WICHITA FALLS TRANSIT SYSTEM

W F T S

VEHICLE MAINTENANCE PLAN

Background

This report describes the maintenance practices of the Wichita Falls Transit System. The report contains a description and brief analysis of the maintenance program. It also includes a sampling of the actual forms and procedures utilized by WFTS maintenance personnel.

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WFTS Maintenance Plan

I. Purpose

The purpose of WFTS Maintenance Plan is to specify the goals and objectives of the Maintenance Program. The activities which are necessary for the achievement of these goals and objectives will be outlined and used as a guideline by which management can effectively monitor performance and maintain a high quality maintenance program.

II. Goals and Objectives of WFTS Maintenance Program:

The primary goal of the maintenance program is to provide a cost-effective, systematic, interruption free pattern of transit operation. To accomplish this, WFTS maintenance practices are centered around the following goals and objectives:

	Goals:	Objectives:
1.	Provide consistently good service to meet public demand.	Maintain equipment and facilities.
2.	Provide safe, reliable, comfortable and clean buses.	Maintain a high quality maintenance program.
3.	Provide maximum operational reliability.	Replacement of certain parts and components at predetermined times.
4.	Minimize Road calls, equipment, downtime and reduce costs.	Adhere to strict Preventative Maintenance schedule of periodic inspections.

To meet these goals and objectives, WFTS has implemented a systematic maintenance program designed primarily to: (A) reduce costs (B) provide more effective scheduling of shop work (C) maximize the number of operable vehicles at any time.

The key to accomplishing this is preventative maintenance. The preventative maintenance philosophy forms the core of WFTS maintenance program. Every maintenance employee at WFTS has this concept ingrained in his/her's purpose of duties. It is the foundation by which the following procedures and practices, as outlined , are followed.

WFTS MAINTENANCE PROGRAM

The following are WFTS primary maintenance activities:

A preventative Maintenance schedule which is closely followed.

Close monitoring and recording of Engine fuel and oil consumption daily.

Component rebuild program

Continuous training program for employees

Maintenance information system, in which individual bus histories, work orders, and parts and inventory are enclosed.

III. WFTS MAINTENANCE PROGRAM:

The WFTS has a fleet of vehicles which are located and maintained under a single facility. In recent years management has concentrated its efforts on upgrading the quality of its maintenance program. In 1983 WFTS expanded facilities to adequately maintain and house its entire fleet. Expansion of the garage facilities was undertaken as a step towards better preventative maintenance. The capacity

to park buses indoors reduces by approximatly four hours the continuous running of engines in the winter or summer months to cool or heat the buses which ultimately decreases the strain on the engine life.

Additional efforts to upgrade the maintenance program has included the completion of a new shop facility complete with modern equipment. Improvements have contributed to the efforts to improve the maintenance program. In addition, new projects and programs have been adopted meeting the clean air and oil recycling procedures and to improve the internal operating effectiveness and efficiency. The following is the basic outline of WFTS daily, weekly, and monthly maintenance practices.

A. Equipment and Facilities

WFTS operates a single facility property that is designed and equipped to support the highest level of capability to repair or overhaul nearly any part of a bus, or the entire vehicle. New Maintenance facilities have been constructed complete with newer equipment. Recently, the construction of the new garage facility, has provided the property with the capability to house the entire fleet.

B. WFTS Maintenance and Service Inspections

1. Daily Servicing and Inspection

   During daily servicing, inspections are made of certain items to locate and correct potential problems:

   a. Buses refueled
   b. Engine coolant level checked
   c. Fuel added
   d. Engine oil level checked
   e. Transmission fluid level checked daily
   f. Front and rear tires are checked for low pressure condition daily.
   g. Interior cleaned and inspected for graffiti, cut seats, glazing, lights, fire extinguisher, mirrors, and body for damage or defects.
   h. During servicing, observations are made of functions, such as air pressure, transmission, brake operation, and lights.
   i. All defects observed are reported for correction

j. Exterior cleaned as scheduled
k. Buses reported by service personnel for defects are repaired and tested to confirm repair.
l. Buses reported by operators during the day for minor defects are routed for repair and tested to confirm repair.
m. Buses that failed in service, i.e., road calls, are repaired and tested to confirm repair.
n. Buses are parked in appropriate locations: buses without defects are placed ready for service; buses with defects are placed for repair operations.
o. All repairs are encoded in Maintenance Information System (MIS)
p. Cash vaults on fare boxes emptied.
q. Pre and Post Wheelchair lift inspection

2. Weekly Inspections

All in-service vehicles are inspected weekly. The purpose of This inspection is to adjust brakes, check for correct brake Application, brake lubrication and to note other conditions Which require repair. As a result of these inspections, a repair list of brake overhauls, engine components, and oil leaks and other items are making up for scheduling.

3. Bus Operator Inspections

As part of WFTS preventative maintenance program, bus operator inspections play a vital role. Pre-trip inspections are performed daily which include a safety check of the following items:

a. Horn and Turn Signals
b. Air Pressure
c. Tires
d. Interior/exterior bus condition
e. Leaks (fuel, lubricants and coolant)
f. Wheelchair Lift Operation
g. Securement Devices

Such inspections are expected to uncover problems that could lead to road calls.

4. Scheduled Mechanical/Maintenance Inspections

The most important level of WFTS's preventative maintenance program involves scheduled mechanical maintenance inspections. These inspections are scheduled and performed routinely, based on mileage, fuel and oil consumption, and engine oil analysis. The following items are checked during scheduled inspections:

a. Differential and transmission
b. Brake adjustment and lubrication
c. Oil and filter change and safety inspection
d. Complete review of all systems and subsystems of the vehicle.
e. A/C and heating systems are scheduled for routine checks on a seasonal basis.

C. PREVENTATIVE MAINTENANCE SCHEDULING

A well planned program of periodic and scheduled maintenance which provides for lubrication, cleaning, inspection and adjustment has been implemented. The key to WFTS's preventative maintenance program is identifying and predicting critical component failure. This is accomplished through the careful and continuous tracking of the consumption of fluids (i.e., fuel, lubricating oil, transmission oil and coolant.) All routine maintenance is regularly scheduled according to fuel, oil consumption, and mileage.

Depending on the bus type, for every 6,000 miles, some type of preventative maintenance is performed. There are three types:

Type A. PMA - change oil and filter, fuel and hydraulic filter depending on engine type. Lubricate steering, U- joints, check transmission and differential all other fluid levels, inspect brakes, tires for wear and proper inflation,body, cab, all safety equipment. Interior and exterior lights, A/C and heating systems (seasonal basis)

Type B. PMB - Complete PMA to include transmission internal and external, filter all fuel filters, inspect wheel bearings front and rear, steam clean engine, front end alignment as required.

Type C. PMC - Complete PMA-PMB to include all fluids, filters changed, engine, transmission, differential, hydraulic systems.

Fuel and oil consumption and mileage information is gathered daily. Using this information, routine preventative maintenance is scheduled.

PMA's are scheduled at 6, 000 mile intervals

PMA's are scheduled at 24,000 mile intervals

PMA's are scheduled at 48,000 mile intervals

In addition to mileage monitoring for preventative maintenance scheduling, oil consumption is also carefully monitored and checked weekly.

D. PARTS INVENTORY AND CONTROL

The primary objective of WFTS parts and inventory department is to reduce costs and control the number of non-moveable or slow moving parts (those parts in stock over 2 years or more.) The following activates are performed in an effort to achieve those objectives:

1. Regular Review of Inventory – conducted to monitor the flow of parts. This information is used to get a minimum and maximum estimate of the total parts needed. A physical count of inventory is also conducted twice a year.

2. Monthly Return Program - The WFTS implemented a monthly return program for dead or slow moving parts. This information is retrieved through the use of the maintenance information system. Those parts considered dead or slow moving are then sent back to the manufacturer for a refund.

E. TRAINING PROGRAM

WFTS's training program involves both on-the-job, formal and cross training.

1. On-the-job

a. Mechanics – Upon entry, new mechanics are assigned to work with a senior mechanic for a period of time. In addition, management provides training aids, such as: filmstrips, movies and manuals.

2. Formal Training

In an effort to upgrade skills, mechanics are required to work in the component rebuild/unit replacement program The mechanics are rotated on a monthly basis to spend a full month in this section of the shop. The purpose of this program is to refine the mechanics skills and familiarize him with the entire component so that he is more qualified to detect or predict problem areas.

3. Cross-training:

a. In house training seminars held by bus manufacturing companies frequently give one day in-house seminars on particular problem areas:

- Front end alignments
- Brakes
- Electrical
- A/C tune-up and heating

b. Manuals and bulletins - management relies extensively on the use of manuals and bulletins published by the bus manufacturing companies to provide updated and technical information on defects, tools, equipment, parts and new techniques.

F. USE OF MANUFACTURER'S MAINTENANCE MANUALS AND RECOMMENDATION

The use of manufacturer's manuals, bulletins and recommendations plays a vital role in WFTS maintenance Program. Information concerning repairs, replacement of components, unit removal, trouble shooting, preventative maintenance and safety problems are critical to the maintenance function. Also, supervisors are alerted to the importance of bulletins, and the need to disseminate the information immediately at the point of needed or critical use.

G. WARRANTY PROCEDURES

Warranty work is normally done by WFTS maintenance personnel. The bus manufacturer provides the necessary materials to accomplish the required work. On a labor time-standard scale, the manufacturer then awards WFTS credit for labor hours against future parts purchased.

If a major modification or repair is required, the vendor will arrange for the work to be done on-site, at a local distributorship (i.e., Detroit Diesel Allison) or at a site selected by the vendor and approved by WFTS.

As part of the warranty procedure, it is required that all parts personnel receive training in warranty and parts. In-house training is also conducted to further familiarize personnel with bus knowledge as it relates to parts and warranty.

H. BUS RENOVATION PROGRAM

Bus Renovation occurs on a daily basis as a result of regular preventative maintenance inspections. Incorporated into WFTS's maintenance philosophy is the belief that Bus Rehabilitation is more cost effective. A 1983 report, published by UMTA, indicated that rehabilitated buses are more fuel efficient than today's new buses. Data from several transit systems, also, showed that rehabilitated buses achieve 25-35% more miles per gallon than new buses, and 40% had better road call records.

According to UMTA's 1983 report " Economic Comparison of New buses versus rehabilitated buses" three levels of bus rehabilitation occur:

1. Level I - Complete remanufacturing of bus.

Installation of new or completely rebuilt engine, transmission or rebuilt major components, and corresponds to a service life extension of 8-10 years.

2. Level II - Maintain a program to rebuild bus component systems and structure to original equipment manufacturer's specifications including routine parts replacement should extend the service life from 5 to 8 years.

3. Level III - Represents the "Repair As Necessary" approach to bus rehabilitation, with particular attention to mechanical areas. It should add 3 to 5 years to service life.

WFTS has a bus rehabilitation program which involves refurbishing at all three levels; ranging from cosmetic, such as repainting, upholstering, and mechanical rebuilding or replacement. All major components, engines and transmissions are rebuilt in-house according to scheduled preventative maintenance and mileage.

I. COMPONENT REBUILD PROGRAM

WFTS has an ongoing component rebuild program which involves the rebuilding of all major and minor components including engines, transmissions, generators, starters, compressors, compressor controls, steering components, radiators, air motors and hardware. The work program includes machining, cleaning and welding. All systems and components such as engines, brakes, transmissions and compressors are replaced and rebuilt on a predetermined schedule. This type of maintenance is intended to reduce the likelihood of the inservice failure of components by anticipating their failure. See the following predetermined inspection intervals schedule for major components.

J. QUALITY ASSURANCE

Quality assurance efforts are concentrated on employee performance, productivity and training. This is achieved through the close supervision and monitoring of all work orders. All work orders are reviewed daily by the Maintenance Supervisor to insure that the required work is performed in a timely, efficient manner, and to monitor repeat repairs. Reviews are also conducted to monitor the proportion of engine overhauls, transmission replacements and other major component overhauls or replacements in relation to management's productivity goals.

K. VEHICLE INFORMATION SYSTEM

WFTS maintenance information system is an interactive work order based system which provides data on individual bus histories, repairs, parts, and labor. The system does include unit repair instructions and the capability to trace units back to specific buses. This system provides sufficient detail to management to pinpoint particular problem areas and to monitor longer term trends and patterns in various maintenance areas.

IV. EVALUATION OF WFTS EXISTING MAINTENANCE PROGRAM:

The success or failure of any program is based on performance and productivity measures. WFTS relies primarily on its road call data to measure the goal of service reliability, and preventative maintenance performance.

Climate has a significant impact on the road call data. The Southwest region has a hot summer climate with temperatures frequently in excess of 100 degrees Fahrenheit (and fairly moderate winters). It should be noted that the number of road call are higher during the hot months (June thru August) due to the overheating of engines and A/C systems during these months. Improvements in facilities and equipment, strict adherence to the preventative maintenance schedule and the ongoing training program for employees are all factors which have contributed to the decreasing number of road calls.

V. Methods to Improve the Vehicle Maintenance Program:

Today transit agencies are under political and financial pressure to reduce operating costs and improve system productivity. Shrinking federal support for operating subsidies, and the growing expense and complexity of modern rolling stock and maintenance equipment are forcing manager to implement more efficient fleet management practices as a means to increase productivity, performance and accountability. The following recommendations are made for both the continuation of existing program elements, as well as new suggestions or ideas all aimed at improving the existing programs efficiency and accountability.

A. Continue Efficient Preventative Maintenance:

1.Accurate Record Keeping: Preventative Maintenance cannot be overemphasized. The problems that are encountered when a coach brakes down during revenue service are costly; delayed or missed trips, lost revenue, maintenance costs, poor customer relations. Preventative maintenance helps minimize mechanical failure, thereby, reducing costs, improving reliability and extending equipment life. Good preventative maintenance assists the marketing and public relations effort by assuring safe reliable, attractive and comfortable vehicles.

The preventative maintenance plans, goals, and activities should continue to be focused on minimizing road failures, equipment downtime, accidents and increasing reliability.

The key to a sound preventative maintenance plan is inspections. Procedures should be taken to insure that inspections are performed efficiently at three levels:

1) Bus Operators 2) Service Mechanics 3) Mechanics

One of the most important areas of inspection are those inspections performed by the bus operators. Pre-trip inspections are critical to the prevention of road calls and possible mechanical failure of a bus. Currently WFTS bus operators perform pre-trip inspection. An effective way of monitoring pre-trip inspections is to provide the bus operators with a pre-trip inspection form. These forms include a check list of items to cover and are carefully monitored by supervisory personnel. Thorough monitoring of pre-trip inspections and the immediate reporting of defects uncovers items that lead to costly road calls.

Vehicle servicemen also play an important role in the preventative maintenance function. To insure accuracy in reporting and recording fluid levels and mileage readings, an inspection and reporting form is used by vehicle service men.

Checklists and appropriate forms all contribute to efficiency and effective communication.

The preventative maintenance scheduling procedure is an area which need to be performed with precisions and accuracy. Failure to schedule a bus for a p.m. inspection or oil analysis can lead to costly breakdown maintenance. Accuracy in record keeping, logging, and reporting is essential. Scheduling for engine oil analysis is crucial. However, the system is lacking a concise method for identifying or flagging those BPM's which require an engine oil analysis or a repeat engine oil analysis.

2. <u>Continuous Training Program:</u>

A condition that has been identified as pervasive throughout the industry is maintenance error. It has been estimated that 35 percent of all repairs performed on buses are done in error. Often a malfunction was incorrectly diagnosed or improperly repaired. Such an incidence of error in transit maintenance translates operationally into additional road calls, service disruptions and higher costs.

The principal underlying factor to the high incidence of error in transit maintenance is the general decline in experience and skill level of maintenance workforce. It is essential that training efforts to upgrade employee skills occur on a daily basis. WFTS will, therefore, continue on the job training, cross training and formal training. Such training will cover the following areas:

a) In-house training will include steps to insure a proficiency of all maintenance personnel in the goals and objectives of our maintenance program. WFTS's preventative maintenance philosophy will be emphasized.

b) In-house training of senior mechanics will continue on a daily basis.

c) One-on-one training provided by supervisors and journeymen will also continue.

d) Trouble shooting in the form of formal training and workshops on particular areas of malfunctioning will continue on a regular basis.

e) Training provided by the manufacturers of equipment will also continue on a regular basis and efforts to have all mechanics participate will be emphasized.

3. Good Shop Leadership - Currently WFTS has a very effective Preventative Maintenance Program. This is due in large part to an excellent rapport between management, supervisors, and mechanics. Good management and shop leadership plays a vital role in the preventative maintenance function. Good rapport can motivate personnel to check additional items when performing each level of inspection. Checking for loose wires and hoses, will in addition the prescribed inspection procedure, help decrease breakdown. Participative management practices should be implemented to foster excellent communication and good morale among all employees. Participative management involves all employees in the decision making process, thereby involving them in the total maintenance effort. The results are: a) better communication b) better employee moral and commitment c) better decisions d) better rapport between management and employees.

B. Continuous Assessment of Maintenance Performance Against Standards.

Maintenance performance and productivity indicators will be consistently monitored and measured according to the goals and objectives of the maintenance program. Performance indicators will provide management with a measure of how well the maintenance system is performing. These measures should be detailed enough so that performance problems can be found, difficulties diagnosed, and improvements can be documented. Detailed documentation and performance monitoring will be emphasized in the following areas:

Reliability: To insure WFTS's goals of service reliability and quality maintenance, the close monitoring of road calls will continue. The indicators will include:

-the average miles between component failures
-average miles between road calls

Productivity To meet WFTS's goal of cost efficiency it is necessary to monitor performance. Indicators include:

- direct labor hours devoted to preventative maintenance inspections
- corrective repairs per bus
- maintenance cost per vehicle mile

Availability To insure WFTS's goal of maximum operational availability and schedule adherence, it is necessary to measure and monitor the following:
- spare ratio levels
- average duration of open work orders

Preventative Maintenance System Effectiveness The goals of WFTS's maintenance Program is preventative maintenance performed on a strict timetable. To meet this objective the following indicators will be monitored:

- average lateness of periodic inspections

- repeat repairs

C. Complete Computerization of the Vehicle Information System:

Maintenance Information:

As previously mentioned, WFTS has a vehicle information system which provides data on individual bus histories, parts, costs, and labor. The system has the ability to interface information, show trends or predict major component failure. In management decision making, the need for more information than the day-to-day record keeping or daily workflow is essential. Research done on bus fleet management has found that the availability of maintenance information is the key to efficient management decisions. Data for management decisions is important. At a minimum, the maintenance system should include information on fleet status, such as: the average miles between road calls, average miles between component failures, average duration of open work orders, current spare levels, direct labor hours devoted to various types of repairs per component failure, by vehicle type and by fleet and inventory control information.

The maintenance information system should also be able to produce reports of maintenance activities in numerical and possibly graphical form. Also, statistical information summoned across the entire fleet or across a bus model that can be compared to individual buses would be useful. For example, the comparison of the oil consumption of one bus to the average oil consumption of the other buses of the same model is useful in diagnosing engine problems. The informational system should also be able to aid the manager in making comparisons to find buses with exceptional parts or fluid consumption rates which indicate a maintenance problem The ability to summarize and report information at every level of breakdown would be ideal. The maintenance information system should include the following:

Vehicle Reliability Indicators: reliability is the likelihood of a vehicle operating properly at any given time.

- Average miles between road calls
- Averages miles between component failures

Vehicle Maintainability Indicators: Maintainability is a measurement of the time needed to fix a failure and perform prevention maintenance.

- Direct labor hours devoted to various types of repairs per component failure, by vehicle type and by fleet.

Vehicle Availability Indicators: Availability is the likelihood of a bus being operational at any point in time. Indicators include:

- Number of open work orders
- Average duration of open work orders
- Spare ratio levels

Accumulation of at least three years of vehicle repair histories

Parts and inventory control:

Another area of concern, and the need for quick and accurate information is inventory control. Inventory control is especially important today with vehicles containing new and more sophisticated parts. Tight budget restraints, also, puts pressure on management to control costs. Parts and inventory is an area where costs can easily escalate and one which should be top priority to upper management. It is critical that management know inventory turnovers, costs, and inventory to sales ratios. Obviously, inventory is a large asset that must be managed efficiently. The inventory information system should help insure that there are neither too few parts nor too many parts and components at hand. Too

few will increase the downtime of a bus requiring a part or component. Too many increases the dollars tied up in parts and components inventory. To properly manage inventory quantities, the system should automatically flag parts that need to be reordered, produce inventory dollar values, and report the average usage rate for each part.

Ideally, the system should interface directly with the maintenance system Interfacing maintenance, inventory, and parts would enable the system to retrieve information on parts and components usage statistics directly from the maintenance system. Such an inventory system can also flag high parts usage, thus alert the manager to investigate the situation further.

In implementing an informational system, UMTA suggests the following:

Information System Development

The development of any computerized information system should go through five stages. They are:

1. Conceptualizing: What are the objectives? What is expected from the information system? This is first determined through management-level brainstorming sessions.

2. Planning: This is the determination of information needs and evaluation methods. Planning should result in a system performance specification.

3. Design: What hardware and software is required to meet performance specifications? How will the system be reorganized? How will transit agency procedures be changed? What about staff training?

4. Implementation: During this step the new information systems is installed. Transit agency staff become operational in its use and the "bugs" are worked out of the system.

5. Maintenance: This stage covers the life of the system after the system builders are done with their implementation. The first half of this chapter deals only with the first two stages Conceptualization and Planning. The second half covers technical considerations of design.

MAINTENANCE OF LIFT EQUIPMENT

Another important aspect of operation is the proper maintenance of access-related equipment. The ADA requires that vehicles be assessable to and usable by individuals with disabilities. Two sections of the regulations address this issue. Sections 37.161 requires that all access-related features, including lifts, ramps, securement systems, and communications systems, be maintained in operating condition. This equipment must be repaired promptly if it is damaged or breaks down.

Section 37.163 requires regular and frequent maintenance checks of lifts. Drivers are required to report lift failures as soon as possible. Every effort must be made to repair lifts before the next day of service. If the lift cannot be repaired before the next day of service, the vehicle can be placed back in operation only if a spare is unavailable.

APPENDIX

MAINTENANCE
PROGRAM FORMS USED BY WFTS

I. Preventative and Major Maintenance Records

II. Vehicle Maintenance Log Forms

I. PREVENTATIVE AND MAJOR MAINTENANCE RECORDS

CITY OF WICHITA FALLS

PM-A CHECK LIST FOR CLASS CODE 385

[ ] CHANGE OIL/FILTER
[ ] CHECK PVC VALVE
[ ] CHANGE AIR FILTER
[ ] CHECK TIRE PRESSURE
[ ] CHECK LUG NUTS
[ ] CHECK BRAKES
[ ] CHECK BRAKE LINES
[ ] LUBRICATE/GREASE
[ ] CLEAN BATTERY/CABLES
[ ] CHECK TRANSMISSION

[ ] CHECK LIGHTS, INTERIOR,EXTERIOR
[ ] CHECK WINDSHIELD WIPER/FLUID
[ ] CHECK FOR LEAKS
[ ] CHECK POWER STEERING FLUID
[ ] CHECK DIFFERENTIAL
[ ] CHECK BELTS/HOSES
[ ] CHECK A/C-HEATER OPERATION
[ ] CHECK INTERIOR/SEATS,HANDRAILS ET
[ ] CHECK SAFETY EQUIP./FIRE EXT., WARNING TRIANGLE, ETC..

CITY OF WICHITA FALLS

PM-A CHECK LIST FOR CLASS CODE 388, 386

[ ] CHANGE OIL/FILTER
[ ] CHANGE FUEL FILTERS
[ ] CHECK AIR FILTER
[ ] CHECK TIRE PRESSURE
[ ] CHECK LUG NUTS
[ ] CHECK BRAKES
[ ] CHECK AIR LINES
[ ] LUBRICATE/GREASE
[ ] CLEAN BATTERY/CABLES
[ ] CHECK TRANMISSION
[ ] CHECK LIGHTS INTERIOR/EXTERIOR
[ ] CHECK WINDSHIELD WIPER/FLUID
[ ] CHECK FOR LEAKDS
[ ] CHECK POWER STEERING FLUID
[ ] CHECK HYDRAULIC FLUIDS
[ ] CHECK DIFFERENTIALS
[ ] CHECK BELTS/HOSES
[ ] DRAIN AIR TANKS
[ ] CHECK AC/HEATER OPERATION
[ ] CHECK INTERIOR/SEATS,HAND RAILS ET
[ ] CHECK SAFETY EQUIPMENT,FIRE EXTING WARNING TRIANGLE ETC.

OTHER COMMENTS: _____
_____
_____

MECHANIC'S SIGNATURE: _____ DATE:_____

CITY OF WICHITA FALLS

PM-B CHECK LIST, CLASS CODE 385

EXTERIOR INSPECTION

[ ] BODY CONDITION
[ ] TURN SIGNALS
[ ] LICENSE PLATE LIGHT
[ ] INSPECT BRAKE LININGS
[ ] CHECK BACKUP WARNING SIGNAL
[ ] HEADLIGHTS
[ ] BRAKE/TAIL LIGHTS/FLASHER
[ ] WINDOW GLASS
[ ] MIRRORS
[ ] WIPER BLADES
[ ] CHECK TIRE PRESSURE
[ ] CHECK LUG NUTS

ENGINE COMPARTMENT

[ ] CHANGE ENGINE OIL
[ ] SERVICE POWER STEERING
[ ] CHECK FOR LEAKS
[ ] PRESSURE TEST RADIATOR CAP
[ ] RADIATOR HOSES/CLAMPS
[ ] CHECK HOSES
[ ] CHECK WIRING
[ ] CHECK HOOD LATCH
[ ] RETIGHTEN VALVE COVER
[ ] SERVICE TRANSMISSION
[ ] CHECK BRAKE FLUID
[ ] WIPER FLUID RESERVOIR
[ ] CHECK BELTS
[ ] CHANGE AIR FILTER
[ ] CHECK FUEL LINES
[ ] REPLACE FUEL FILTER
[ ] CLEAN BATTERY AND CABLES
[ ] STEAM CLEAN ENGINE
[ ] REPLACE PVC VALVE AND FILTER

VEHICLE UNDERBODY

[ ] CHANGE OIL/FILTER
[ ] CHECK BUSHINGS
[ ] CHECK IDLER ARM
[ ] CHECK MUFFLER & EXHAUST
[ ] LUBE GREASE FITTINGS
[ ] CHECK WHEEL BEARINGS AS REQUIRED
[ ] CHECK SHOCK ABSORBERS
[ ] CHECK TIE ROD ENDS
[ ] CHECK U-JOINTS
[ ] CHECK EMERGENCY BRAKE CABLE
[ ] TIGHTEN OIL PAN BOLTS
[ ] CHECK BRAKE LINING
[ ] INSPECT BRAKE LINES

VEHICLE INTERIOR

[ ] IGNITION SWITCH
[ ] REAR VIEW MIRROR
[ ] WINDOW/DOOR HANDLES
[ ] GAUGES
[ ] BRAKE,ACCEL PEDALS
[ ] HEATER/AIR CONDITIONER
[ ] SEAT BELTS
[ ] INSPECT PASS. SEATS AND HAND RAILS
[ ] RADIO
[ ] DASH LIGHTS
[ ] HORN/STEERING
[ ] EMERGENCY BRAKE
[ ] SPEEDOMETER/ODOMETER
[ ] WHEELCHAIR LIFT OPERATION

COMMENTS: _____
_____
_____

MECHANIC'S SIGNATURE: _____ DATE:_____

CITY OF WICHITA FALLS

PM-B CHECK LIST FOR CLASS CODE 388, 386

EXTERIOR INSPECTION

[ ] BODY CONDITION
[ ] TURN SIGNALS
[ ] LICENSE PLATE LIGHT
[ ] INSPECT BRAKE LININGS
[ ] CHECK FRONT END ALIGNMENT
[ ] CHECK BACKUP WARNING SIGNAL
[ ] HEADLIGHTS
[ ] BRAKE/TAIL LIGHTS/FLASHERS
[ ] WINDOW GLASS
[ ] MIRRORS
[ ] WIPER BLADES
[ ] CHECK TIRE PRESSURE
[ ] CHECK LUG NUTS

ENGINE COMPARTMENT

[ ] CHANGE ENGINE OIL
[ ] SERVICE POWER STEERING
[ ] SERVICE HYDRAULIC SYSTEM
[ ] CHECK FOR LEAKS
[ ] RADIATOR HOSES/CLAMPS
[ ] PRESSURE TEST RADIATOR CAP
[ ] CHECK HOSES
[ ] CHECK WIRING
[ ] CHECK HOOD LATCH
[ ] RETIGHTEN VALVE COVER
[ ] SERVICE TRANSMISSION
[ ] WIPER FLUID/RESERVOIR
[ ] CHECK BELTS
[ ] CHANGE AIR FILTER
[ ] CHECK FUEL LINES
[ ] REPLACE FUEL FILTER
[ ] CLEAN BATTERY & CABLES
[ ] STEAM CLEAN ENGINE

VEHICLE UNDERBODY

[ ] CHANGE OIL FILTER
[ ] CHECK BUSHINGS
[ ] CHECK IDLER ARM
[ ] CHECK WHEEL BEARING AS REQUIRED
[ ] CHECK MUFFLER AND EXHAUST
[ ] LUBE GREASE FITTINGS
[ ] CHECK SHOCK ABSORBERS
[ ] CHECK TIE ROD ENDS
[ ] CHECK U-JOINTS
[ ] DRAIN AIR TANKS
[ ] CHECK DIFFERENTIALS
[ ] CHECK BRAKE LINING
[ ] TIGHTEN OIL PAN BOLTS
[ ] SERVICE AIR DRYER

VEHICLE INTERIOR

[ ] IGNITION SWITCH
[ ] REAR VIEW MIRROR
[ ] WINDOW/DOOR HANDLES
[ ] GAUGES
[ ] BRAKE, ACCEL PEDALS
[ ] HEATER/AIR CONDITIONER
[ ] SEATBELTS
[ ] INSPECT PASS. SEATS AND HAND RAILS
[ ] RADIO
[ ] DASH LIGHTS
[ ] HORN/STEERING
[ ] PARK BRAKE
[ ] SPEEDOMETER/ODOMETER
[ ] WHEELCHAIR LIFT OPERATION

OTHER:_____
_____
_____

MECHANIC'S SIGNATURE:_____ DATE:_____

CITY OF WICHTIA FALLS

PM-C CHECK LIST FOR CLASS CODE 385

EXTERIOR INSPECTION

[ ] INSPECT BODY CONDITION
[ ] INSPECT TURN SIGNALS
[ ] INSPECT FRONT END ALIGNMENT
[ ] INSPECT MIRRORS
[ ] INSPECT HEADLIGHTS
[ ] INSPECT BRAKE/TAIL LIGHTS/FLASHES
[ ] INSPECT WINDOW GLASS
[ ] REPLACE WIPER BLADES
[ ] CHECK TIRE WEAR/PRESSURE
[ ] CHECK LUG NUTS

ENGINE COMPARTMENT

[ ] CHANGE ENGINE OIL/FILTER
[ ] CHANGE POWER STEERING FLUID
[ ] CHECK FOR LEAKS
[ ] INSPECT RADIATOR HOSES/CLAMPS
[ ] INSPECT BELTS
[ ] INSPECT VACUUM HOSES
[ ] INSPECT WIRING
[ ] INSPECT HOOD LATCH
[ ] RETIGHTEN VALVE COVER
[ ] CHANGE TRANSM. FLUID/FILTER
[ ] CHANGE BRAKE FLUID
[ ] INSPECT WIPER FLUID/RESERVOIR
[ ] INSPECT OVERFLOW RES RADIATOR
[ ] PRESSURE TEST RAD CAP
[ ] REPLACE AIR FILTER
[ ] INSPECT FUEL LINES
[ ] REPLACE FUEL FILTER
[ ] CLEAN BATTERY/CABLES
[ ] STEAM CLEAN ENGINE
[ ] REPLACE PVC VALVE/FILTER
[ ] INSPECT SWITCHES/CIRCUITS
[ ] COMPLETE TUNE UP

VEHICLE UNDERBODY

[ ] CHANGE OIL/FILTER
[ ] INSPECT BUSHINGS
[ ] INSPECT IDLER ARM
[ ] INSPECT U-JOINTS/DRIVESHAFT
[ ] LUBRICATE GREASE FITTINGS
[ ] INSPECT EMERGENCY BRAKE CABLE
[ ] INSPECT BRAKES
[ ] INSPECT SHOCK ABSORBERS
[ ] INSPECT DRAGLINK/TIE ROD ENDS
[ ] CHANGE DIFFERENTIAL GREASE
[ ] INSPECT MUFFLER/EXHAUST
[ ] TIGHTEN OIL PAN BOLTS
[ ] INSPECT BRAKE LINES
[ ] INSPECT ENGINE/TRANS. MOUNTS

VEHICLE INTERIOR

[ ] INSPECT IGNITION SWITCH
[ ] INSPECT REAR VIEW MIRROR
[ ] INSPECT AIRCONDITIONER/HEATER
[ ] INSPECT DASH LIGHTS
[ ] INSPECT BRAKE/ACCEL PEDALS`
[ ] INSPECT SPEEDOMETER/ODOMETER
[ ] INSPECT HORN/STEERING
[ ] INSPECT DOOR OPERATION
[ ] INSPECT SEATBELTS
[ ] INSPECT WINDOW/DOOR HANDLES
[ ] INSPECT PASS.SEAT AND HAND RAILS
[ ] INSPECT CAB INTERIOR
[ ] INSPECT EMERGENCY BRAKE
[ ] INSPECT GAUGES
[ ] LUBRICATE DOOR HINGES
[ ] CHECK WHEELCHAIR LIFT OPERATION

OTHER COMMENTS: _____
_____
_____

MECHANIC'S SIGNATURE:_____ DATE:_____

CITY OF WICHITA FALLS

PM-C CHECK LIST FOR CLASS CODE 388,386

EXTERIOR INSPECTION

[ ] INSPECT BODY CONDITION
[ ] INSPECT TURN SIGNALS
[ ] INSPECT FRONT END ALIGNMENT
[ ] INSPECT MIRRORS
[ ] INSPECT HEADLIGHTS
[ ] INSPECT BRAKE/TAIL LIGHTS/FLASHES
[ ] INSPECT WINDOW GLASS
[ ] REPLACE WIPER BLADES
[ ] CHECK TIRE WEAR/PRESSURE
[ ] CHECK LUG NUTS

ENGINE COMPARTMENT

[ ] CHANGE ENGINE OIL/FILTER
[ ] CHANGE POWER STEERING FLUID/FILTER
[ ] CHANGE HYDR. FLUID/FILTER
[ ] CHECK FOR LEAKS
[ ] INSPECT RADIATOR HOSES/CLAMPS
[ ] INSPECT BELTS
[ ] INSPECT HOSES
[ ] INSPECT WIRING
[ ] INSPECT HOOD LATCH
[ ] RETIGHTEN VALVE COVER
[ ] INSPECT ALT/GREASE
[ ] CHANGE TRANSM. FLUID/FILTER
[ ] INSPECT WIPER FLUID/RESERVOIR
[ ] PRESSURE TEST RAD CAP
[ ] REPLACE AIR FILTER
[ ] INSPECT FUEL LINES
[ ] REPLACE COOLENT/WATER FILTERS
[ ] REPLACE FUEL FILTER
[ ] CLEAN BATTERY/CABLES
[ ] STEAM CLEAN ENGINE
[ ] INSPECT SHUTTER OPERATION
[ ] INSPECT SWITCHES/CIRCUITS

VEHICLE UNDERBODY

[ ] CHANGE OIL/FILTER
[ ] INSPECT BUSHINGS
[ ] INSPECT IDLER ARM
[ ] INSPECT U-JOINTS/DRIVESHAFT
[ ] INSPECT ENGINE/TRANSM. MOUNTS
[ ] LUBRICATE GREASE FITTINGS
[ ] INSPECT BRAKES
[ ] INSPECT SHOCK ABSORBERS
[ ] INSPECT DRAGLINK/TIE ROD ENDS
[ ] CHANGE DIFFERENTIAL GREASE
[ ] INSPECT MUFFLER/EXHAUST
[ ] TIGHTEN OIL PAN BOLTS
[ ] INSPECT AIR LINES/BRAKE CHAMBERS
[ ] DRAIN AIR TANKS
[ ] CHANGE AIR DRYER
[ ] CLEAN AIR BOX (DETROIT)

VEHICLE INTERIOR

[ ] INSPECT IGNITION SWITCH
[ ] INSPECT REAR VIEW MIRROR
[ ] INSPECT A/C / HEATER
[ ] INSPECT DASH LIGHTS
[ ] INSPECT BRAKE/ACCEL PEDALS
[ ] INSPECT SPEEDOMETER/ODOMETER
[ ] INSPECT HORN/STEERING
[ ] INSPECT DOOR OPERATION
[ ] INSPECT SEATBELTS
[ ] INSPECT WINDOW/DOOR HANDLES
[ ] INSPECT PASS.SEATS AND HAND RAILS
[ ] INSPECT RADIO
[ ] INSPECT CAB INTERIOR
[ ] CHECK PARK BRAKE
[ ] INSPECT GAUGES
[ ] LUBRICATE DOOR HINGES
[ ] CHECK WHEELCHAIR LIFT OPERATION

OTHER COMMENTS:_____
_____
_____

MECHANIC'S SIGNATURE:_____ DATE:_____

E M S / I X for City of Wichita Falls

Report Date: 06/04/99 Repair and PM Tasks

Task Code	Task Type	Description
100	P	CHANGE ENGINE OIL & OIL FILTER
101	P	BODY INTERIOR & EXTERIOR, INSPECT/REPAIR
102	P	EXHAUST, INSPECT/REPAIR
103	P	FUEL SYSTEM, INSPECT/REPAIR, REPLACE FILTER
104	P	AIR SYSTEM, INSPECT/REPAIR: COMPRESSOR, TANKS, LINES, FITTINGS
105	P	AIR INTAKE, REPAIR/INSPECT, REPLACE FILTERS
106	P	COOLING SYSTEM, BELTS, HOSES, ANTIFREEZE
107	P	BRAKES, REPAIR/INSPECT: LININGS, DRUMS, ROTORS, FLUID LEVEL
108	P	SUSPENSION, REPAIR/INSPECT: LEAF SPRING, AIR BAGS, TRAILING ARMS, STEERING, LUBRICATE AS REQUIRED
109	P	LUBRICATTION, PERFORM: STEERING, REAR DIFFERENTIAL, DRIVE LINE
110	P	BATTERY, CLEAN BATTERY, CABLES, BOX, TRAY
111	P	TRANSMISSION, CHECK FOR LEAKS, FLUID LEVEL
112	P	TIRES, CHECK PRESSURE, TREAD DEPTH, DAMAGE
113	P	LIGHTS, INTERIOR/EXTERIOR, INSPECT/REPAIR
114	P	INDICATORS, INSPECT/REPAIR: GUAGES, WARNING LIGHTS, PASSENGER SIGNAI DESTINATION SIGN
115	P	HEATER & A/C, ACCESSORIES INSPECT/REPAIR: HEATER, A/C, COMFORT CONTROL, FIRE EXTINGISHERS, SCHEDULES, FIRST AID
116	P	WHEELCHAIR LIFT, TIE DOWN, INSPECT OPERATION
118	P	TRANSMISSION, CHANGE FLUID & FILTER
120	P	VALVES, ADJUST IF FIRST TIME FOR B SERVICE
121	P	AIR DRYER, CHANGE
122	P	BRAKES, DRAIN AND REFILL
123	P	DOORS & HINGES, LUBRICATE
124	P	COOLING SYSTEM, DRAIN & REFILL
125	P	HYDRAULIC RESERVOIR, CHANGE FLUID & FILTER
126	P	VALVES, ADJUST
127	P	VIBRATION DAMPER, INSPECT
128	P	A/C, CLEAN DRAINS (BOTH SIDES)
A	P	OIL CHANGE,AIR FILTERS,CHECK, OIL FILTERS CHECK REAR END GREASE THE UNIT RADIATOR CHECK BRAKE SYSTEM CHECK/LEVELS
B	P	B SERVICE
C	P	C SERVICE
01	R	SERVICE CALLS, BUS SERVICE CALLS FOR TRANSIT FLEET. DENOT UMPTA REPORTS.
02	R	SERVICE TESTING
03	R	SERVICE CALLS, NON-BUS
04	R	TOWING

E M S / I X for City of Wichita Falls

Report Date: 06/04/99 Repair and PM Tasks

Task Code	Task Type	Description
05	R	EQUIPMENT DELIVERY
06	R	MAKE READY
07	R	DISPOSAL PREPARATION
		PREPARING UNIT FOR DISPOSAL (AUCTION, ET
08	R	ESTIMATE PREPARATION
		PREPARING INFORMATION FOR REPAIR ESTIMAT
		ACCIDENT/INCIDENT
10	R	LAWNMOWER REPAIR
		REPAIRS MADE TO LAWNMOWERS
117	R	ROADTEST
119	R	DIFFERENTIAL, CHANGE
12	R	SMALL EQUIPMENT, REPAIR
13	R	STATE INSPECTION
14	R	WINTERIZATION
15	R	LUBRICATION
17	R	CLEANING/WASHING
18	R	FUEL DISPENSING
19	R	BEARINGS, SEALS, O-RINGS
20	R	BODY/CAB
21	R	PAINTING
23	R	GLASS/WINDOW
		REPLACEMENT OR REPAIR OF WINDSHEILDS AND
25	R	RADIO EQUIPMENT
26	R	GENERAL ACCESSORIES
27	R	AIR CONDITIONER
28	R	HEATER
29	R	WIPERS & ASSOCIATED EQUIPMENT
33	R	BRAKE SYSTEM, HYDRAULIC
37	R	BRAKE SYSTEM, AIR
38	R	BRAKE SYSTEM, ELECTRICAL
40	R	CLUTCH & FLYWHEEL
41	R	TRANSMISSION, STANDARD
42	R	TRANSMISSION, AUTOMATIC
43	R	POWER TAKE OFF
45	R	POWER TRAIN
50	R	FRAME/SUSPENSION
52	R	STEERING SYSTEM
56	R	ALIGNMENT
60	R	TIRES, REPAIR
61	R	TIRE, INSTALL NEW
62	R	TIRES, INSTALL RECAPS
63	R	WHEEL BALANCING
64	R	WHEELS/HUBS, REPLACEMENT
65	R	TIRES, REPLACE HARDWARE
66	R	TUBES
70	R	ENGINE, REPLACEMENT
71	R	ENGINE, TUNEUP
72	R	ENGINE, REPAIR
73	R	BELTS/HOSES

E M S / I X for City of Wichita Falls

Report Date: 06/04/99 Repair and PM Tasks

Task Code	Task Type	Description
74	R	EXHAUST SYSTEM
75	R	COOLING SYSTEM
76	R	CARBURETOR
77	R	ENGINE, OVERHAUL
78	R	FUEL SYSTEM
79	R	AIR INTAKE SYSTEM
80	R	BATTERY
82	R	CHARGING SYSTEM
83	R	STARTER, REPAIR OR REPLACEMENT
86	R	INSTRUMENTS/GUAGES
87	R	LAMPS/BULBS, REPLACEMENT
88	R	ACCESSORIES, ELECTRICAL
90	R	HYDRAULICS, ALL ASSOCIATED PARTS
92	R	GEAR BOXES, REPLACEMENT OR REPAIR
93	R	WELDING
94	R	BLADES/BROOMS/BRUSHES/BUCKETS
96	R	SPECIAL PURPOSE EQUIPMENT, REPAIR OR REPLACE
97	R	HITCHES
99	R	HARDWARE, NUTS, BOLTS, REPLACEMENT OR REPAIR
X100	R	BATTERY REPLACE
X200	R	TUNE UP
X300	R	REPLAC HEAD LITE

E M S / I X for City of Wichita Falls

Repair Order

Work Order TS0700

Equip No 00470 OWNED Date 06/04/99 13:35
1991 FORD MOTOR CO F150 601532
Serial No 1FTEF15N4MNA90647 In Service 06/03/91
Equip Cl 205 PICKUP, 1/2 TON 96 Color WHITE

Date Due 06/04/99
Time Due 21:35
Est Compl 06/04/99

Meter 19986
Priority 1
Equip Stat
Asset No

User Dept 538WT
WICHITA F.TRAN.
Contact
Phone
Warr Expir

Mechanic
Parking Stall
Ref Order

Reason B OTHER
Work Class
Warranty NO
Account Code 31-538

Est Hours 0.0

Expected Tasks Std Hours Complete

Comments Complete

II. VEHICLE MAINTENANCE LOG FORMS

CITY OF WICHITA FALLS
FLUID LOG

LOCATION: **TRANSPORTATION** | ADDITIVE | DATE _____

UNIT#	MILEAGE	QTS	TYPE	CODE	SIGNATURE

ADDITIVE CODES
A = ISO68 HYDRAULIC FLUID
B = DEXTRON II TRANSMISSION FLUID
C = 15W40 MOTOR OIL

MECHANIC VEHICLE CHECK LIST

_____	Oil	_____	Water and Anti-freeze content
_____	Belts (fan, generator, air compressor, water pump, etc.) for slippage or excessive wear	_____	Hand Brake
_____	Brake Air Pressure	_____	Foot Brake
_____	Instrument Lights-oil, heat, ammeter, etc.	_____	Check Sound of Engine
_____	Mirrors	_____	Safety Equipment-Fire Extinguisher reflectors, etc.
_____	Steering Wheel for excessive play	_____	Accelerator for Looseness
_____	Horn Operation	_____	Windshield Wipers
_____	Heaters	_____	Defrosters
_____	Headlights, clearance lights marker lights, tail lights	_____	Turn Signals
_____	Stop Lights	_____	Clean All Windows
_____	Clean floor, seats, steps, etc.	_____	Tires for correct pressure
_____	Wheel Nuts	_____	Check for loose fuel lines or leaks
_____	Air Conditioning	_____	Body Damage
_____	Buzzer	_____	Starter
_____	Doors	_____	Warning Signs-ie: No Smoking, Watch Your Step, etc.

_____ Road Test _____ Condition of Vehicle _____
(Name) (Date)

_____

_____

_____

_____
Foreman Signature

Daily Preventive Maintenance Schedule

Vehicle Number: _____ Date: _____

Inspector: _____

Pre-Trip Inspection:

Before each scheduled day of lift service, operate lift **minimum one complete cycle** and inspect each of the following :

- ☑ Does the lift interlock (if equipped) function as intended?
- ☐ Does the lift cargo door light (if equipped) function as intended?
- ☐ Does the lift deploy when the lift interlock is activated as intended?
- ☐ Does the lift safely clear the cargo door as the lift is deployed and stowed?
- ☐ Does the lift operate smoothly (no jerking or abnormal movement)?
- ☐ Does the lift operate at normal speed?
- ☐ Is the lift power source adequate?
- ☐ Does the roll stop(s) operate properly?
- ☐ Does the outboard roll stop latch operate properly?
- ☐ Do the handrails operate properly?
- ☐ Is the platform angle normal?
- ☐ Is lift operation quiet (no rattles, abnormal sounds, etc.)?
- ☐ Has the hand-held switch box cable been damaged?
- ☐ Do the lift control switches function properly?
- ☐ Do the lift cargo door securement devices function as intended?
- ☐ Is the manual back-up pump handle in place?
- ☐ Is the hand pump valve closed securely (tight)?
- ☐ Are the lift-posted and door-posted decals worn, missing or illegible?
- ☐ Is the lift protective padding (if equipped) in place, worn or damaged?
- ☐ Can you visually detect any lift wear, damage, misalignment, hydraulic leaks, loose bolts, broken welds or any abnormal conditions?

Post-Trip Inspection:

Operate lift **minimum one complete cycle** and check each of the above daily pre-trip inspections **if applicable** for your daily inspection routine (outlined by your transit agency).

- ☐ Clean lift surfaces where wheelchairs travel
- ☐ Clean and lubricate key locations based on lift usage frequency and climate conditions (outlined by your transit agency). Lubrication procedures should be performed by transit agency maintenance personnel.

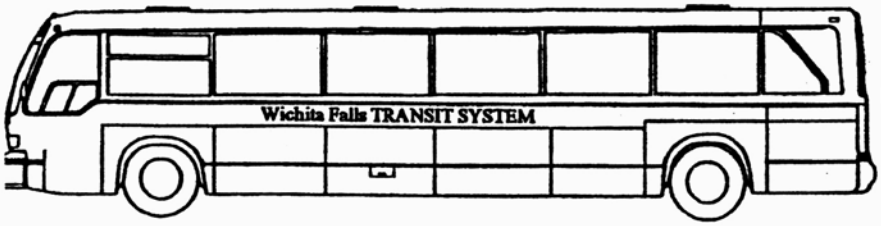
Pre-check

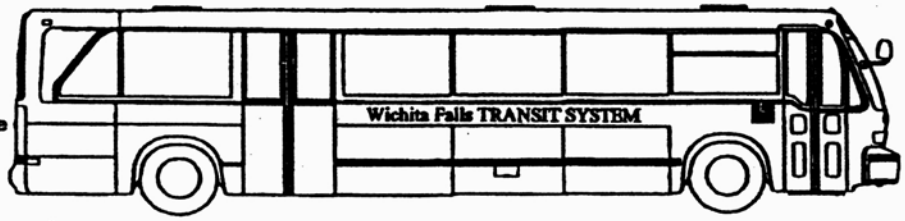
Bus No. _____ Date _____
Route No. _____

BUS DEFECT CARD

Note any damage on bus body.

Draw circle use seq.# for each defect noted.





Only check ☑ items that are OK. Do Not Check Defective Items. Note defects under **Problems**

CHECKLIST

INSIDE

- ☐ Parking Brake
- ☐ Radio & PA system
- ☐ Farebox (light) vault
- ☐ Oil Pressure [light or gauge]
- ☐ Air Pressure [gauge]
- ☐ Low Air Warning
- ☐ Windshield Wiper & Washer
- ☐ Heater-Defroster
- ☐ Mirrors
- ☐ Air Conditioner
- ☐ Indicator Lights / Buzzer
- ☐ Horn
- ☐ Windows
- ☐ Seats
- ☐ Steering Wheel-Play

INSIDE (continued)

- ☐ Fire Extinguisher & Highway Devices
- ☐ Turn Signal Operation
- ☐ Interior Lights
- ☐ 4-Way Flashers
- ☐ Apply Brake - Air lose should not exceed 3 PSI per minute
- ☐ Emergency Exit [roof hatch / windows]
- ☐ Transit Schedules/Accident Card
- ☐ Flashlight

WHEELCHAIR

- ☐ Cycle Lift
- ☐ Check Manual Lift Bar
- ☐ Count Wheelchair Seat Belts
- ☐ Count Wheelchair Tiedown Straps

OUTSIDE

- ☐ Tires
- ☐ Wheels, Lugs
- ☐ Clearance Lights
- ☐ Reflectors

FRONT

- ☐ Frt. Destination Sign
- ☐ Destination Sign Light
- ☐ Headlights
- ☐ Turn Signal Lights
- ☐ License Plate

SIDES

- ☐ Enterance & Exit Doors
- ☐ Side Destination Sign
- ☐ Destination Sign Light

REAR

- ☐ Tail Lights
- ☐ Stop Lights
- ☐ Turn Signal Lights
- ☐ License Plate & Light

Driver's Signature _____

PROBLEMS

_____
_____
_____
_____
_____

POST-CHECK

Bus No. _____ Date _____

Route No. _____ Miles _____

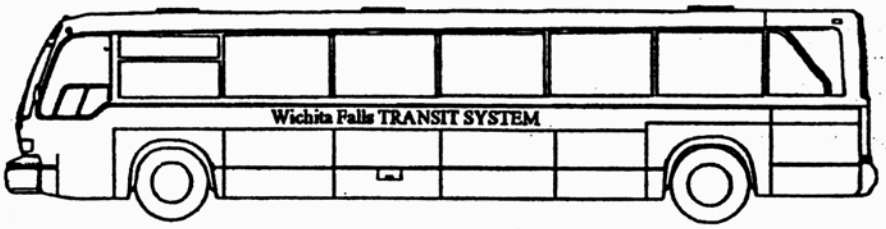
BUS DEFECT CARD

Note any damage on bus body.

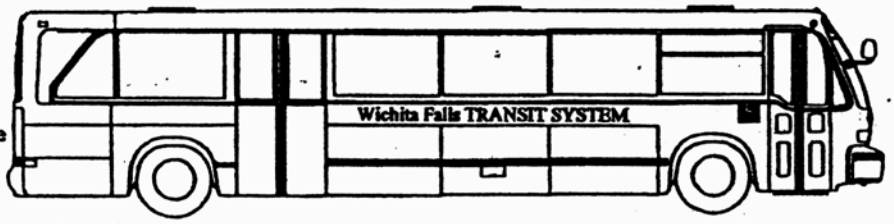
Draw circle use seq.# for each defect noted.

Rear End

Front End



Left Side



Right Side

Only check ☑ items that are defective. Note defects under PROBLEMS below.

CHECKLIST

INSIDE

- ☐ Parking Brake
- ☐ Radio & PA system
- ☐ Farebox (light) vault
- ☐ Oil Pressure [light or gauge]
- ☐ Air Pressure [gauge]
- ☐ Low Air Warning
- ☐ Windshield Wiper & Washer
- ☐ Heater-Defroster
- ☐ Mirrors
- ☐ Air Conditioner
- ☐ Indicator Lights / Buzzer
- ☐ Horn
- ☐ Windows
- ☐ Seats
- ☐ Steering Wheel-Play

INSIDE (continued)

- ☐ Fire Extinguisher & Highway Devices
- ☐ Turn Signal Operation
- ☐ Interior Lights
- ☐ 4-Way Flashers
- ☐ Apply Brake - Air lose should not exceed 3 PSI per minute
- ☐ Emergency Exit [roof hatch / windows]
- ☐ Transit Schedules/Accident Card
- ☐ Flashlight

WHEELCHAIR

- ☐ Cycle Lift
- ☐ Check Manual Lift Bar
- ☐ Count Wheelchair Seat Belts
- ☐ Count Wheelchair Tiedown Straps

OUTSIDE

- ☐ Tires
- ☐ Wheels, Lugs
- ☐ Clearance Lights
- ☐ Reflectors

FRONT

- ☐ Frt. Destination Sign
- ☐ Destination Sign Light
- ☐ Headlights
- ☐ Turn Signal Lights
- ☐ License Plate

SIDES

- ☐ Enterance & Exit Doors
- ☐ Side Destination Sign
- ☐ Destination Sign Light

REAR

- ☐ Tail Lights
- ☐ Stop Lights
- ☐ Turn Signal Lights
- ☐ License Plate & Light

Driver's Signature _____

PROBLEMS

_____

_____

_____

_____

_____ Mechanic Signature _____

Location: TS Part: 33-MKD224PE
Descr: BRAKES, PADS
Bin: D2
Vendor: MAINAUTO 06535 MAIN AUTO PARTS

TRANSPORTATION DEPARTMENT
BUS IDENTIFICATIONS
July 19, 2002

BUS NO.	YEAR	MAKE	WHEEL CHAIR	SEAT CAP	TOT CAP
491	1996	Escort RE VIN # 1N9EBAC69SC084150 Lic. # 695-229	Y	23	35
497	2002	Escort RE VIN # 1N9EBAC632C084144 Lic. # 827-673	Y	23	23
493	1996	Escort RE VIN # 1N9EBAC60SC084148 Lic. # 695-228	Y	23	35
494	1996	Escort RE VIN # 1N9EBAC62SC084149 Lic. # 695-230	Y	23	35
496	1998	Transmark RE-32 VIN # IN9TDAC82WO84175 Lic. # 742-901	Y	29	41
497	1998	Transmark RE-32 VIN # IN9TDAC82WO84176 Lic. # 742-902	Y	29	41
488	2000	Transmark RE VIN # 1N9TDAC8XYCO84041 Lic. # 772-431	Y	29	41
489	2000	Transmark RE VIN # IN9TDAC8XYCO84042 Lic. # 773-619	Y	29	41
498	2000	Transmark RE VIN # IN9TDAC8XYCO8404 Lic. # 772-432	Y	29	41
499	2000	Transmark RE VIN # IN9TDAC8XYCO84039 Lic. # 773-618	Y	29	41
475	2002	Transmark RE VIN # IN9TDAC852CO84021 Lic. # 817-392	Y	29	53
476	2002	Transmark RE VIN # IN9TDAC872CO84022 Lic. # 817-381	Y	29	53

TRANSPORTATION DEPARTMENT
BUS SERVICE VEHICLE IDENTIFICATIONS
JULY 19, 2002

VEH #	YEAR	MAKE			
472	2001	Dodge RAM 1500 VIN # 1BTHC16Z515234520 Lic. # 802-111			
473	2001	Ford 15 Passenger Van E350 VIN # 1FBSS31L01B02788 Lic. # 802-112			
474	2001	Ford Taurus LX VIN # FAFP52021A210586 Lic. # 803-134			