# Pittsford Schools

Transportation Department

**BUS MAINTENANCE** 

POLICIES AND PROCEDURES

### POLICIES & PROCEDURES CATEGORIES

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- 2. Lube, Oil, & Filter Changes
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- 12. D.O.T. Inspection

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#### Bus Maintenance Policy & Procedures

# 1. Preventative Maintenance Inspection Policy:

All vehicles used in student transportation will receive Preventative Maintenance Inspection (PM) every sixty (60) days.

#### Procedure:

Preventative Maintenance Inspections will be performed using a preprinted cover sheet as a guideline. All categories will be examined and checked off as acceptable or defective on the cover sheet. A work order will be filled out including labor hours, brief description of work, type of defect, and corresponding letter and number of categories. All part prices, numbers and descriptions will be recorded.

Defects found during preventative maintenance inspection will be reported immediately following completion of inspection. The only exceptions being non-critical defects, which will be scheduled for repair at the discretion of the head mechanic or supervisor of the shop at the time.

All completed repairs will be initialed by the technician(s) making the repair. A pre- preventative maintenance road test/brake test will be performed and a post P.M. road test will be performed before that vehicle is put into service.

Any 'Out of Service' vehicle in process of, or in waiting for repair will have the keys and DVIR book placed in the mechanic's office.

## 2. Lubrication, Oil, and Filter Changes

#### Policy:

Chassis lubrication will be performed at each preventative maintenance inspection. Engine oil and filter changes will be monitored through preventative maintenance records for change intervals.

#### Procedure:

Engine oil and filter will be changed during scheduled PM inspection.

#### 3. Brake Inspection

#### Policy:

All vehicles used in student transportation will receive a brake inspection at the following intervals: All hydraulic brake systems at 20,000 miles or once per year; all air Brake systems at 20,000 miles or once per year, whichever occurs first.

#### Procedure:

All braking wheels will be removed and components properly cleaned. All components will be carefully inspected for wear and defects and replaced as needed.

All brake shoes and/or pads, and brake drums and/or rotors will be measured and recorded on brake inspection records. There will also be a work order documenting type of work, parts, description, numbers, labor time, and measurements taken.

Wheel bearing service will be performed at each brake inspection or at manufacturer's recommended intervals. This includes: cleaning, inspecting for defects and application of proper lubrication. Any axle seal that is removed will not be reused. Axle locks and/or cotter keys will not be reused.

Re-assembly will follow manufacturers recommended torquing procedures and settings.

A road test will be performed following all brake work. Braking distances will be checked for both service and parking systems. These systems must perform to D.O.T. specifications.

#### 4. Engine tune-up

#### Policy:

All gasoline engines will receive a tune-up on a two year basis, or at manufacturers recommended intervals.

All diesel engines should not require a maintenance tune-up at the mileage intervals that they are scheduled for replacement. However, if a drive ability problem should arise or intervals change, a maintenance tune-up may be performed at the discretion of the head mechanic.

#### Procedure:

Due to variations and rapid changes in today's engine systems, tune-up procedure and component replacement will be determined and preprinted on work orders for vehicles in need of tune-up service. Technicians will include labor time and initial completed work on the work order. Tune-up work will also be followed up by a road test before the vehicle returning to service.

### 5. Fuel Filter Replacement

#### Policy:

Vehicles, gasoline and diesel powered, will receive fuel filter replacements on a yearly basis.

#### Procedure:

All fuel filters will be removed and properly discarded. New filters will be installed. Systems will be pre-primed and bled as needed and thoroughly checked for leaks. This service may be included with tuneup service or on summer preventative maintenance service. Parts and labor will be included on appropriate work order.

#### 6. Transmission Service

#### Policy:

Automatic transmissions will be serviced on a two (2) year basis. Any external transmission filters on a yearly schedule.

#### Procedure:

All automatic transmissions with an external filtering system will have that filter changed each year. Fluid changes will be done on a two (2) year basis. Internal filters will be changed at 50,000 miles or manufacturer's interval if it occurs first. This service may be performed as a "spotlight" repair included in regular preventative maintenance inspections or as part of summer service. In either case, the head mechanic will determine when and which buses are to be serviced. Parts and labor will be recorded on the appropriate work order.

#### 7. Cooling System Service:

#### Policy:

Cooling System Service will be performed at the manufacturers recommended interval. Due to changes in models and manufacturers, these intervals will be determined by the head mechanic and service performed at that time.

#### Procedure:

Predetermined cooling system service intervals will be set up by the head mechanic and procedures will be set as to what steps should be taken to meet manufacturers specification. All waste generated by such service will be collected and properly disposed of.

#### 8. Differential Service

#### Policy:

Differentials will be monitored for fluid level and condition through brake inspections or spot light repair.

Fluid changes will be performed on a need to be basis only, at the discretion of the head mechanic. Technicians need to be aware of the type of fluid used in each vehicle due to the presence of both synthetic

and petroleum base lubricants which are not compatible with each other.

#### Procedure:

Upon inspection and discovery of the presence of contamination the head mechanic will be notified. Depending on the severity and type of contamination, appropriate measures will be taken to drain, flush, and replace fluid. Materials and labor will be recorded on the appropriate work order.

#### 9. Tire Replacement

#### Policy:

Tire condition will be monitored through preventative maintenance inspections and replacement will be as follows:

- Type A and B vehicles (less than 10,000#gvw) upon tire tread reaching 2/32" depth the tires will be replaced.
- Type B over 10,000# and C and D vehicles upon reaching 4/32" tread depth the tires will be replaced.

Other conditions may also warrant replacement at the discretion of the head mechanic. Any replacement tire must be of the proper size, type, and load range recommended by the manufacturer.

Retread tires may be run on the rear of all type of buses but not on the steer axles. Any tire repairs will be done at the discretion of the head mechanic.

#### Procedure:

Technicians will be responsible for installing the proper size, type, and load range tire. Dual tires will be matched as closely as possible for diameter and width. A and B vehicle tires will be mounted as needed and balanced at that time. Proper mounting and torquing procedures will be used on all vehicles. Tire pressures and tread depth measurements will be taken and recorded at the time of installation. Labor times and tire description will be recorded on the proper work order. Clean up and refinishing of wheels and hub assembly will be done upon replacement.

A road test shall be performed at completion to ensure proper performance.

#### 10. Body Repair and Refinishing Policy and Procedure

At this time the Pittsford Central School District Transportation Department does not employ an auto body technician. Any body or paintwork that is of a questionable nature will be evaluated by the head mechanic and operational manager for contractual repair.

#### 11. Scheduled or Spotlight Repair

#### Policy

Scheduled or Spotlight Repairs may be implemented at any time throughout the year. They may include component replacements, technical service updates, annual or bi-annual services, or non-critical defect repairs found during preventative maintenance inspection or by driver write-ups.

#### Procedure:

These repair programs are set up by the head mechanic on a priority basis. Technicians will be advised of, or assigned these repairs.

Technicians will be responsible for documenting labor, parts, and procedure on the appropriate work order. All work orders will be submitted to a pre-determined location for review by the assigned bus driver.

#### 12. D.O.T. Inspection

#### Policy:

Department of Transportation inspections are performed on a semiannual basis pursuant to NYS regulation.

#### Procedure:

DOT inspections will be recorded on a repair order by the technician that is assisting the inspector. All R.O.'s will include at least the unit #, date, mileage, and any noted defects. The R.O. will be forwarded to the Head Mechanic or Operations Manager at the completion of each unit's inspection.