be closed. There are three different statuses for close depending on the type of payment received. They are:
    a. 461 MW Closed Parts Received
    b. 462 MW Closed Credit Received
    c. 463 MW Closed Check Received

Below are two scenarios describing how the financial portion of the claim should be processed:

Scenario 1: Part #XXX fails prematurely the vendor furnishes a new part to replace failed part.

1) Find work order that part #XXX was charged to return part to inventory
2) This will credit 54221 running cost and debit 11721 parts inventory
3) The new physical part goes back to the appropriate bin in your store room

Scenario 2: Part #XXX fails prematurely the vendor issues a credit for the part.

1) Find work order that part #XXX was charged to return part to inventory
2) This will credit 54221 running cost and debit 11721 parts inventory
3) Complete “SMRETN” This will remove the part from inventory
4) Process the credit using the return check box in “PMINVO”
5) Go to original PO and cancel the outstanding quantity

MINOR WARRANTY STATUS	
161	MW pending- shop
260	MW filed- shop
461	MW closed- parts
462	MW closed-credit
463	MW closed- check
961	MW invalid claim

NOTE: Federal, State, Provincial and Local laws may prevail in circumstances where there is a conflict with this policy. For additional guidance with regard to the application of the law, contact your supervisor for assistance.

THIS STANDARD OPERATING PROCEDURE SUPERSEDES ALL PREVIOUS POLICIES AND LIKE DOCUMENTS.

THE COMPANY RESERVES THE RIGHT TO MAKE CHANGES AND/OR REVISIONS TO THIS DOCUMENT AT ANY TIME.

Injury Prevention
If you cannot do it safely, don't do it

First Transit

Standard Operating Procedure **Number: P029**	**Description:** **Warranty Claim Submissions**
Effective Date: April 2011 **Issue:** **Last Revision Date:**	**Document: 1 Page of 6**

Initials											
Date											

Important: Responsible Personnel Are Required to Initial and Date the Receipt of this document

➢ GOAL

The goal of this SOP is to ensure that all vehicles are maintained in a SAFE, RELIABLE and CLEAN CONDITION. Vehicles must be available to meet all operational requirements at optimum cost and in accordance with First Transit Operating Procedures and all relevant legislation.

Any variances from these standards must be approved prior to implementation by the First Transit Senior Vice President of Maintenance.

The policy should be read and administered in conjunction with The FirstGroup America Environmental Maintenance Manual, First Transit Safety Manual Policies, Procedures, and Guidelines, First Transit Preventive Maintenance Manual, and requirement as stated in the Vehicle Manufacturer's Manual.

➢ RESPONSIBILITY

This procedure applies to all First Transit locations that operate and/or maintain vehicles requesting warranty reimbursement.

The Maintenance Managers are required to submit warranty claims in the FirstBase. Info[SM] for each Work Order (WO) requiring reimbursement from a manufacturer when a component fails prematurely.

➢ PURPOSE

To ensure all First Transit locations performing vehicle repairs file warranty claims for all premature failures.

Ensure claims are filed with the manufacturers on a timely basis and the location is reimbursed for repairing the failure.

To maintain a process for monitoring submitted warranty claims through the current FirstBase.Info[SM] system.

➢ SCOPE

This procedure applies to all First Transit locations that operate and/or maintain company or customer-owned vehicles.

➢ PROCEDURE

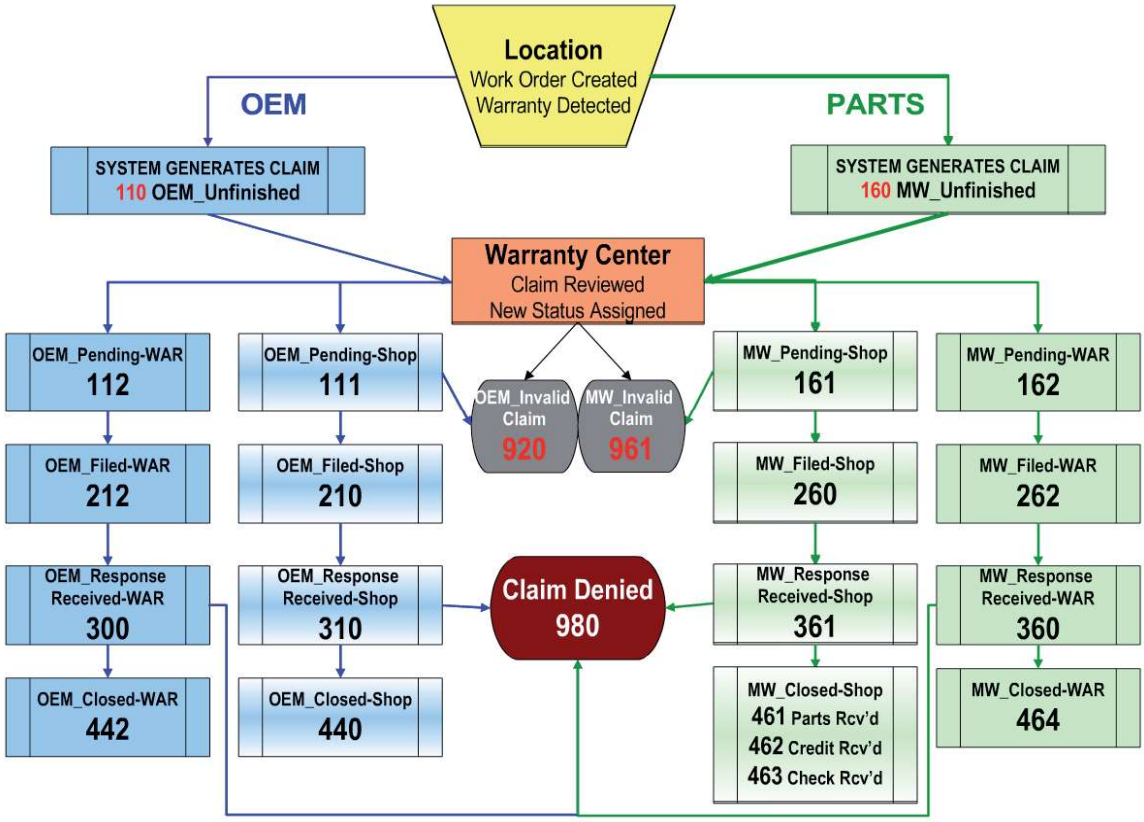
The FirstBase.Info[SM] provides for handling of warranty including:

- Initiating warranty claims
- Follow up on warranty claims
- Completion of warranty claims

Warranty claims are handled two ways, by the Warranty Claims Center and through the originating shop.

The Claims Center usually handles all warranty against the Original Equipment Manufacturer (O.E.M.) while the local shop handles individual part claims.

Following is a chart discribing the basic stages in the warranty process:

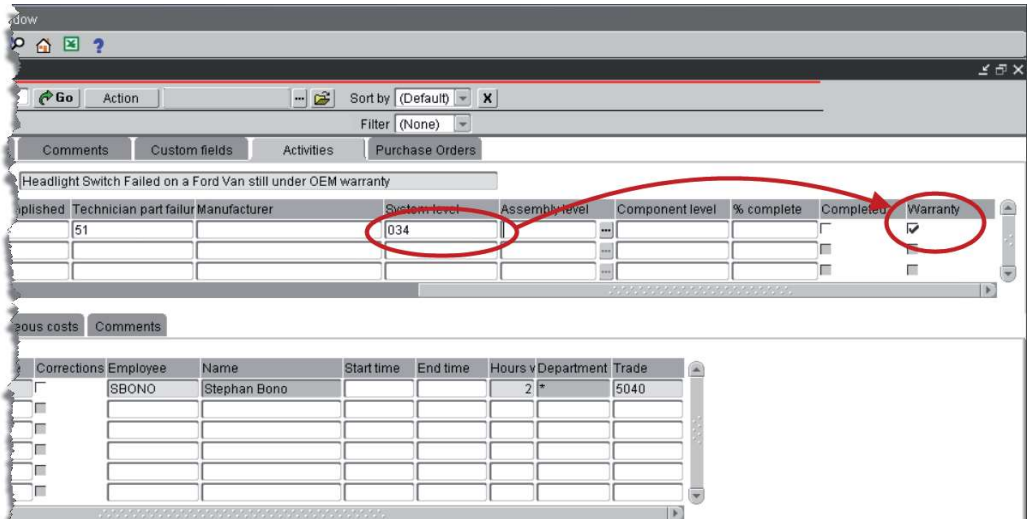


This provides the information for status of warranty claims for both O.E.M. and Parts.

Filing Warranty Claim

Filing a Warranty Claim is almost automatic. Once the Work Order (WO) is properly completed, any items, systems or parts that are covered by a warranty should be triggered by FirstBase.Info[SM].

When you are filling out a work order, under the Activities Tab to insert codes for the type, reason, failue and System Level. If the affected part is warrantied, the Warranty check box will automatically be checked.



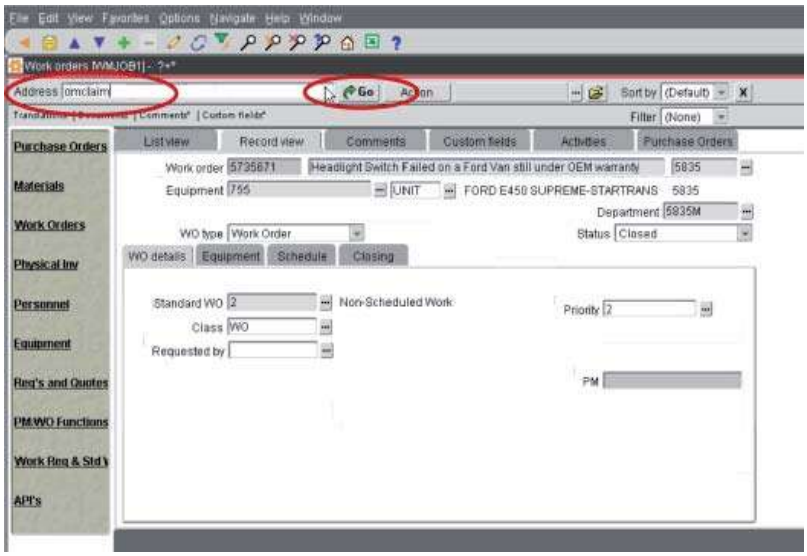
Make sure to note when this happens in order to follow up on all warranty items for your shop.

Viewing Warranty Claim Status

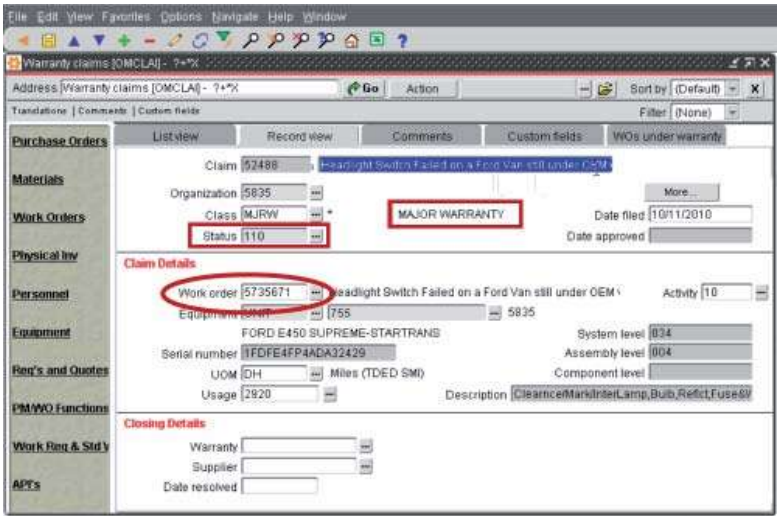
Major Warranty

The initial claim in status 110 is only visible at the Warranty Center. They review the claim for accuracy and either send it directly to the manufacturer and change the status to 112 or return it to the shop and change the status 111 for your shop to process.

To view the current warranty claim status type "OMCLAIM" into the address window and click on "GO".



Once in the OMCLAIM window, one way of finding the warranty status by going to "Record View", press "F7" for Query mode. Input the part number or WO number (as in oval below) in the appropriate box and press "F8" to submit the query. The window will fill in as shown below:



The warranty status (110) and type (MAJOR WARRANTY) will be displayed as shown in the boxes above. This screen allows you to check on status of claim submitted from your location.

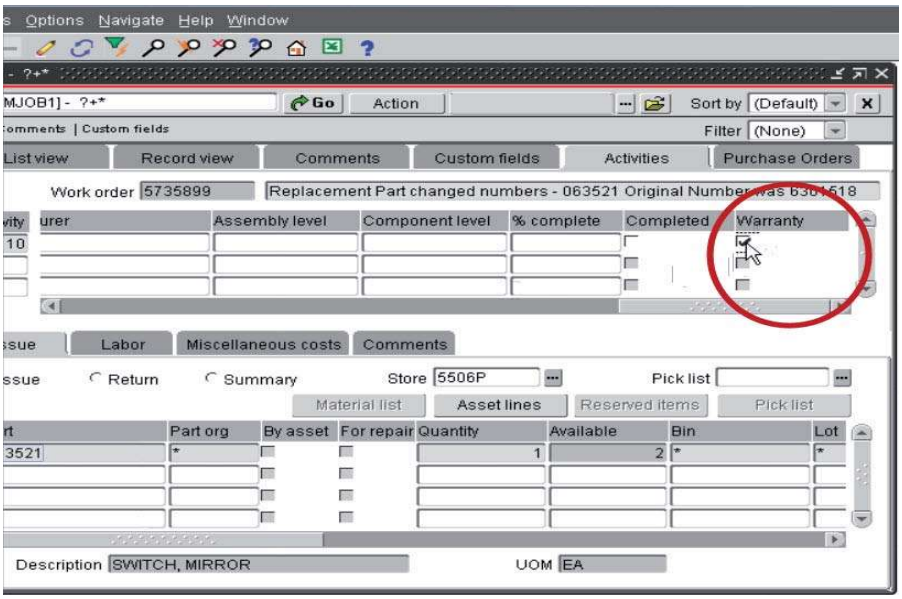
Part Warranty

The process for Parts Warranty is similar to Major Warranty with a few differences. The warranty will be automatically generated when the WO is completed.

Forcing and Overriding Warranty

At times it may be necessary to force a part into warranty. An example would be when a replacement part has a new number for a part still under warranty. The new part number, different than the one on the warranty agreement will not trigger the automatic warranty creation.

To force a warranty claim simply click the warranty check box.



The warranty will then be sent through the same process for approval by the Warranty Center, then sent back to the Shop for submission to the manfacturer.

Monitoring Warranty Claims

Use the OMCLAIM screen to track and monitor warranty claims submitted by your shop. This will help you to ensure you receive all the credits due your location.

Core Money

Should a dealer complete a warranty repair and file for warranty, the dealer is held responsible for the core.

If a First Transit shop completes the repair and files for warranty, the failed part must be retained. The cost of the new part and core charge must be applied to the WO. Failure to return a requested core for warranty will result in claim denial/reversal.

Timely Submissions

ALL warranty claims must be submitted as soon as repair(s) are completed in order to qualify for reimbursement. Sending the claims as soon as possible will prevent denials by the manufacturer or rejection because the claim was filed beyond time limits for warranty reimbursement.

Contact Information

All issues pertaining to warranty and campaign should be directed to the First Transit Director of Warranty and Campaigns located at 45 Anderson Road Buffalo, NY 14225.

Solo Learning

For more information on submitting and tracking warranty claims go to:

http://vms.sololearning.com/

There are several training modules to help with filing warranty claims:

FirstBase.Info-Warranty Basics - Part 1_OVERVIEW

FirstBase.Info-Warranty Basics - Part 2_OEM

FirstBase.Info-Warranty Basics - Part 3_PARTS

FirstBase.Info-Warranty Basics - Part 4_Overriding and Forcing Warranty

FirstBase.Info-Warranty Basics - Part 5_Monitoring

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VEHICLE INSPECTION

Bus #: _____ **Location ID:** _____ **Date:** _____

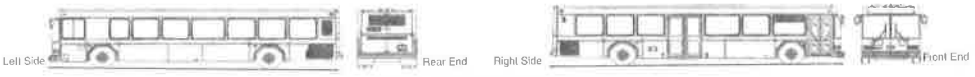
Vehicle Height: _____

Beginning Odometer _____ **End Odometer:** _____ **Distance Driven:** _____

Operator Name: _____ **Operator Signature:** _____

Please print *Please sign*

I indicate by my signature that I have reviewed the previous operator's vehicle inspection report and have inspected all items.



If exterior defects are noted during the vehicle inspection, indicate the location of the defect on the appropriate diagram by circling it.
*Use "✓" if no defect found; use "X" if defect is found; use "NA" if not applicable. Turn in daily. * indicates requirements for a mini pre-trip.*

Step	Pre	Post	INTERIOR	COMMENTS
1			**Leak check***	*On approaching the vehicle, visually check under the vehicle for fluid leaks*
2			**Safe start vehicle***	*Start the vehicle with the parking brake set/vehicle not in gear*
3			**Tap NFC***	*Tap driver card to NFC reader; you should hear a beep*
4			Driver seat & seatbelt	*Confirm the driver seat is secure and seatbelt works as expected*
5			**Review the last DVIR***	*Review comments from prior operators of the vehicle and ensure safety items have been addressed*
6			**Vehicle registration and insurance***	*Ensure vehicle registration and proof of insurance are present and valid*
7			**Gauges & dash indicator lights***	*All driver area gauges and indicator lights should be functioning (Left/ Right/ 4-Way/ High beam/ ABS*
8			Steering mechanism	*Slowly rock wheel left to resistance. Repeat to right. No more than 2 inches free play.*
9			Horn(s)	*Honk the horn to ensure it is working*
10			Windshield wipers	*Engage the wipers (at low speed and high speed) and washer fluid*
11			**Rear vision mirror(s)***	*Rear vision mirrors are present, adjusted and free of damage*
12			Heater/ defroster/ Air conditioning	*Engage heater, defroster and AC*
13			Backup alarm	*Engage the backing alarm. Should be audible from the driver's area.*
14			2 way radio check & PA system	*Ensure power to radios and PA. Test functionality.*
			EXTERIOR	**COMMENTS**
15			**Front right tire/ wheel/ rim/ lugnuts***	
16			**Front right /curb side lights and reflective equipment***	
17			**Front right mirror bracket***	
18			**Windshield***	
19			Destination sign	
20			**Front left tire/ wheel/ rim/ lugnuts***	
21			**Front left / street side lights and reflective equipment***	
22			**Front left mirror bracket***	
23			**Rear left tire/ wheel/ rim/ lugnut***	
24			**Rear left lights and reflective equipment***	
25			Emergency exit door	*Open and close to ensure operability, scan under passenger seats for passengers, packages, other items*
26			**Rear right tire/ wheel/ rim/ lugnut***	
27			**Rear right lights and reflective equipment***	
28			**Leak check***	*Visually check under the vehicle for fluid leaks*
29			Wheelchair lift/ramp operation	*Open the lift door (if applicable), deploy to the ground, ensure the gate is secure, return to stowed position*
			INTERIOR	**COMMENTS**
30			Hand rails / modesty panels	*Confirm hand rails and modesty panels are secure*
31			Steps & flooring	*Steps and flooring are safe and free of hazards*
32			Emergency equipment	*Required emergency equipment is present (First aid kit, triangle reflectors, bloodborne pathogen kit, seat belt*
33			W/C securement straps, covers, floor tracks	*Flooring and tracks are clear of hazards and operable, securements are present and operable*
34			Emergency exits	*Verify emergency window exits open and close properly*
35			Passenger seats & seat belts	*Seat belts are operable and seats are secure*
36			Interior clean	*Vehicle is clean*
37			**Low pressure warning test***	*Pump brake pedal until warning light and alarm comes on at or above 55 psi Pump brake*
38			Parking brake auto pop out test	*until spring brake pops at or above 20 psi*
39			Service brake test	*Accelerate to 5 mph; step firmly on brake. Vehicle should be free of brake drag and stop properly.*
40			**Tap NFC***	*Tap driver card to NFC reader; you should hear a beep*

Operator Comments: _____

Operator Signature: _____

Technician Comments: **Work Order Number:** _____

Technician Signature: _____

FT-DVIR-AB