SUPPORT SERVICES **1 of 2**
INDEX

History: Effective: 8-6-10 Revised: 7-27-10 Original: 11/00

INDEX (Continued)

History: Effective: 8-6-10 Revised: 7-27-10 Original: 11/00

901 FIXED ASSET INVENTORY

History: Effective: 12/01/04 Revised: 9/04 Original: 11/00

Maintaining an accurate inventory of all property owned by the Department is a very difficult, but essential task of any business. In order to maintain a closer control of all property the following procedures must be followed by ALL personnel.

1. All purchases will only be made after being approved by the Fire Chief.

2. The proper purchase request form will be completed and approved prior to purchasing or taking delivery of any item. The only exception will be for emergency purchase.

3. All items being delivered to the station or picked up by an employee will be checked in by the Administration Office-Personnel-prior to use or distribution.

4. Asset tags will be attached to the appropriate item before it is placed in service.

5. Any items which are retired or sold must be checked off the inventory prior to it leaving the property. All items which are declared surplus must be sold to the highest bidder after first being offered to other County fire departments.

6. No property can be given by any employee or member of the Department to any other member or employee.

902 VEHICLE MAINTENANCE

History: Effective: 12/01/04 Revised: 9/04 Original: 11/00

PURPOSE AND RESPONSIBILITY

This management procedure establishes standard and approved methods necessary for the proper maintenance of Department apparatus and auxiliary equipment.

Each apparatus of this Department assigned to a Fire Station for emergency response, standby, or garaging will receive inspection and maintenance on a scheduled basis. This activity will be recorded and reported on standard forms approved by the Department and will be monitored and reviewed by those persons assigned to that responsibility.

It shall be the responsibility of each driver to maintain his assigned vehicle in complete state of readiness at all times. This is to include the cleanliness of the vehicle as well.

District Chiefs, shall monitor and assist maintenance activities by reviewing all forms to insure correct preparation and completion. They will also be responsible to see that all equipment under their supervision is maintained and kept ready to respond at all times.

The District Chiefs shall be involved in formal inspections and spot checks of all apparatus as a means of controlling apparatus cleanliness and readiness. This is to include the monitoring of all reports and inventories.

Failure to properly comply with this Standard Operating Procedure may result in disciplinary action.

903 DAILY VEHICLE STATUS BOARD

History: Effective: 12/01/04 Revised: 9/04 Original: 11/00

The intent is to keep oncoming shifts informed of all vehicle status. Also to include medical equipment that has been sent to various hospitals and requires return (i.e. backboards, K.E.D.'s). Also, any fire equipment left at fire scenes.

1. The Status Board shall be used and updated any time there is a status change.

2. Shift Officers will make all arrangements to pick up equipment. If possible, equipment should be picked up prior to shift change.

3. Hydrants and street closures will also be kept up to date on the Status Board.

904 EQUIPMENT MOVEMENT **1 of 1**

History: Effective: 01/01/07 Revised: 10/06 Original: 11/00

The intent of this is for each vehicle to carry the best possible equipment that may be needed on an emergency scene.

1. Form #904.1 is to be used to request equipment relocation, addition of equipment or removal of equipment from vehicles.

2. The approval from the District Chief Support Services will be required.

3. If request is approved, Form #904.2 will be completed by the District Chief on duty and posted on the bulletin board showing the relocation of equipment for that unit.

4. Posted notice will remain on the bulletin board for six (6) days.

5. If request is not approved by the District Chief Support Service and/or the other two District Chiefs, the equipment will be replaced to original location after six days.

905 VEHICLE DAMAGE/LOST EQUIPMENT **1 of 1**

History: Effective: 12/01/04 Revised: 9/04 Original: 11/00

The intent of this procedure is to keep track of all vehicle damage or lost equipment reports.

1. Personnel will complete the information requested in the Company Journal (CJ04081) Damage/Loss Report, for any equipment that has been damaged or lost.

2. Damage to vehicles as a result of a crash shall be reported following Safety Standards and Procedure 5.0 (Accident Report Procedures).

3. Reasonable Suspicion for drug testing will follow SOP 128.

History: Effective: 8-6-10 Revised: 7-27-10 Original: 11/00

A. STATION 57 DIESEL TANK

The fuel maintained at Station 57 is for the stand-by generator only. The tank shall be measured each Monday by the following method:

1. Tank checked and inches recorded on the Department weekly inspection form.

B. FUELING VEHICLES AT COUNTY SITE:
Vehicles will be refueled at a County site when below 3/4 of a tank. These facilities have 24 hour access. New county fuel system will record vehicles and amounts.

NOTE: When filling cans etc. use 5 gallon fuel key (red).

For vehicles using diesel, follow instructions above.

History: Effective: 8-6-10 Revised: 7-27-10 Original: 11/00

ASSET NUMBERS FOR EAST LAKE TARPON SPECIAL FIRE CONTROL DISTRICT

PRIMARY VEHICLES	CO. ID	DESCRIPTION	FUEL
05240	524	1961 AM. LA FRANCE	DIESEL
05250	S57	2002 E-ONE/SAULSBURY	DIESEL
05260	E57	2003 E-ONE/SAULSBURY	DIESEL
05280	E58	2003 E-ONE/SAULSBURY	DIESEL
05290	E56	2009 E-ONE/SAULSBURY	DIESEL
05400	EL 500	2003 FORD EXPLORER	UNLEADED
05410	EL100	2009 Chevy Impala	UNLEADED
05420	EL400	2007 FORD TAURUS	UNLEADED
05430	DC	2008 F250	UNLEADED
05470	Reserve	1999 FORD EXPEDITION	UNLEADED
05480	W58	2005 AMERICAN LA FRANCE	DIESEL
05490	B58	2006 FORD F550	UNLEADED

	DESCRIPTION	FUEL
1330426	MISC. FUEL CANS	UNLEADED

907 DAILY VEHICLE CHECK

History: Effective: 12/01/04 Revised: 9/04 Original: 11/00

1. This section is to be used as a guide by vehicle operators when checking their respective vehicles. It should be noted that all vehicle operators will be responsible to maintain their vehicles in a constant state of readiness at all times.

2. Morning Vehicle Checks
   - A. Each oncoming driver shall contact the off going driver to cover any discrepancies noted with each vehicle.
   - B. Form #907.1 or 907.2 will be completed daily and discrepancies will be noted. Form will be given to the vehicle maintenance officer who will in turn correct any problems that cannot be corrected (i.e., replacing light bulbs) by Shift Personnel, and file for future information.
   - C. Shift officers shall document any discrepancies in the station log book.
   - D. The following items are to be checked each morning by all vehicle operators.
     1. Engine
        - a. Run for 10 minutes
        - b. Voltage output
        - c. Amp. outage
        - d. Fuel level if less than 3/4 shall be filled.
        - e. Pull vehicle to ramp checking steering, clutch, brakes
        - f. Tires - tread wear
     2. Electrical system, all lights, to include clearance, headlights, backup lights, warning lights, hand lights, etc.

Note: Sirens are not to be tested in audible mode.

     3. Pump
        - a. Operate pump
        - b. Operate class one Captain System (Relief valve on P57 (522 only)
        - c. Operate all gate valves
        - d. Excessive water leakage from pump packing
     4. Water tank level, if so equipped. All vehicles with water tanks shall be maintained at maximum capacity (visually inspect level).

History: Effective: 12/01/04 Revised: 9/04 Original: 11/00

5. Visually inspect foam tank level (522 only).
6. Check inventory of equipment, reporting changes or missing equipment.

10. Vehicle start-up procedures

NOTE: Master Switch to be used. Never turn this switch to the OFF position with the engine still running.

a. Do not accelerate the engine prior to reaching the normal oil pressure reading (non-emergency running only i.e., morning pull out and checks).

b. Release parking brake before moving vehicle.

c. On apparatus equipped with air brake systems, make sure the proper air pressure is built up before attempting to move the vehicle. Failure to do this may result in drive-line damage.

d. While idling for extended periods of time, diesel engines should have the high idle switch on, which sets the throttle at 1200 RPM's to provide proper lubrication of the engine (P57 522 only). All unnecessary lighting and accessories should be shut down.

NOTE: All new apparatus have automatic high idles.

4. Vehicle Shut Down Procedures

a. On diesel equipped engines, the engine should be permitted to idle a minimum of three to five (3-5) minutes before shutting down. The high idle switch, a/c units, and all lights should be shut off prior to turning off engine. This allows proper cooling and lubrication of the engine.

b. On automatic transmissions, the gear shift shall be left in the position designated by the manufacturer. (Admin. Vehicles in "Park, Engine & Brush trucks in "Neutral", etc.)

c. All vehicles will be parked with the parking brake on. This applies to vehicles at emergency scenes or any time a vehicle is left unattended.

d. Unless there is a services brake failure, at no time will the parking brake be applied while the vehicle is in motion.

908 WEEKLY VEHICLE MAINTENANCE

History: Effective: 12/01/04 Revised: 1/08 Original: 11/00

The purpose of weekly vehicle maintenance is to identify the problem areas of the apparatus so that we may reduce the cost of vehicle maintenance. By locating problems in the early stages we will not only reduce repair costs, but contribute to the prevention of a breakdown of the apparatus.

1. Weekly Vehicle checks shall be completed on Sunday for all available vehicles. Staff vehicles to be checked on Monday.

2. Form #908.1 is to be completed on Monday and given to the Vehicle Maintenance Officer who will in turn correct any problems, if not corrected by Shift Personnel, and file for future information.

3. The following items are to be checked:
   a. Hood latches, springs, and mounting hardware.
   b. Compartments, door latches, hinges, proper illumination, springs, (includes cab doors) lube if necessary.
   c. Inspect glass, mirrors for tightness or breaks.
   d. Windshield wipers, blades, arms
   e. Heater, defroster, Air conditioner
   f. Tire inflation, tread wear and lug tightness
   g. Check engine belts for wear and tension
   h. Check transmission fluid and engine oil
   i. Check power steering fluid
   j. Radiator water level and hoses
   k. Check for excessive oil leaks from valve covers, turbo chargers, transmission, power steering etc.
   l. Check batteries, cable, clamps
   m. Check pump shift operation
   n. Check pump primer and relief valve
   o. Check control valves and pipes for leakage
   p. Check gauges for operation
   q. Listen for auto purge

NOTE: Plate inside driver’s door lists fluid types.

909 MONTHLY VEHICLE MAINTENANCE

History: Effective: 11-5-09 Revised: 10-27-09 Original: 11/00

The purpose of monthly vehicle maintenance is to keep the appearance of the vehicle at its best and to alert the Maintenance Officer of any defects or problems.

1. Monthly vehicle maintenance shall be completed the last week of the month.
2. Monthly vehicle maintenance shall be recorded into the daily station log by the Shift Officer. Once completed, the D/C on duty shall be notified vehicle ready for inspection. The on-duty D/C will inspect vehicles and initial sheet.
3. The following items are to be completed:
   a. Wash entire vehicle with soap and water.
   b. Clean all compartments.
   c. Clean all windows.
   d. Clean entire cab for dust, sand etc.
   e. Clean all seats.
   f. Clean all equipment.
   g. Wax Vehicle (February, June and October only).
   h. Hose Testing (January 5 inch, April all other sizes per SOP 930)
   i. Complete Form 909.1

4. Monthly Vehicle Cleaning Schedule.

Bold WAX Month
* Hose Test Month

STATION 56

MONTH	A	B	C
January	529		526
February	**526**	**529**	
March*		526	529
April*	529		526
May	526	529	
June		**526**	**529**
July	529		526
August	526	529	
September		526	529
October	**529**		**526**
November	526	529	
December		526	529

History: Effective: 11-5-09 Revised: 10-27-09 Original: 11/00

STATION 57

MONTH	A	B	C
January	524	525	
February*	540, 546, 547	524,545,543	525,542
March*	525		524
April*	524	525	
May		524	525
June	525,542	540, 546, 547	524-545,543
July	524	525	
August	524	525	
September	525		524
October	524-545,543	525,542	540, 546, 547
November		524	525
December	525		524

STATION 58

MONTH	A	B	C
January	548	528	549
February	549	548	528
March*	528	549	548
April*	548	528	549
May	549	548	528
June	528	549	548
July	548	528	549
August	549	548	528
September	528	549	548
October	548	528	549
November	549	548	528
December	528	549	548

909.1 MONTHLY VEHICLE MAINTENANCE FORM

History: Effective: 7-2-09 Revised: 6-23-09 Original 11/00

MONTHLY VEHICLE MAINTENANCE

DATE _____ VEHICLE _____

Performed by: (Initials)	Initials__	Comments_____
Wash entire vehicle w/soap & water		
Wax vehicle (Feb. June & Oct. only)		
Clean all compartments/vacuum		
Clean all windows		
Clean entire cab for dust, sand, etc.		
Clean all seats		
Clean all equipment/oil, if necessary (Check for proper operation)		
Hose Testing (March 5", April all other sizes)		
Ladders (extend, clean and wax)		

Additional Comments _____
_____
_____
_____
_____
_____

Shift/OIC _____

D/C _____

910 3 MONTH VEHICLE MAINTENANCE

History: Effective: 12/01/04 Revised: 9/04 Original 11/00

This section is to be used as a guide by the Vehicle Maintenance Officer to perform the necessary inspections and maintenance of the Apparatus to reduce maintenance costs and possible breakdown.

It shall be the responsibility of the Vehicle Maintenance Officer to schedule the service work with the contracted outside maintenance service (per NFPA 1915).

911 6 MONTH VEHICLE MAINTENANCE **1 of 1**

History: Effective: 12/01/04 Revised: 9/04 Original 11/00

This section is to be used as a guide by the Vehicle Maintenance Officer to perform the necessary inspections and maintenance of the Apparatus to reduce maintenance costs and possible breakdown.

It shall be the responsibility of the Vehicle Maintenance Officer to schedule the service work with the contracted outside maintenance service (per NFPA 1915).

912 ANNUAL VEHICLE MAINTENANCE **1 of 1**

History: Effective: 12/01/04 Revised: 9/04 Original 11/00

This section is to be used as a guide by the Vehicle Maintenance Officer to perform the necessary inspections and maintenance of the apparatus to reduce costs and possible breakdowns.

It shall be the responsibility of the Vehicle Maintenance Officer to schedule the service work with contracted outside maintenance service (per NFPA 1915).

913 PUMP SERVICE TEST

History: Effective: 12/01/04 Revised: 9/04 Original 11/00

The purpose is to service test fire apparatus pumps on a yearly basis to determine if any deficiencies exist and to comply with I.S.O. requirements.

It is the responsibility of the Vehicle Maintenance Officer to schedule and supervise the Annual Pump Service Test of all Fire Department Apparatus which will be performed by the contracted outside maintenance service

Each District Chief will be responsible to ensure that all personnel under their supervision as Driver/Operators are familiarized with the operations and testing procedures of the Annual Pump Service Test for Fire Department Pumpers.

All Driver/Operators are required to have a working knowledge of the requirements of the Annual Pump Service Test for Fire Department Apparatus.

1. A Pump Service Test will be conducted on the date and time and site chosen by the Vehicle Maintenance Officer.

2. A service test form will be completed and turned in to the Vehicle Maintenance Officer by the contracted outside maintenance service

History: Effective: 7-2-09 Revised: 6-23-09 Original 11/00

PURPOSE: To assist Personnel responsible for placing vehicles out of service for mechanical reasons. This standard categorizes in a red, yellow and green form of all items that require repair based on seriousness of situation. Refer to Out of Service Criteria.

RED (IMMEDIATE)

YELLOW (AS SOON AS POSSIBLE BUT NOT IMMEDIATELY)

GREEN (CAN WAIT, OR IN-HOUSE REPAIR)

History: Effective: 7-2-09 Revised: 6-23-09 Original 11/00

OUT OF SERVICE CRITERIA

The following list is to be referred to as a guide when deciding when to place the apparatus "out of service" or otherwise unable to be driven for safety reasons:

DRIVING AND CREW AREAS, APPARATUS BODY AND COMPARTMENTATION

1. **Body or Cab mountings that are defective** (Visible missing mounting bolts or attachments where the body or cab can or has moved from its original position.)

2. **Seat Belts that are defective** (Missing or otherwise non functional seat belts will render that seat unusable. Driver's seat belt must be in good, operable condition at all times.)

3. **Broken or cracked cab glass –** particularly the windshield that can obstruct the operator's view. (Any glass, which is damaged, can cause premature failure and injury to the occupants and should be considered unsafe.)

4. **Rearview mirrors which are missing, broken, or unable to hold a setting.** (Will create unsafe driving conditions and "blind spots".)

5. **Windshield wipers that are missing or inoperable.** (This is to include grossly ineffective wiping acting due to worn or defective blades where the operators view can become compromised.)

6. **Steering wheel that has a deficiency.** (This is to include inoperable – (or unable to hold) adjustment settings and loose coverings which may compromise the operators control.)

7. **Steering wheel play in excess of 5"** This is to be checked with s\wheels straight and engine running. Free play is steering wheel movement that does not affect tire movement.)

8. **Critical engine/transmission gauges that have failed.** (This is to include: Oil pressure, Engine Temperature, Transmission Temperature.)

9. **Brake air pressure gauge(s) and/or warning devices that have failed.** (This is to include: gauges that are unreadable, grossly inaccurate, inoperable and warning lights and buzzers that fail to operate if the reserve air falls below 50 PSI.)

10. **Door latches that are defective.** (Any door, which has questionable security, should be considered unsafe. This includes both cab and body compartment doors.)

11. **Windshield Defrosters which are defective.** (This includes the front cab blower (must work) and operator selector (must be able to put selector to "defrost" and feel air coming from windshield vents.)

History: Effective: 7-2-09 Revised: 6-23-09 Original 11/00

12. **Foot Throttle that is defective.** (Particularly a throttle that either doesn't work at all or one which allows the engine to rev independent of foot command [sticking].)

Chassis, Axles, Steering and Suspension Systems, Driveline, Wheels and Tires

1. **Tires that have cuts to the cord.** Or otherwise damage exposing the cord.

2. **Tires that are excessively worn.** (Measured with a tread gauge; 4/32" tread remaining for front tires, 2 /32" tread remaining for rear tires – or – visual checking to wear bars for rears or twice the tread remaining for the front tires on two or more adjacent grooves.)

3. **Tires that are low or flat.** (Tires should be checked daily by "thumping" and the pressure should be checked with gauges whenever doubt exists that the pressure is adequate.) Example: dual tires should never touch each other. Contact road surface should be approximately square (width Vs length of contact at rest).

4. **Suspension components that are defective.** (Visibly "off tracking" of vehicle (crabbing) can be caused by broken springs parts. Shifting (popping, snapping) noises when cornering or articulating over bumps can be caused by loose or excessively worn parts.)

5. **Wheel fasteners that are either missing or broken.** (Lug nuts and studs)

6. **Wheels that are defective.** (Broken, cracked or deformed wheels can fail without warning.)

7. **Any significant oil or grease leakage from axles or inner wheel ends.** (Drippage that leaves oil on the floor or visible oil traces on the inside of the tire [oil slinging].)

8. **Steering components that are defective.** (Abnormal play, noises, tightness or looseness, binding or lack of steering control can be caused by worn or failed steering parts.)

9. **Any significant oil or grease leakage from the steering gear or pump.** (Drippage that leaves oil on the floor directly below the component.)

10. **Driveline components that are defective.** (Abnormal noises associated with vehicle movement can warn of wear or failure. Example: Abnormal "clunking" when shifting into gear, high frequency "throbbing" increasing with vehicle speed could indicate prop shaft failures.)

History: Effective: 7-2-09 Revised: 6-23-09 Original 11/00

Engine Systems

1. **Air Take (Filter) restricting warning sounding or showing maximum restriction.** (Extremely obstructed intakes, on diesels, can cause the engine to "run-away" uncontrollably by sucking the motor oil into the combustion chambers (catastrophic failure) rendering the engine unable to shut off or otherwise control.)

2. **Engine that won't crank or otherwise start.**

3. **Any significant oil or grease drippage from the engine or attached parts.** (Drippage is defined by a 4" diameter spot below the component leaking, within 8 hours, is considered excessive.)

4. **Engine overheating.** (Normal driving operations should never cause the temperature gauge to exceed normal temperatures (180-195 degrees) however; pumping operations may cause the engine temperature to increase causing additional cooling needed by opening the auxiliary cooler. Overheating shall be defined as exceeding 240 degrees maximum in any situation.)

5. **Oil that contains coolant**. (Best-noted on oil sampling but can be monitored by the operator by checking the underside of the oil fill cap for "milking".)

6. **Oil that is diluted with fuel.** (Best-noted on oil sampling but can be monitored by the operator by checking the dipstick. Motor oil should NEVER smell like diesel.)

7. **Fuel system that has signs of leakage.** (Defined by "haloing" [wet crusting around lines and fittings] or pooling on the component but not enough to leak to the floor.)

8. **Loose or shifted fuel tank or straps.**

9. **"Stop Engine" (amber "fluid") light that fails to go out or comes on when driving.** (This indicates a critical failure of one of the components monitored by the engine systems computer and should be considered potentially catastrophic.)

History: Effective: 7-2-09 Revised: 6-23-09 Original 11/00

Engine Cooling System

1. **Coolant leak.** (Any leak that pools on the floor directly below the component leaking. This is not to be confused by overflow leakage following a refill (outage).)

2. **Coolant contains oil.** (Best noted during service intervals but can be easily monitored by the operator by checking for "slime" under the radiator cap. Appears like brown mud.)

3. **Noisy water pump with visible pulley wobble when the engine is idling.**

4. **Cooling Fan that is defective.** (Damaged or missing blade(s) or uneven rotation (looseness).)

Transmission and Clutch (when applicable)

1. **Clutch (when equipped) that either slips excessively or has no free play.**

2. **Automatic transmission that either doesn't shift or "flares" significantly between shifts.** ("Flaring" is the term used to describe the engine revving up between shifts.)

3. **Shift linkage that is defective.** (Shifter that cannot move into/out of gear. Safety lock-outs that are inoperable – should never be able to go into reverse without first pulling up T-handle.)

4. **Transmission that overheats.** (Transmission maximum temperature is 300 degrees with normal operating temperatures below 200 degrees.)

5. **Transmission warning lights or buzzers sounding.** (Transmission temperature warning light on the pump panel.)

6. **Any significant oil or grease drippage from the transmission.** (Drippage is defined by any oil or grease on the floor directly the component leaking leaving a 4-inch diameter spot within 8 hours.)

Electrical Systems

1. **Running lights that are inoperative.** (One or more headlamps, brake light, tail lights inoperative or clusters or more marker lights inoperative (switch failure) and/or dash lights inoperative.)

2. **Ignition system that is defective.** (Stalling, backfiring or otherwise unreliable engine operation.)

3. **Charging system that is defective.** (Low battery warning when the engine is running (except when excessive lights are turned on with the engine at idle).)

History: Effective: 7-2-09 Revised: 6-23-09 Original 11/00

BRAKING SYSTEMS

Air Brake Systems

1. **Service brakes that leak air excessively.** (Excessive air loss is defined by a drop in system pressure of more than 2 PSI in one minute with the engine turned off and the park braking released.)

2. **Service brakes that leak air excessively when applied.** (Excessive air loss is defined by a drop in system pressure (after initial brake application) of 3 PSI in one minute with the engine turned off, the park brake released, and the service brake applied.)

3. **Brakes that are out of adjustment.** (This is best checked on the periodic inspections and when servicing (1-3/4" max slack @ 90+PSI) but can be checked by the operator by setting the park brake on a slight roll and noting travel distance (brake action should be rapid, even and firm).)

4. **Audible air leaks.**

5. **Ineffective brakes** (to include abnormal brake fade).

6. **Air compressor fails to build air pressure.**

7. **Air pressure that fails to maintain 80 – 90 PSI** when brakes are applied and the engine is idling.

8. **Brake lining that is worn.** (This measurement is done by qualified technicians – ¼" to rivets for drum brakes, 1/8" to rivets for disc brakes.)

9. **Brake parts that are defective.** (This includes but not limited to: cracked brake drums, loose or missing parts.)

10. **Rotors or Drums that are worn beyond their maximum specifications.** Apparatus drums or rotors cannot be machined and must be replaced when performing reline repairs.)

11. **ABS (anti-lock) warning light that doesn't go out or comes on when driving.** (The light indicates a failure in the ABS system. Even though the ABS failure will not affect the total application of the service brakes, the ABS failure can affect the total safety of the vehicle by allowing the wheels to lock on severe applications thereby affecting vehicle control.)

History: Effective: 7-2-09 Revised: 6-23-09 Original 11/00

Hydraulic Brake Systems

1. **Any leakage of the brake system (brake fluid).** (Defined by "Haloing" of wet product leaving a dark crusty shadow to visible wetness.)

2. **Any unexplained loss of brake fluid.** (Repeated need to refill the master cylinder.)

3. **Braking system that is ineffective.** (Unable to stop the vehicle in a normal manner.)

4. **Parking brake that is ineffective.** (Will not hold the vehicle when applied on a mild grad.)

5. **Brake warning light on.** (Indicates a system failure. Brake failures of this type can be catastrophic.)

7. **Brake lining worn.** (This is checked by qualified technicians. ¼" lining remaining to rivets or backing.)

8. **Brake parts that are defective or missing.** (This includes but is not limited to: damaged brake lines, brake hoses that are cracked or burned, loose or worn pedal linkages.)

9. **ABS warning lights that do not go out or lights when driving.** (This may indicate a failure in the anti-lock system and usually will not affect total brake application, but will prevent the ABS from preventing over braking and vehicle loss of control.)

History: Effective: 7-2-09 Revised: 6-23-09 Original 11/00

Fire Pump System

1. **Pump service test results that fall below 90% of the original rated capacity.** (Failure to achieve rated capacity can indicate worn pump parts and can further fail when operating on fire ground.)

2. **Pumps that will not engage.**

3. **Pump that does not lock transmission.** (Can be noted by transmission shifting through the gears as the pump throttle is raised. Will affect performance / output.)

4. **Pressure control system(s) that are inoperative.** (Relief valves and/or governors that fail to hold pressure or otherwise are unreliable are deemed inoperative and require manual operation which could be hazardous in multi-line operations.)

5. **Water tanks that will not hold water.** (Leak.)

6. **Pump transmission components that have significant oil/grease leaks.** Significant leaks can be defined by noting a 4" diameter spot of product on floor directly under the leaking component with the vehicle at rest for over 8 hours.

7. **Pump transmission lubricant that is contaminated.** Excessive pump packing leakage can "water jet" water past the output shaft seal of the transmission, thereby contaminating the oil with water. Identifying contaminated oil is a function of the periodic inspections.

8. **Pump panel throttle that is defective.** This is to include electronic and/or mechanical irregularities (i.e.: unable to hold engine speed due to a vernier lock failure, Captain system electronic failure causing throttle loss).

9. **Pump packing leaking excessively.** Excessive leakage is defined as water drippage, while vehicle is at rest (engine off) in excess of 210 DPM (drips per minute).

10. **Any gate or drain that cannot be turned off.** Uncontrolled discharge from any gate or drain. This is NOT to include minor intake drippage due to colder weather conditions.

11. **Water tank level lights or indicators that are defective.** Level lights that are grossly inaccurate or otherwise fail to alert the operator of the reserve tank capacity.

History: Effective: 7-2-09 Revised: 6-23-09 Original 11/00

Aerial Device Systems

1. **Power take-off (PTO) that will not engage.** This includes requiring the operator to "emergency pump" the hydraulics to operate the aerial when otherwise PTO would operate the system.

2. **Aerial "MASTER" inoperative.** This includes having to manually operate the devices using the interlocks when otherwise the system would be operated normally from the control panel.

3. **Aerial device that is defective.** This includes missing or visibly damaged parts, excessive play or binding of the boom or aerial nozzle parts.

4. **Hydraulic system components that are defective.** This is to include abnormal pump noise (whine or growl) or unstable hydraulic pressures. (Should be 1000-1500 PSI when operating).

5. **Cable sheaves that are defective.** (Cable pulleys. This is to be checked by qualified technicians.

6. **Cables that are defective or worn (frayed).** This includes loose or missing parts.

7. **Base and section rails (boom surfaces) that show ironing.** Ironing is defined as metal galling due to excessive or abnormal metal contact of moving parts.

8. **Aerial device that is structurally deformed.** Any deformation is unacceptable.

9. **Torque box structure or fasteners that are defective.** This must be checked by qualified inspectors.

10. **Turntable fasteners that are defective or missing.** This must be checked by qualified inspectors.

915 EQUIPMENT PURPOSE AND RESPONSIBILITIES **1 of 1**

History: Effective: 7-2-09 Revised: 6-23-09 Original 11/00

The purpose of this S.O.P. is to identify areas of equipment maintenance, which can be routinely performed by personnel in each station. It covers simple cleaning procedures, which take a minimum amount of time to perform. For more complex maintenance procedures, such as trouble shooting or tune up of equipment, contact the Vehicle Maintenance Officer for the individual operating manual for that respective piece of equipment.

The cleaning of power equipment, such as the Rescue Tool and K-12 saw, shall be performed on Mondays. All other equipment shall be maintained on the days stated or after each use.

Any discrepancies shall be noted in the Station Log and documented on the CJ04081 Maintenance Log. Any tool or equipment needing repair, or is damaged and removed from service, shall be tagged using an East Lake Maintenance Request Tag (916). An ELFR Work Request Form should also be completed. The tag should be filled out and attached to the item and shall stay with it until it is placed back in service.

916 MAINTENANCE REQUEST TAG

History: Effective: 12/01/04 Revised: 9/04 Original 11/00

PURPOSE AND INSTRUCTIONS

This tag is used to identify out-of-service equipment and tools. The tag is to be filled out completely along with FM 04081 under A56 / A57 / A58 for station equipment or unit number. On the back of the tag, write any pertinent information regarding any repairs performed. Tag is to be attached to item and will remain with the item until it is placed back in service. Remove the tag and turn it in to the Maintenance Officer.

917 RESERVED

918 AIR BAGS

History: Effective: 12/01/04 Revised: 09/04 Original 11/00

Care and Maintenance:

BAGS

1. Inspect after each use.
2. Remove any foreign objects that may be on bag surface, such as broken glass and debris.
3. Wash bag in soap and water. Avoid getting water in the bag. If water does get in, allow the bag to dry thoroughly before the next use.
4. Cuts on the neoprene surface can be repaired with rubber cement.
5. Leak test the bag by pressurizing to 30 PSI for 30 minutes. If a loss of pressure has occurred, immerse in water or soap solution. The appearance of small air bubbles around the connection pipe/air inlet is of no significance with regards to the safety and operational readiness of the bag and may be disregarded.
6. Check for damage on the air inlet nipple.

HOSES

1. Keep couplings clean and dry.
2. Broken hose may be recoupled or replaced.
3. Inspect for any cracks or nicks.

DUAL SAFETY RELIEF AND CONTROL VALVE (CONTROLLER)

1. Keep couplings clean and dry.
2. Replace broken gauges.

PRESSURE REGULATOR

1. Inspect inlet nipple and seat for tightness and damage.
2. Check for bent gauges, dials, indicator, case screws, cracked lens.
3. Check for overall tightness and damage.

History: Effective: 12/01/04 Revised: 09/04 Original: 11/00

Safety Procedures:

1. Only trained and qualified personnel shall operate this equipment.
2. All personnel using and assisting must wear proper safety equipment, including head, eye, hand, body and foot protection.
3. All non-essential personnel must be kept clear of the operating area.
4. Always block and secure the load as it is being lifted.
5. Never work under a load that is supported only by Air Bags.
6. Remain clear of operating area of air bags.
7. Never operate the air bags without a safety controller.
8. When shoring, use the box cribbing method, make sure the bag is placed on a solid top layer. Do not leave a hollow center as any movement of load may cause the cribbing to shift and collapse.

919 AIR HAMMER TOOL

History: Effective: 12/01/04 Revised: 9/04 Original 11/00

The weekly check out will be conducted by the Engine/Pumper Driver.

Check Air Hose:

1. Check for worn areas, cracks or leaks.
2. Check couplings and clean.

Air Hammer:

1. Inspect hammer for any defect and note.
2. Remove sand and dirt from Kwik change safety retainer.
3. Check operating trigger for working ability.

Case of Cutting Tools:

1. Inspect all cutting tools for defects or damage.
2. Remove all dirt and rust, apply a fine oil film.
3. Insert each cutting tool into hammer to be sure tool locks properly.

Regulator:

1. Check regulator for damage or defects.
2. Check valve for working condition.
3. Check and clean fittings.

Operate Air Hammer:

1. Connect air hose to proper connection at engine and air hammer.
2. Insert a cutting tool.
3. Place cutting tool against a block of wood or other suitable object before operating tool.

Replace Air Hammer in Storage Box:

1. Clean storage box.
2. Be sure air hose is not crimped.
3. Replace on Engine or Pumper.

Note: Hearing Protection will be worn anytime unit is in operation.

920 APPLIANCES

History: Effective: 7-2-09 Revised: 6-23-09 Original 11/00

All appliances shall be cleaned during monthly cleaning.

1. Gated Wyes and Siamese shall be inspected for corrosion and ease of operation. They shall be cleaned as necessary.

2. All Gated Steamer intakes shall be checked for ease of operation. If needed, lubricate them for proper operation using a dry silicone lubricant.

NOTE: Remove and lube threads

921 AXES AND PIKE POLES

History: Effective: 12/01/04 Revised: 9/04 Original 11/00

Daily Checks

1. All axes and pike poles shall be checked daily for cracks, burns etc.
2. Tightness of axe heads and pike pole heads should be checked.
3. Cleanliness of tools shall be noted. Clean or paint if necessary.

Monthly Checks

1. The heads shall be cleaned and oiled, or painted if necessary.

922 BATTERY MAINTENANCE **1 of 1**

History: Effective: 7-2-09 Revised: 6-23-09 Original: 11/00

PORTABLES RADIO

Charging of batteries will be done on a weekly basis with rotation every Monday. If the radio indicates a low battery the unit will be recharged at that time. Any battery which does not hold a charge for a 24 hour shift must be reported to LK 700 for replacement.

Any new battery not meeting the required capacity level will be reported to the Officer in Charge (OIC) for replacement.

History: Effective: 12/01/04 Revised: 9/04 Original 11/00

Daily procedures

1. Daily check to be conducted by man responsible for use.

   a. Apparatus in cab assigned to Officer position.
   b. Apparatus in jump seats assigned to firefighter.

2. Check cylinder pressure:

   a. Note cylinder pressure.
   b. Replace or top off cylinder listed below 45 minutes, cylinder 3,500 PSI.

3. Check operation of regulator and alarm system:

   a. Note any difference in pressure between tank gauge and regulator gauge.
   b. DO NOT bleed off pressure by use of By-pass. To check regulator, attach face piece and check breathing and diaphragm operation.
   c. Note pressure at which alarm starts and stops ringing.
   d. Check gauge for any malfunction or damage.
   e. High pressure line will not be left charged.

4. Check harness on back pack:
   a. Inspect all straps and buckles for damage.
   b. Extend all straps fully.
   c. Check clamp on air cylinder and its position in pack.

5. Check face piece (only after use)
   a. Fully extend and check spider for fatigue.
   b. Make sure face piece is in good condition and clear of dust or sand
   c. Place mask back in protective bag with seal.

History: Effective: 12/01/04 Revised: 9/04 Original 11/00

Cleaning Procedures (after each use and assigned duty day)

1. Frame and regulator service:

   a. Lay frame on ground tank exposed.
   b. Remove tank from frame.
   c. Lengthen all straps.
   d. Clean frame, straps and webbing with warm water and mild detergent.
   e. Check all buckles and catches.
   f. Wipe dry.
   g. Check regulator, valves and threads for damage. Wipe clean (do not tighten valves too tight – finger tight only.)
   h. Fill and clean tank.
   i. Reassemble and place on apparatus.

2. Face Piece-Cleaning:

   a. Lengthen all head straps, check buckles, straps and face piece for damage and deterioration.
   b. Wipe clean only.
   c. Check for department identification if no marking, do so at that time.
   d. Place mask in storage bag.

3. Face piece for overhaul:

   a. Service will be as needed due to damage.

History: Effective: 12/01/04 Revised: 9/04 Original 11/00

Documenting Requests for Repair:

1. All requests will be submitted for SCBA maintenance on the CJ04081 Maintenance Log, tag attached and work order forms filled out.

2. The individual (evaluator) requesting the repairs will fill out the form noting specifically:
   a. The identification number of the regulator or tank requiring repairs.
   b. A detailed description of what he feels the problem is with the unit, and where the problem is located physically, if known.

3. The shift officer will be responsible to review, sign and notify the District Chief of the unit status.

4. Mask repair procedure:
   a. Personnel having problems with masks will fill out the request for repairs on the tag attached and work order forms filled out…

Marking and Placement

1. All breathing apparatus will be assigned to a station.

2. All breathing apparatus shall have identification marking.

Transferring

1. No breathing apparatus will be removed or transferred from its unit unless repairs are needed, or if truck is being stripped for servicing. The spares that are kept at each station, will be used for replacement.

2. After needed repairs are completed, units will be returned to unit assigned.

History: Effective: 12/01/04 Revised: 9/04 Original 11/00

Allocation of Air Pack Units

1. The following allocation of SCBA units will be maintained for fire line apparatus and spares in station.

Apparatus	No. of Units	Spare Bottles
E56	4	4
S/57	4	6
E/58	4	4
DC/57	1	0
B/58	2	0
W/58	2	0
LK300	1	0
LK400	1	0

Each firefighter will be assigned his/her own SCBA mask. The mask is to be kept clean and in a plastic bag (provided) when not in use.

Repairing

1. Only personnel who have completed the SCBA certification training program that is presented by factory representatives will be able to perform repairs. This does not include daily inspection of regulators, bottles and proper cleaning procedures.

History: Effective: 12/01/04 Revised: 9/04 Original 11/00

COATS & PANTS

Daily Inspection: Should report any unsafe conditions to the Shift Officer.

Frequency of Cleaning: Should be accomplished at least every six months or as soon as possible after the termination of an incident where the clothing has been soiled or has come into contact with blood or other body fluids.

Cleaning at Scene: If possible, flush the clothing with water as soon as possible after the emergency (after exiting the structure) as this will remove as much as 90% of all contaminants before they have a chance to set in.

Cleaning Instructions:

1. Machine wash at Station 56 or 58. Wash inside out with buckles hooked.
2. Hang dry in well ventilated area or the drying unit at Station 56.
3. Inspect for any unsafe condition after wash.
4. Follow printed instructions.

NOMEX PROTECTIVE HOODS.

Daily: Inspect for any unsafe conditions.

Frequency of cleaning: Same as Coats & Pants.

Cleaning:

1. Wash in machine, warm water with liquid detergent.
2. Hang to dry in well ventilated area or place on drying unit.
3. Inspect for any unsafe conditions.

History: Effective: 01/01/07 Revised: 01/07 Original 11/00

FIREFIGHTING GLOVES:

Daily: Inspect for seam integrity and for lack of tears.

Frequency of Cleaning: Same as Coat & Pants.

Cleaning:

1. Machine wash using extractor washers.
2 Rinse thoroughly
3. Hang to dry or use the drying unit.
4. Re-Inspect

PROTECTIVE HELMET:

Daily: Inspect inner lining and outer shell for visible damage.

Frequency of Cleaning: Same as Coats and Pants.

Cleaning: Inner Lining.

Remove ear flap and wash with protective hood.

1. Tumble dry, warm

Cleaning: Outer Shell:

1. Hand wash with mild detergent and warm water.

BOOTS:

Daily: Inspect for any tears or unsafe conditions.

Frequency of Cleaning: Same as Coat & Pants.

Cleaning:

1. Hand wash in mild detergent and warm water
2. Hang to dry using the drying unit at Station 56 when possible.
3. Re-inspect.

History: Effective: 01/01/07 Revised: 01/07 Original 11/00

SUSPENDERS

Daily: Inspect for unsafe condition

Frequency of Cleaning: Same as Coat & Pants.

Cleaning:

1. Machine wash using extractor washers.
2 Rinse thoroughly
3. Hang to dry or use the drying unit.
4. Re-Inspect

Monthly Inspection of all Bunker Gear:

There will be a monthly formal inspection of all Bunker Gear by the personnel to whom the equipment is assigned. Periodic inspection will be completed when designated on the Training Schedule. Any damages found will be reported on a Uniform Inspection Form 917.1.

Identifying Bunker Gear

All gear will be identified with the last 3 digits of the employee's ELFR ID number marked with permanent ink marker in the following locations:

• Helmet liner	Rear of liner just above lower hem line
• Nomex Hood	Just above manufacturer's label
• Bunker Coat shell	inside the right side of coat flap (if name is not already on rear "tail" of coat shell)
• Bunker Coat liner	on manufacturer's label
• Trousers shell	Inside right flap of trousers fly
• Trousers liner	on manufacturer's label
• Boots	Inside top edge of each boot top
• Gloves	Posterior aspect of glove in gray area between fabric wrist closure and blue leather

Laundering Contaminated bunker gear (extractor machines only)

- Bunker coats and trousers will have liners removed from shells (older gear will still require liners to be separated and inverted "inside-out")
- Follow instructions listed on laundry cycle option sheet. (Wash only liners with liners, shells with shells, etc.)

925 CHAIN SAWS

History: Effective: 01/01/07 Revised: 01/07 Original 11/00

Daily Check:

1. Check fuel level.
2. Run saw.

Weekly Check:

1. Visually inspect saw for any needed repairs.
2. Run for two (2) minutes.

Fuel:

Gas/Oil Mixture per manufacturer's recommendations.

Clean all spilled fuel from saw before starting.

Cleaning and Maintenance:

1. Keep the chain, bar, and sprocket clean and lubricated.
2. Keep the chain sharp.
3. Keep the chain at proper tension; tighten all nuts, bolts and screws (except the carburetor adjustment screws) after each use.
4. Keep spark plug and wire connection tight and clean.

Safety:

1. Always wear hearing, eye, head and glove protection as a minimum requirement.

NOTE: B58, W58 and S57 have CHAPS.

History: Effective: 12/01/04 Revised: 9/04 Original 11/00

Care of Hoist:

1. Never leave or store the hoist with the brake locked. Loosen the brake by operating the hoist as if lowering a load.
2. Avoid leaving the hoist in a wet or corrosive environment. Clean and dry the hoist before storing when it has been exposed to dirt or water.

Daily Inspection:

1 Check hooks, and hook latches for deformation or cracks.
2. Check chain for wear and twist.
3. Check operating handle for cracks or bending.
4. Check brake for drift.

Quarterly Inspection:

1. Check for loose screws, nuts, etc.
2. Check load sprocket for wear.
3. Lubricate chain with SAE 30 weight oil. Be sure that the oil is worked into the area between the links.

Annual Inspection:

1. Inspect for worn, cracked or distorted gears, bearings, pawl, pawl spring, ratchet, shafts and chain fastening bolt.
2. Check for worn discs. Replace any disc less than .078" thick.
3. Clean chain in kerosene or other non-corrosive solvent and inspect for wear, nicks, or distortion of any kind.

Safety Procedures:

1. Be familiar with hoist operating controls, procedures, and warnings.
2. Make sure that the unit is securely attached to a suitable support before applying load.
3. Make sure the hook latches, if used, are closed and not supporting any party of the load.

History: Effective: 12/01/04 Revised: 9/04 Original 11/00

Safety Procedures (continued)

4. Make sure all persons stay clear of the support load.
5. Do not use unit with twisted, kinked, damaged or worn chain.
6. Do no apply a load unless chain is properly seated in chain wheel(s) or sprocket(s).
7. Do no apply the load to the tip of the hook.
8. Do not operate except with hand power.
9. Do not attempt to lengthen the load chain or repair damaged load chain.

927 FOAM INDUCTOR

History: Effective: 12/01/04 Revised: 9/04 Original 11/00

Monthly Check and After Each Use

1. Wash in mild detergent and water. Dry completely.
2. Check all moving parts.
3. Check induction hose for cracks or damage. Report any damage.

928 FORCIBLE ENTRY TOOLS

History: Effective: 12/01/04 Revised: 9/04 Original 11/00

Weekly Check (every Monday)

1. Check tools for any damage, note damage.
2. Clean tools of dirt, rust or foreign matter.
3. Check cutting edge for damage, file if necessary.

929 HAND LIGHTS **1 of 1**

History: Effective: 12/01/04 Revised: 9/04 Original 11/00

Daily or After Each Use
Check lens for cracks, visually inspect case and strap for damage and operation.

Monthly or After Each Use
Use a mild cleaner to remove soil and dirt spots from the light.

930 HOSE SERVICE TESTING

History: Effective: 2-6-09 Revised: 1/27/09 Original 11/00

PURPOSE: To perform hydrostatic testing on all in-service (including reserve) hose to determine suitability for continued service. The guideline is referenced from NFPA 1962 (1993 edition), providing Service Testing of Fire Hose, and is intended to provide a reasonable level of safety for users of fire hose and a reasonable degree of assurance that the hose and couplings assemblies will perform as designed.

1. In-Service hose will be inspected and service tested at least annually. All 5.0 inch diameter hose will be tested in March. All remaining hose will be tested in April.

2. Each length of hose to be tested simultaneously will be of the same service test pressure and, collectively, will be considered the hose test layout. The total length of any hose line in the hose test layout to be service tested will not exceed 300 feet.

3. Electric hose tester to be used for testing.

4. Hose Service Test Pressures and Duration will be as follows:

   a. Test to pressure stamped on hose per NFPA 1962 (2003 Edition).

5. Physical inspection of fire hose will verify that it has not been vandalized, is free of debris, does not have mildew or rot, or damage by chemicals, burns, cuts, and abrasions.

6. Couplings will be kept in serviceable condition. During service testing they will be visually inspected for the following: damaged threads, corrosion, slippage on the hose, out of round, swivel not rotating freely, missing lugs, loose external collar, internal gasket wear or damage, and any other defects that might impair operation.

7. Marks will be placed at the back of the couplings and observed for slippage during the test. If the coupling slips, the hose fails the test.

8. Care will be taken to remove all air from the hose before the nozzle or test cap is closed and the pressure raised. The development of test pressures introduces a serious accident potential if air remains in the system.

9. If, during the test, a section of hose is leaking or a section bursts, the service test will be terminated, and that length of hose fails the test. The test layout will be drained, and the defective hose removed from the test layout. The service test will be restarted and completion achieved for the test when five (5) minutes of uninterrupted test duration is achieved.

10. All hose failing a physical exam, bursting, leaking, or having couplings that fail because of slippage will be tagged, removed from service, reported to the Support Services officer for repair, or discard.

11. After five minutes at the service test pressure, the pump will be shut down at proper pressure, the hose test valve opened, the pressure allowed to equalize with the source, and each nozzle or test cap valve opened to drain the test layout.

History: Effective: 2-6-09 Revised: 1/27/09 Original: 11/00

12. Minimum protective gear to be worn during Hose Service Testing will be bunker helmet and gloves. In compliance with NFPA Standard 1962, 5-2.11, the inspecting personnel walking the test layout to inspect for leaks, will be at least 15 feet to the left side of the nearest hose line in the test layout. The left side of the hose line will be defined as that side that is to the left when facing the free end from the pressure source. Personnel will never stand in front of the free end of the hose, on the right side of the hose, or closer than 15 feet on the left side of the hose, or straddle a hose in the test layout during the test.

13. Hose records for all hose tested will be documented on form 930.1, and forwarded to the Support Services Officer.

14. (REFERENCE NFPA 1500 4-3.1.2) Hose loading operations be performed on moving fire apparatus only when there is compliance with all of the following conditions:

a. There shall be an employee, other than those employees loading hose, assigned as a safety observer. The safety observer shall have an unobstructed view of the hose loading operation and be in visual and voice contact with the apparatus operator.

b. The fire apparatus shall be driven only in a forward direction at a speed of 5 mph or less.

c. No employees shall be allowed to stand on the tail step, sidesteps, running boards, or any other location on the apparatus while the apparatus is in motion.

d. Employees shall be permitted to be in the hose bed, but shall not stand while the apparatus is in motion.

e. Prior to the beginning of each hose loading operation, the situation shall be evaluated to ensure compliance with all the provisions of the standard operating procedure. If the standard operating procedure cannot be complied with, or if there is any question as to the safety of the operation for the specific situation, then the hose shall not be loaded on moving fire apparatus.

930.1 5" HOSE SERVICE TESTING

History: Effective: 11-5-09 Revised: 10/27/09 Original: 11/00

5" Hose testing to be completed in March of each year.

HOSE TESTING

2004	2005	2006	2007	2008	Station 56	Station 57	Station 58
C	B	A	C	B	529		
A	C	B	A	C			528
B	A	C	B	A	526	525	
2009	**2010**	**2011**	**2012**	**2013**	**Station 56**	**Station 57**	**Station 58**
C	B	A	C	B	529		
A	C	B	A	C			528
B	A	C	B	A	526	525	

Stations may come together to assist with test and reload hose always keeping two units available to respond to calls.

***Hose test is to include all supply connections. Total length of hose line are not to exceed 300 feet each. (See SOP 930 and test to NFPA 1962 standard (2003 edition.)**

POST AT ALL STATIONS

930.2 1.5", 1.75", 3" HOSE SERVICE TESTING

History: Effective: 11-5-09 Revised: 10-27-09 Original: 11/00

HOSE TESTING
1.5", 1.75", 3" BY UNIT AND YEAR.

TESTING TO BE COMPLETED IN APRIL OF EACH YEAR

2010	2011	2012	2013	2014	2015	STATION 56	STATION 57	STATION 58
A	B	C	A	B	C	529 1.75" & 3"		528 1.75" & 3"
B	C	A	B	C	A		525 1.75" & 3"	548 1.5", 1.75" & +3" FROM STORAGE
C	A	B	C	A	B	526 all 1.75"& 3"		549 1.5", 1.75", 3" ALSO FROM STORAGE 1.34"
2016	2017	2018	2019	2020	2021	STATION 56	STATION 57	STATION 58
A	B	C	A	B	C	529 1.75" & 3"	--	528 1.75" & 3"
B	C	A	B	C	A	--	525 1.75" & 3"	548 1.75" & 3"
C	A	B	C	A	B	526 1.75" & 3"	--	549 1.75" & 3"

Post at all stations

*Hose test is to include all supply hoses and High Rise Kits. Total lengths of hose lines are not to exceed 300' each (See SOP 930 and test to NFPA Standard 1962 (2003) edition).

931 STATION EMERGENCY GENERATORS **1 of 1**

History: Effective: 7-2-09 Revised: 6-23-09 Original: 11/00

The Station emergency generator will be tested each Monday. The following steps shall be completed when testing the unit:

1. Inspect levels of Oil and Anti-freeze.
2. Test light panel on Generator.
3. Inspect battery terminals for cleanliness.
4. Test light panel on wall.
5. The Generator will start and stop automatically.
6. Check Generator gauges for levels as follows:
    a. Hertz: 58 - 60
    b. A-C volts: 500/235
    c. A-C amperes: Varies
    d. Oil Pressure: 70
    e. Water Temperature: 160ºF
    f. Battery: 13.9
7. After Generator shuts down check fuel level (Station 58-propane tank; Station 57-Diesel) (Station 56 hooked to gas main).
8. Report any problems to the shift Officer as soon as possible.

Note: If for any reason the Generator starts automatically, allow the unit to shut down automatically.

932 HYDRAULIC RESCUE TOOL **1 of 1**

History: Effective: 7-2-09 Revised: 6-23-09 Original: 11/00

The Rescue Tools will be checked as follows: on gas operated tools:

Daily Check:

1. Fuel and oil level should be checked (on portable units).
2. Run for five (5) minutes.

Weekly Checks: (every Monday)

1. Visually inspect tool and accessories for any damage or needed repairs.
2. Run for five (5) minutes.
3. Hook up Jaws, Cutter, and Ram and check for operational status.
4. Check bolts, screws, and mounting hardware for tightness.
5. Complete cleaning of tool and accessories.
6. Check hydraulic fluid level.

Fuel:

1. Use the one (1) gallon safety can designated for the tool on portable units)..

Cleaning:

1. Power Unit: The power unit shall be cleaned after each use as well as weekly. Avoid the use of water and workhorse on the unit itself. A rag with mineral spirits or similar type agent shall be used to wipe excess oil and dirt from the power unit.

2. Accessories: All accessories such as the Cutter and Jaw may be cleaned using a soap solution and water. The accessories should be thoroughly dried before placing back on the apparatus.

Electric Rescue Tool Pumps:

1. With hydraulic generation on, turn pumps on.
2. Follow weekly checks, same as gas units.

History: Effective: 12/01/04 Revised: 9/04 Original: 11/00

The K-12 will be checked as follows:

Daily Check:

1. Fuel level should be checked.
2. Blade nut tightness.
3. Run for two minutes.

Weekly Checks: (every Monday)

1. Visually inspect tool/accessories for any damage or needed repairs.
2. Run for two (2) minutes.
3. Check bolts, screws and mounting hardware for tightness.
4. Complete cleaning of tool and accessories.
5. Inspect starter rope for fraying.

Fuel:

1. Use the one (1) gallon safety can designated for the tool.
2. Must use a gas and oil mix.

Cleaning:

1. Keep cooling and the holes in the dust-guard free of any build-up of dirt.
    a. Remove dust cover.
    b. Remove cap that secures filter.
    c. Remove filter element and clean by gentle tapping.
    d. Remove filter mount cover by loosening the screw at front of cover. Check secondary flat filter under cover and clean by tapping. Do Not remove center mounting bolt that mounts primary filter and dust cap.
    e. Replace dirty filters, if necessary.
    f. When replacing filter mount cover, be certain rubber gaskets are in place.
    g. After the primary filter is properly seated at base, be certain metal cap that secures filter has rubber gasket glued in place. Tighten securely and replace dust cover.

Other Maintenance:

1. For more complex maintenance, contact Vehicle Maintenance Officer for individual operating manual.

Note: Hearing Protection will be worn anytime unit is in operation.

934 LADDERS **1 of 1**

History: Effective: 12/01/04 Revised: 9/04 Original: 11/00

Inspection

1. Ladders shall be inspected daily during morning equipment check for proper placement on apparatus and condition of halyards on extension ladders.

2. Ladders shall be removed from all apparatus and washed with soap and water during monthly cleaning and after each use.

3. Halyards, rings, beams and pawls shall be checked for condition and/or operation.

4. Pawls and roof ladder hooks shall be lubricated as necessary for proper operation.

5. Lubrication shall be of a silicone type.

Testing:

All ladders (including the spare set at Sta. 56) will be tested on an annual basis (by a third party company).

935 NOZZLES **1 of 1**

History: Effective: 12/01/04 Revised: 9/04 Original: 11/00

All nozzles shall be removed from pre-connects, master stream devices, compartments, and tail boards during monthly cleaning.

Nozzles shall be cleaned by immersing them in soapy water and operating all moving parts. They shall then be rinsed and dried. Proper operation of shut off and pattern adjustment shall be noted.

Note: To keep apparatus in service for fire fighting, do not remove all nozzles at the same time.

All nozzles not hooked to pre-connected systems shall remain in the open position to prevent dirt from collecting on the ball valve.

936 PORTABLE GENERATORS **1 of 1**

History: Effective: 7-2-09 Revised: 6-23-09 Original: 11/00

Daily Check
1. Inspect for cleanliness.
2. Check air filter.
3. Check gas and oil levels.
4. Check condition of starter rope.
5. Start engine.
6. Test electrical system.

Lights
1. Check for cracks.
2. Check for cleanliness.
3. Check operation.

Extension Cords
1. Check for faulty connections.
2. Check for cracks.
3. Check operation.

Weekly Cleaning (every Monday) (524 and 548) also spare generator kept at Station 57.
1. Air Filter: Remove cover and elements. Carefully check both elements for holes or tears and replace if damaged.
2. Foam Element: Wash in detergent and warm water, rinse thoroughly allow element to dry.
3. Paper Element: Tap lightly several times on a hard surface or blow compressed air through the filter from the inside out. Replace if excessively dirty.
4. Sediment Cup: Turn fuel valve to OFF. Remove the sediment cup and O-ring and wash them in non-flammable or high flash point solvent. Dry them thoroughly and install securely. Then turn valve to **ON,** and check for leaks.
5. Avoid excessive water, a rag with mineral spirits or similar type agent shall be used. Wipe off any excess cleaning agent.

Fuel
1. Use the one (1) gallon safety can be designated for the tool.

Other Maintenance
1. For more complex maintenance, contact Vehicle Maintenance Officer for the individual operation manual.

937 SMOKE EJECTOR (ELECTRIC/GAS) **1 of 1**

History: Effective: 01/01/07 Revised: 01/07 Original: 11/00

ELECTRIC

Daily Check

1. Check the cord and electrical connections. The grommet holding the cord must be intact. Replace if damaged or missing.
2. Check smoke ejector for proper operation.
3. Check oil and fuel levels.

Weekly Check (every Monday)

1. If smoke ejector is dropped or falls refer to Vehicle Maintenance Officer for operating inspection.
2. Check door jam bar for proper operation.
3. Check oil and fuel levels.

Monthly Checks

1. Clean and inspect for damage
2. Check oil and fuel levels.

938 SHOVELS 1 of 1

History: Effective: 12/01/04 Revised: 9/04 Original: 11/00

Monthly Check and After Each Use

1. Check handles for cracks or splinters.
2. Check heads for tightness.
3. Clean heads, paint if necessary.

939 WINCH OPERATIONS (ELECTRIC) 1 of 3

History: Effective: 2/6/09 Revised: Original: 1/27/09

OPERATING INSTRUCTIONS

REMOTE CONTROL SWITCH

The control switch, when engaged in the receptacle, is used to power in, or power out wire rope. The toggle switch activates the winch motor. There are three positions for the switch, the middle position being "OFF", and the other two positions are "power in" and "power out" as indicated on the control. The switch must be held in the power positions as the switch is spring-loaded and will automatically return to the "Off" position.

AUTOMATIC BRAKE (if so equipped)

Any time the control switch is in the neutral or off position, the brake will automatically activate against a load.

OVERLOADING-OVERHEATING

This winch is rated for intermittent duty. It should not be operated with the motor lugged down to a low RPM. When the motor approaches stall speed, a very rapid heat buildup occurs which could cause permanent motor damage. The best way to judge safe running time is to stop winching and lay your hand on the motor occasionally. When it reaches the point that it is uncomfortable to leave your hand there, shut down and cool for a while. The cool down period can be used to advantage to recharge the battery. Double lining with a snatch block substantially reduces amperage draw which in turn will allow longer "on time".

BATTERY RECOMMENDATIONS

A fully charged conventional automotive battery with a minimum rating of 500 cold cranking amps is recommended to obtain peak performance from your winch. Make sure all electrical connections are clean and tight.

MAINTENANCE

No internal lubrication by the owner is needed for the life of the winch. Winch should not be submerged in water. If winch is accidentally submerged, it should be operated within 3 days until motor is warm to the touch. This should drive out any moisture that has entered the motor.

SAFETY PRECAUTIONS

1. Never touch the wire rope or hook while they are in tension or under load. Even at rest, the winch may have the wire rope in tension.
2. **DO NOT** have the remote control lead plugged into the winch while free spooling, rigging, or sitting idle. Have the remote control lead plugged in **ONLY** during the actual winching operation.
3. While the remote control lead is plugged into the winch, always keep clear of the drum and fairlead area and the wire rope and rigging.

History: Effective: 2/6/09 Revised: Original: 1/27/09

4. Never handle the wire rope or rigging while anyone else is at the control switch or during the winching operation.
5. Always stand clear of the wire rope and load during the winching operation. Keep helpers and spectators at a safe distance. If a wire rope pulls loose or breaks under load, it can lash back with tremendous force.
6. Before winching, inspect the remote control lead for cracks, pinched spots, frayed wire or loose connections. A damaged, shorted lead could cause the winch to run as soon as it is plugged in. When using the remote control inside a vehicle, always pass it through a window to avoid pinching the lead in the door. Always store the remote control lead in a clean, dry area where it will not be damaged.
7. Always be certain that the anchor you intend to use is capable of withstanding the load. Always use a choker chain, wire choker rope, or tree trunk protector on the anchor. Never put the winch wire rope around an object and hook back to it; this will cause damage to the wire rope.
8. Never winch with less than five wraps of wire rope around the winch drum. With fewer wraps, the wire rope could break loose from the drum under heavy load.
9. The wire rope must always spool off of the drum as indicted by the drum rotation decal on the winch. Some winches are quipped with an automatic brake and this brake WILL NOT FUNCTION if the wire rope spools off in the opposite direction. The wire rope spooling can accidentally be reversed by running the wire rope all the way out and respooling in with the control switch in the "power out" mode.
10. Never exceed the rated capacity for winching. Double line with a snatch block to reduce the load on the winch and wire rope by almost half.
11. Use the switch intermittently to take up wire rope slack to avoid shock loads which can momentarily far exceed the winch and wire rope rating.
12. Always unspool as much wire rope as possible when preparing rigging. Double line with a snatch block or pick an anchor as far away as practical. This will minimize wire rope damage, such as mashing and kinking, caused from top layers pulling down into the bottom layers when short pulls are made. The greatest pulling power is available at the First Layer on the drum, decreasing with each successive layer.
13. Always pull as straight as possible to minimize the buildup of wire rope on only one end of the drum. Always inspect and carefully rewind the wire rope after use. Mashed, pinched or frayed areas severely reduce the original tensile strength. For safety's sake, replace wire rope when damaged.

CAUTION: When powering in wire rope during side pull operations, the wire rope will stack up at one end of the drum. Eventually this stack will become large enough to cause serious damage to the winch. To prevent his damage, line pulls should be as straight in front of the vehicle as possible. Stop winching if the wire rope comes close to the tie rods or mounting plate. To correct an uneven stack, spool out the stacked section of the wire rope and reposition it to the opposite end of the drum. This will free up space for continued winching.

14. The life of the wire rope is directly related to the care and use it receives. The wire rope on a new winch, and any replacement ropes, MUST BE STRETCHED AND RESPOOLED UNDER LOAD before using the winch. Failure to do this will result in wire rope damage.

History: Effective: 2/6/09 Revised: Original: 1/27/09

15. At times, it may be necessary to temporarily respool the wire rope under no load after use. The correct procedure is to hold the remote control lead in one hand and the wire rope in the other. Start as far from the vehicle as the remote control will allow, activate the switch, walk in several feet of rope and release the switch. Repeat the process. ALWAYS release the switch when your hand is AT LEAST FOUR FEET from the fairlead (the physical opening through which the wire rope passes).
16. ALWAYS release the switch when the HOOK is a MINIMUM OF FOUR FEET from the fairlead. The following procedures are important to PERSONAL SAFETY and to avoid wire rope damage caused by over tightening.

If your winch is equipped with a clutch, unplug the remote control lead, release the clutch, and rotate the drum by hand to retrieve the remainder of the wire rope. Re-engage the clutch.

If your winch is not equipped with a clutch, place the hook on a suitable spot on the mounting kit. Then, keeping your hands completely clear of the hook, the wire rope and the fairlead, jog the switch intermittently to take up the slack. Do not over tighten or damage may occur to the wire rope.

17. When anchoring the pulling vehicle, set the parking brake and block the wheels. Place automatic and manual transmissions in neutral.
18. When retrieving or spooling in wire rope, be sure to distribute the wire rope evenly and tightly on the drum. This prevents the top layers of wire rope from being drawn into the bottom layers of wire rope and creating a "bind". If the wire rope binds on the drum, the winch and/or the wire rope may be damaged. A "bound" wire rope will reel out only a short distance and then will reel back in even though the remote control is held in the "out" position. Should the wire rope become "bound", connect the hook to a load. By alternately powering "in" and "out", the wire rope will usually work itself free. In any event, **DO NOT PUT YOUR HANDS ANYWHERE NEAR THE WIRE ROPE WHEN WORKING A "BIND" FREE.**

History: Effective: 2/6/09 Revised: Original: 1/09

Using engine brakes on wet or slippery roads can cause overbraking, especially on vehicles with light loads or single-drive axles. Stopping distance can actually increase, or the vehicle can skid or jackknife. Reduce the retarding power or turn "OFF" the engine brakes on slick roads.

When driving on slick roads, start with the on/off switch in the "OFF" position and the two-position selector switch in the LOW position.

Remove your foot from the throttle to make sure the vehicle will maintain traction with the retarding power of the engine alone.

If the vehicle drive wheels begin to skid or if there is a fishtailing motion, do not activate the engine brakes.

If traction is maintained using the retarding power of the engine alone and more braking power is required, Switch the two-position selector switch to the LOW position, and activate the engine brakes by switching the on/off switch to the ON position and test.

If the vehicle's drive wheels begin to skid or there is a fishtailing motion, switch the on/off switch to the OFF position.

If traction is maintained when the engine brakes are activated and more braking power is required, move the two-position selector switch to the HI position and test.

Again, if the vehicle has lost traction or if there is a fishtailing motion, switch the on/off switch to the OFF position. Do **not** attempt to use the engine brakes in the HI position.

EAST LAKE TARPON SPECIAL FIRE CONTROL DISTRICT	STANDARD OPERATING PROCEDURES

942 LANDING ZONE LIGHTS **1 of 1**

History: Effective: 12/01/04 Revised: 9/04 Original: 11/00

Consist of five (5) battery operated blue strobe lights, and five (5) lights with bag.

Daily Inspection:

Check the operation of each unit at the start of each shift.

Inspect for cracks or damage of each unit.

Annual Maintenance:

Change batteries (two (2) AA batteries each).

943 CELLULAR PHONE **1 of 1**

History: Effective: 12/01/04 Revised: 9/04 Original: 11/00

Daily Check

1. Inspect for proper operation.
   a. Test for power/battery level.
   b. Inspect cord (if applicable).
   c. Check cleanliness.

Weekly

1. Batteries will be charged on a weekly basis. If low battery, unit should be recharged at that time.
2 Each officer shall carry and be in charge of the phone while on duty.

944 WATER FOUNTAIN CLEANING **1 of 1**

History: Effective: 12/01/04 Revised: 9/04 Original: 11/00

DAILY:

1. Wipe top of machine with disinfecting solution.
2. Use calcium remover to remove stain.
3. Wipe stainless with proper cleaner.