SECTION 1

SUPPORT UTILITY VEHICLE AND EQUIPMENT OPERATION

Section 1 Vehicle & Equipment

APPARATUS OPERATION PART 1

OPERATING EQUIPMENT - PART 2 1-2.1

Notes

General Vehicle Operation

The Support Utility vehicles are two converted Ford/Wheeled Coach Type III Rescue Ambulance.

Shop Number 11696 - Support Utility 1 (SU1)

Shop Number 11832 - Support Utility 2 (SU2)

This Chapter gives the basic description of the instrumentation and controls of the vehicle.

1. Keys and Apparatus Locks
2. Power Connection and Battery Charger
3. Communications Equipment
4. Lighting and Switches
5. Hand Lights and Flashlights
6. Jump Starting Apparatus

Apparatus Key

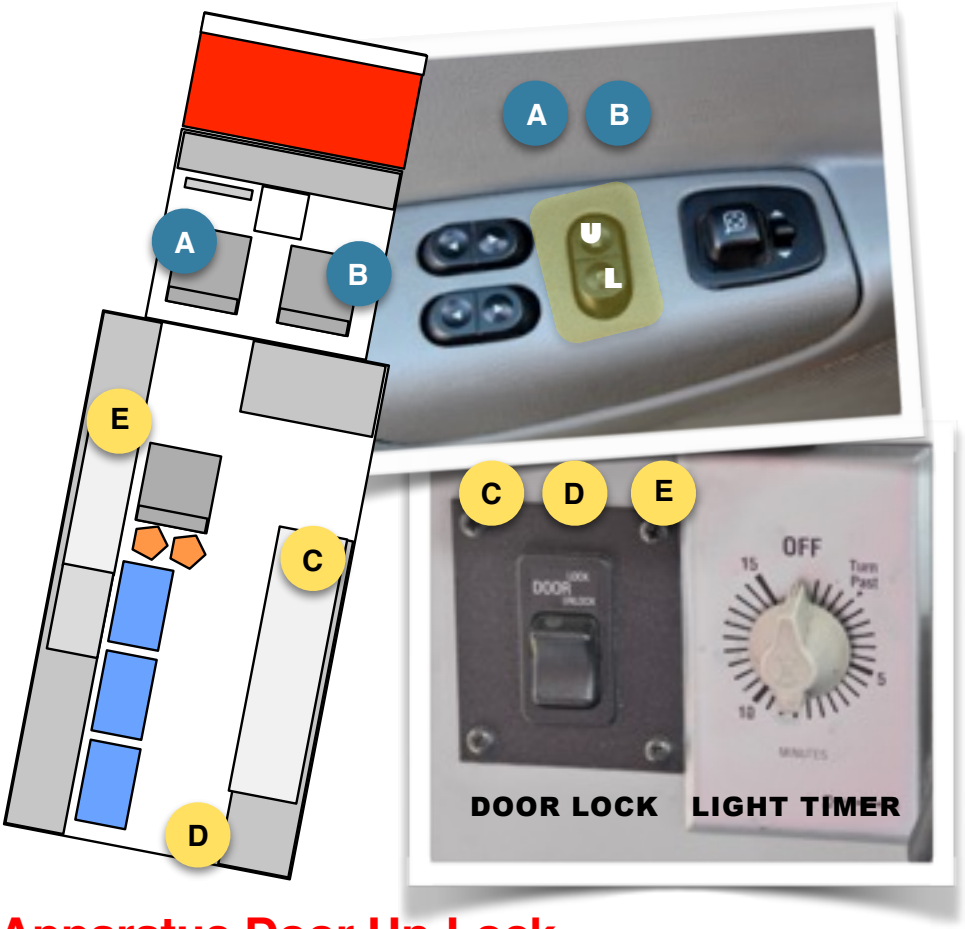
Support Utilities are equipped with combination lock boxes located next to the driver's door. The combination is **6100**, the Division Commander's phone number at Supply and Maintenance **213.485.6100**.

Apparatus Key Lock Box

The vehicle key is located in the lock box and must be returned when the apparatus is returned to station. The Apparatus Key Box is mounted to the freezer in the shed behind Support Utility 2. The lock box combination is **610**. Lock the box after you get the keys.

All van rescue ambulances are keyed the same. Any Ford van rescue ambulance key can open any other rescue ambulance. (i.e., SU1 keys can access SU2)

All emergency apparatus have a Department Lock Box mounted on the rear of the vehicle. A “lock box” key is kept with all emergency apparatus. This key lets the fire company access all emergency apparatus and fire stations.



Apparatus Door Un-Lock

Access apparatus through the driver or passenger door (A / B). Unlock all doors (including outside compartment doors) using un-lock switches located on apparatus door armrest. Press **U** to unlock all doors and **L** to lock all doors. Un-lock switches are also located on side wall and rear door panels (C / D / E).

Siren/Air Horn Foot Switch

The Support Utility is equipped with a foot switch located on both the driver and passenger floor boards.These switches activate the air horn/hi-low horns. Switches are mounted on the floorboard and can be activated when stepping into and out of the cab. The driver's side also has a siren foot switch for the "growler siren" located next to the parking brake peddle. Take caution when stepping in/out of the cab to avoid hitting switches.

Power Connection

The function of the power converter is to take the 110-volt alternating current (110-v AC) from a source outside the Support Utility and convert it through the 12-volt battery charger to the three on-board batteries and the 110-v receptacles on the action wall in the cargo compartment.

- 110v AC is often referred to as a landline or shore power. The heavy-duty cable uses a Hubble connector (a special three-pronged plug with a ground) to connect 110v standard shore power current to the apparatus. Plug the 3-pronged plug into a 20-amp grounded 110v wall outlet. Plug the other end of the cable into the weatherproofed outlet on the roadside of the apparatus.
- Do not allow water to touch the power connection. This may cause personal injury or may short circuit the electrical system.

Battery Charger

The apparatus is equipped with an on-board battery charging system that is used to keep the electrical system fully charged and ready to go. The battery charger hookup to shore power is located next to the driver's door.

The shore power hookup cable should be plugged into the charging system when the apparatus is in station and not in use. This will keep the apparatus battery system charged and ready for use.

The Battery/Charger Monitor plate indicates the battery condition from GOOD (Fully Charged) to LOW (Needs to be Charged). When the shore power is plugged in, the CHARGER ON (blue light) will indicate that the apparatus is being charged. The battery lights will also come on and indicate the charge level from low to good. When the battery system is fully charged, all indicator lights will be up to the GOOD level and the charger will go into trickle mode, maintaining the charged battery level.

Power in Compartment 3

Unique to the Support Utilities is a shore power outlet in Compartment 3 for the Coffee Brewer. This outlet was added to the apparatus when it was turned over to the Support Service Volunteer Unit.

The 110-volt power outlet is located in the cargo compartment of the apparatus. This outlet is next to the action wall at the utility or attendant seat. Plug in the cable to this outlet to supply shore power (20-amp circuit or generator) to the apparatus. This will activate the action wall outlet and power the outlet in Compartment 3. Plug the coffee brewer into the outlet box located in the top of Compartment 3.

Basic Radio Equipment

The two-way radio system is part of every Los Angeles Fire Department (LAFD) vehicle. Not every LAFD vehicle is equipped with a two-way radio. The radio consists of five main components:

1. The Control Unit is the radio control head.
2. Microphone is located next to the driver's seat.
3. An additional control head is located on the action wall in the cargo compartment. The transceiver is mounted in a compartment in the cargo area next to the action wall.
4. The speaker is mounted next to the driver's seat.
5. The antennas are mounted on the roof of the cargo compartment.

LAFD Fire Radio Operations

The 800 MHz radio system is the primary radio used for communicating with Metro Fire Dispatch and other LAFD fire companies. There are other radios in the Support Utility that are not to be use by crews unless directed by the Communications Unit for the incident.

The control head for the LAFD radio is located above the switch console on the passenger side and the microphone is located on the dashboard next to the steering wheel.

1. FIRE RADIO Power On

When the ignition is turned on, the Fire Radio immediately powers up and proceeds into an automatic self-test mode. If {FAIL ##/##} or {ERROR ##/##} is displayed, constantly after the self test, turn the radio OFF, then back ON again. If you receive a failure code again, turn the radio OFF and notify FCCS at 213.978.8350 and inform Metro Fire Communications that you have radio problems by cell phone when you arrive on scene

2. Channel Select or MODE

To select a Channel/Mode, turn the Mode Select knob until the desired channel is displayed.

3. Volume CONTROL

Press and hold the Volume Rocker Switch to increase or decrease the volume. You will hear a volume set tone as you increase or decrease the volume.

4. Direct

Your radio has the ability to operate directly with other radios without going through the repeaters.

NOTE: Remember that while operating in DIRECT, you will not be able to speak with Metro Fire Dispatch or units a long distance away. DIRECT is only good for approximately 1-5 miles, depending on the terrain.

Press the DIR button. The DIR indicator lamp will light up. To exit DIRECT operation, press the DIR button again.

5. Scan ON/OFF

To turn Scan ON, press the SCAN button. The indicator lamp under the SCAN button will light up.

NOTE: SCAN will allow you to have all programmed channels.

TIP

The scan function also works when you transmit. It can put you on another channel. **TURN IT OFF WHEN YOU ARE GOING ON AN INCIDENT AND TRANSMITTING.**

6. XMIT (Transmit)

When you push the transmit button on the microphone, this indicates that you are “on the air” and transmitting.

7. BUSY

The light comes on when someone else is transmitting and the system is busy.

8. DIM DISPLAY ON/OFF

Your radio display has 4 levels of display brightness/intensity: High, Medium, Low and OFF. Press the DIM button to lower the display intensity. While the display and keyboard backlights are OFF, the radio is still fully operational. Press the DIM button again to return to High intensity.

Microphones

The Support Utility has a radio microphone on the dashboard next to the steering wheel. This is the primary microphone used for communicating with Metro Fire Dispatch and other fire resources. There are two mic clips in the cab, one on each side of the center switch console. If the driver is the only person responding, the mic can be placed on that side of the cab. If a second person is in the cab, that person is responsible for navigation and communications and the mic can be moved to that side of the cab.

To Transmit:

1. Select the desired channel. The channel will appear on the display.
2. Listen for on-going conversation. When clear, proceed with your message.
3. Press the Push-To-Talk (PTT) on the microphone and wait for 3 quick beeps. Begin speaking with the microphone approximately one inch from your mouth.
4. If you hear a phone-type busy signal, release the PTT and wait for the system to call you back with the Call Back Tones.
5. If you hear a steady low-pitched tone (honk), release the PTT and wait until the channel is available. You now have priority in the queue and have 4 seconds to respond.
6. Release the PTT button to receive.

Radio Techniques:

Keep the following safety tips in mind when using the radio:

1. The radio identifier should be on the microphone and the Control Head.
2. You must comply with the following:
    - All operators are to identify themselves with the LAFD apparatus or call number assigned.
    - Operators may not interrupt any distress or emergency messages — these have priority over all other messages.
    - Do not use profane or obscene language.
    - Do not use the radio to send personal messages.
    - Do not repeat conversations overheard on the radio.

Apparatus Intercom Headsets System

The radio system headset can be used for either the cab intercom or radio system.

1. With the headsets on, select the radio system you cant to use. The intercom can access both the LAFD Red NetworkUHF and VHF Networks. The system should be kept on the LAFD 800 Network.

2. Press the push-to-talk mic trigger located on the driver's console. You are now on the air and may transmit your message.

Auxiliary Radio Systems

The auxiliary radio (UHF and VHF) are primarily used for RA-to-Hospital communications. They are not used for normal radio communications. These radios are used for mutual aid and logistics communications.

UHF - Blue

Mutual Aid with LA County Dispatch and the Logistics Net.

- LA County Fire
- LAPD
- Mutual-Aid
- Air Net
- Logistics Net
- Glendale Fire

VHF - White

Mutual Aid with LA County and State Mutual Aid Net.

- LA County Fire
- Mutual-Aid
- LACO Repeaters

The radios are located next to the drivers seat in the cab and on the action wall in the cargo area.

HT Charger & Radio

Each Support Utility is equipped with a Handie-Talkie (HT) radio charger for the LAFD red radios. This charger is located behind the driver's seat. The HT radio and battery will slide into the charger and can continue use as it charges.

The charging light on the base will shine yellow when charging and turn green when the charge is complete.

A single radio battery can also be charged outside the radio body. You can remove the battery from the HT and replace it with a charged battery. Place the used battery into the charger making sure to slide it firmly into the charger plate close to the wall. The charging lights will come on.

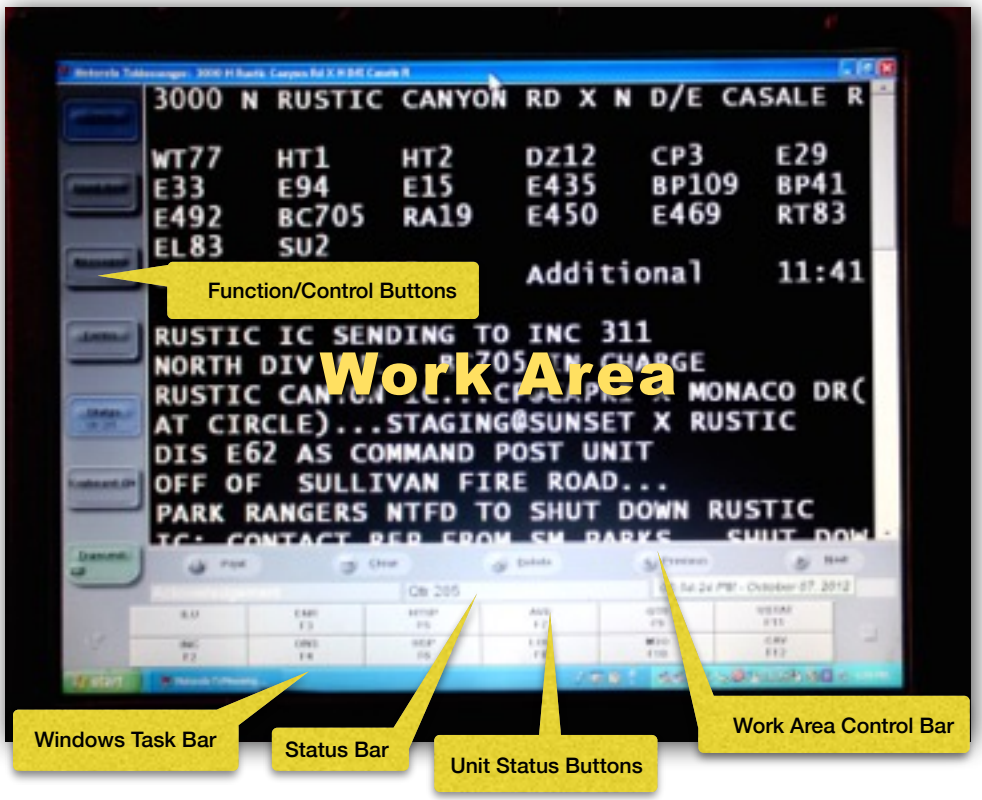
Mobile Data Computer - MDC

Each Support Utility is equipped with a Mobile Data Computer (MDC). This computer is a direct link to Metro Fire Communications and other apparatus operating in the field. Some of the basic operations are outlined in this section, along with specific instructions outlined in the dispatch, on-scene and demobilized chapters. A complete manual is available in the Communications Course.

MDC Power Switch and Password

The MDC power is supplied to the MDC from the apparatus batteries and are power is constant. The laptop power switch is located on the right hand side of the laptop.

When starting up the computer the first screen that will come up is a log in screen. The password is **lafire** in all lower case. The password is listed next to the keyboard as a reminder. The TX Messenger Mobile Data Computer (MDC) will automatically boot when the MDC is powered up and password entered. The MDC is a vital link between the Support Utility and Metro Fire Communication. The software is loaded on the apparatus's laptop and can appear as the current application. If it is minimized it can be brought to the screen by clicking the mouse on the "Motorola Tx Messenger" icon on the lower Windows taskbar.



MDC Functional Work Areas

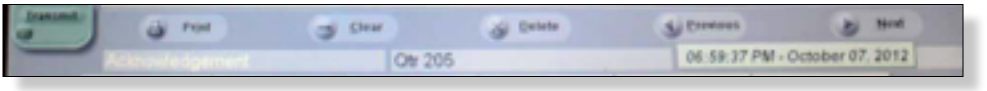
The screen is divided into three parts – function/control buttons along the left side, status bar, and the unit status buttons along the bottom. This screen compliments the computer's keyboard with its alphanumeric keyboard and function keys. The work area is the section of the MDC window located just below the title bar. The work area is where all MDC dispatch messages, forms, as well as other messages received from other units and Metro Fire Dispatch are displayed.

Work Area Control Buttons

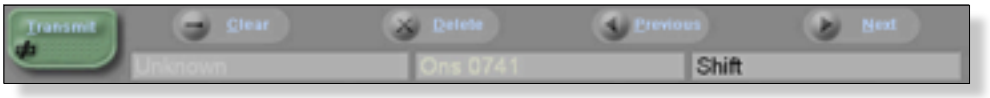
The work area control buttons change based on the form being viewed on the screen. They are not displayed when the "**Forms**", "**Status**", and "**Other**" buttons are selected. The mouse can be used to point and click on these buttons or by the buttons themselves on computers with a touchscreen.

When messages are viewed as a result of selecting "**Messages**" from the Function/Control Buttons, the Work Area Control Buttons shown below are displayed.

When a particular message is selected to be read the Work Area Control Buttons are displayed.

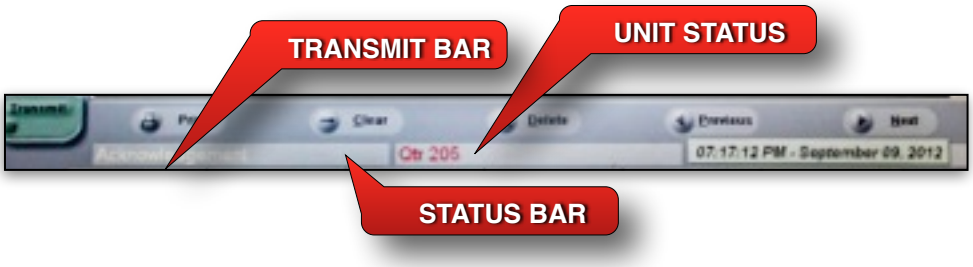


For all other Forms the Work Area Control Buttons shown below are displayed.



Status Bar

The status bar is located just below the Work Area Control Buttons and is used to view the status of the data transmissions and the unit 's status. It contains information pertaining to the current status of the MDC, the computer, and the messages. The status bar is always visible.



TERMINAL STATUS shows the current status of the MDC. *Transmit, Receive, Acknowledge, and Message Not Acknowledged* are common status messages displayed in this field. (Do not confuse this field with the Unit Status field or the Unit Status buttons used to report the unit status to Metro Fire.)

UNIT STATUS displays the unit's current dispatch status. This field is updated whenever a status conformation is received from the CAD. This field remains yellow until acknowledged by the CAD at which time it turns black.

Unit Status Buttons

Unit status buttons are located on the bottom of the screen and are used as part of the system to acknowledge calls and indicate unit status. These keys are active on computers with a touchscreen. The mouse can be used to point and click on these buttons or the computer's function keys can be used to initiate the corresponding functions, e.g. **F4** for "**ONS**", **F12** for "**CAV**", etc.

MDC - Mobile Data Computer Function Buttons

The following is a listing of the functions that are initiated when these keys are selected:

ILU (F1) - XMIT Transmits any message on the screen.

INC (F2) - Brings up information for the incident on which the unit is currently assigned.

ENR (F3) - Places the apparatus en-route to an incident.

ONS (F4) - Places the apparatus on scene of an incident.

HTSP (F5) - Places the apparatus enroute to the selected hospital.

HSP (F6) - Places the apparatus in the hospital.

AVR (F7) - Places the apparatus available on the radio.

LOC (F8) - Is used to change location as a unit transitions through different districts.

QTR (F9) - Places the unit in quarters in whichever district the unit is in.

MSG (F10) - Used to send Unit-to-Unit messages.

USTAT(F11) - Used to determine the status of any unit.

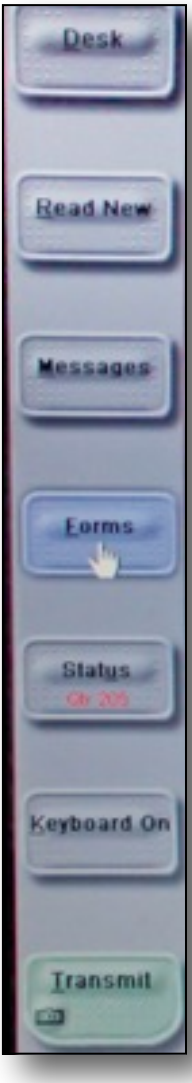
CAV (F12) - Brings up the CAV menu.

Shift, F1 - Brings up the NAV menu.

To the left of the status buttons is the Day/Night Switch. This button can be used to put the screen either into a day or night mode.

Control Buttons

MDC control buttons are located on the left side of the screen. These are the buttons used to perform basic MDC functions.



Desk – This button brings you to your Main working screen.

Read New – This button will let you read New messages that arrive. When messages are present and have not been read, the number of messages are indicated on the button. Selecting the button will step through the new unread messages.

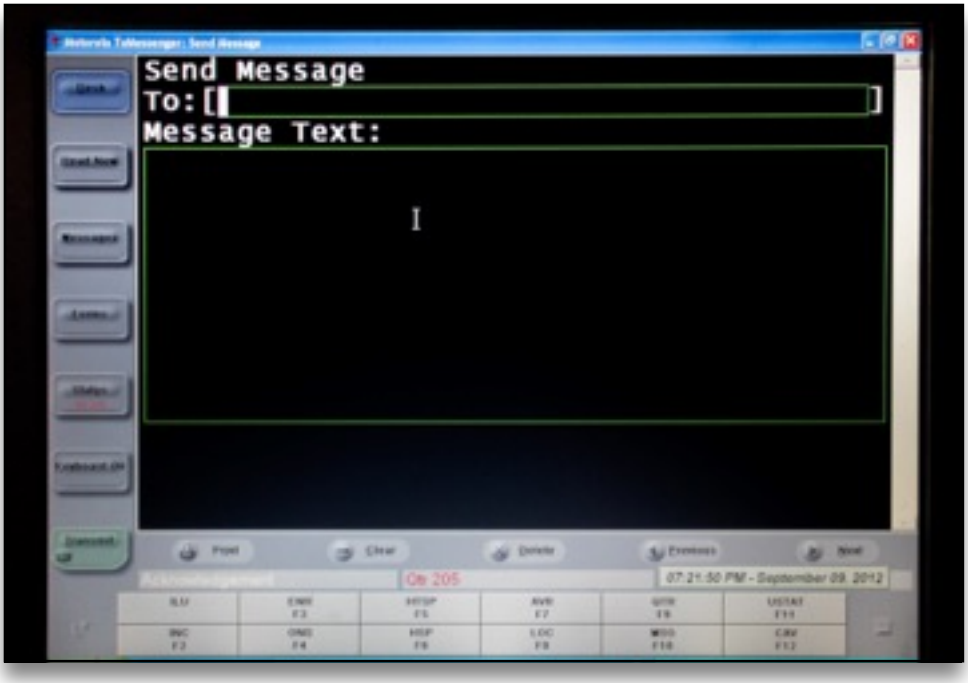
Messages – This button takes you to where all incoming and outgoing messages are stored.

Forms – This button should not be used by Field Personnel.

Status – This button shows the unit's current status.

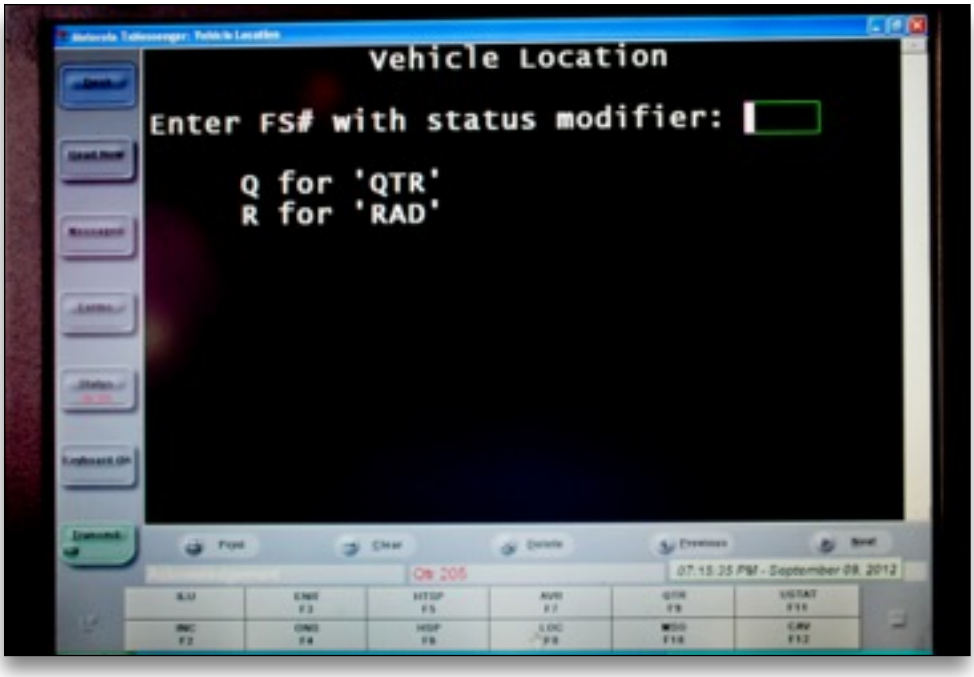
Keyboard On – This button brings up the on-screen keyboard.

Transmit – This button is used to transmit messages.



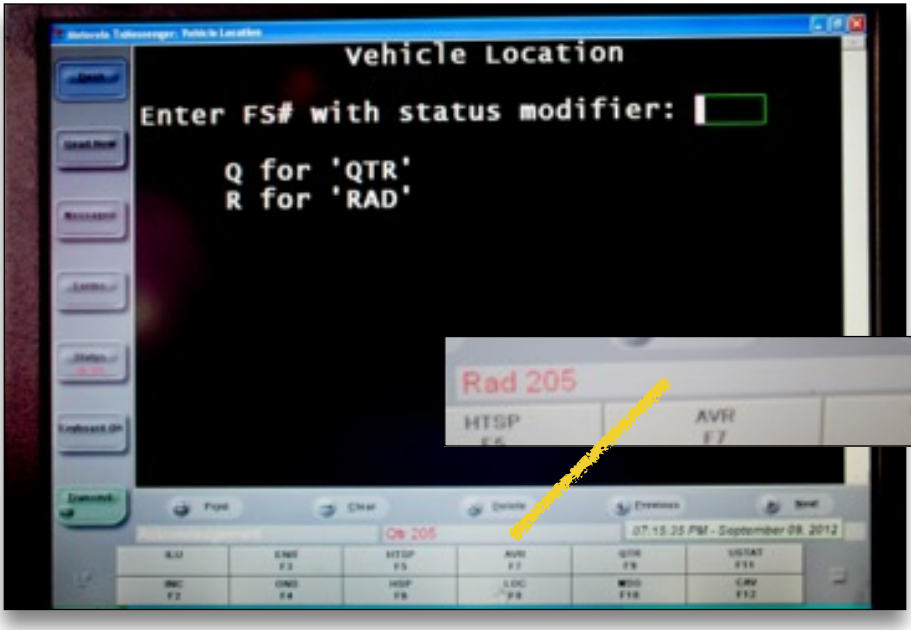
Unit-to-Unit Message Form

This form is used to send a message to Metro Fire or to another field unit. The Message form is an often-used form. You can display this form by pressing **F10** on the keyboard, or by choosing the "**MSG**" button from the status buttons.



Location Form (Change Location Form)

The Location form is displayed by pressing **F8**, or by choosing the "**LOC**" button on the status buttons. Enter the fire station district and an "**R**" or "**Q**" for Radio or Quarters status. Enter the Fire Station Area that you are in such as 001R or 060R followed by the status R or Q. When you are in Quarters at S&M enter 205Q or Fire Station 7 - 007Q.



Available Status:

Select "**AVR**" (or **F7** key) to display available status.

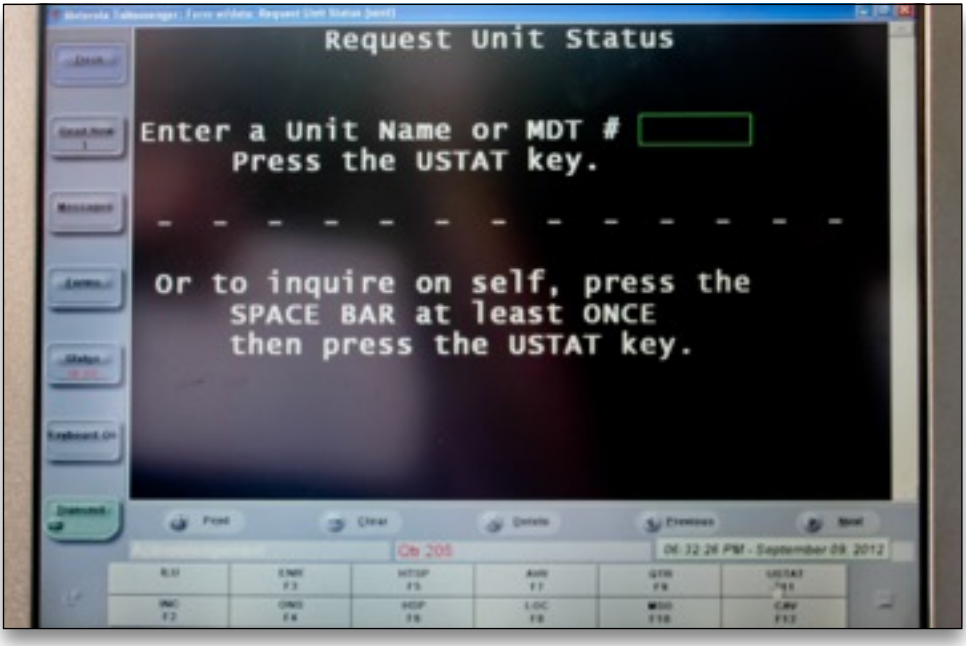
When the location screen is displayed, enter the location number.

Select the "**Transmit**" (or **F1** key) button.

This form is used to update Metro Fire Communications when the unit has moved from its established First-in District to another district. To establish a First-in District, a unit must go into quarters in that district.

For example:

SITUATION KEY STATUS	KEY PRESS	STATUS DISPLAY
Support Utility 2 in Quarters		QTR 205
Support Utility 2 enters FS4's District	**"4R" "LOC"**	RAD 4
Support Utility 2 goes into FS4's quarters	**"4Q" "LOC"**	QTR 4
Support Utility 2 is on scene	**"ONS" (F4)**	ONS
Support Utility 2 in Quarters	**"205Q" "LOC"**	QTR 205



USTAT Form

This function obtains the current status of any unit along with the last 10 status updates.

Obtain Status of "Self"

Method 1:

Select "Clear" to clear the screen.
Select the "Space Bar".
Select "USTAT" (or F-11).

Method 2:

Select "USTAT" (or F-11)
USTAT Form is displayed
Enter your Company's Designation (for example: E39 or SU2).
Select "Transmit" (or F-1).

Obtaining the status of Another Company

Method 1:

Select "Clear" to clear the screen.
Enter the Company's Designation (for example: E76 or SU1).
Press "USTAT" (or F-11).

Method 2:

Select "USTAT" (or F11)
USTAT Form is displayed.
Enter the designation of the Company which you seek to obtain the status of (for example: BC14).
Select "Transmit" (or F-1).

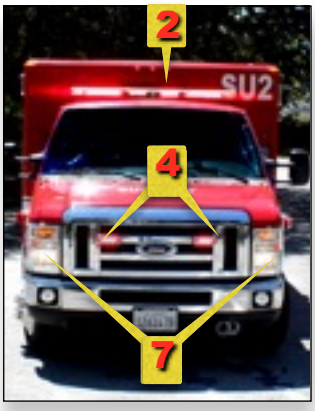
Apparatus Light Control

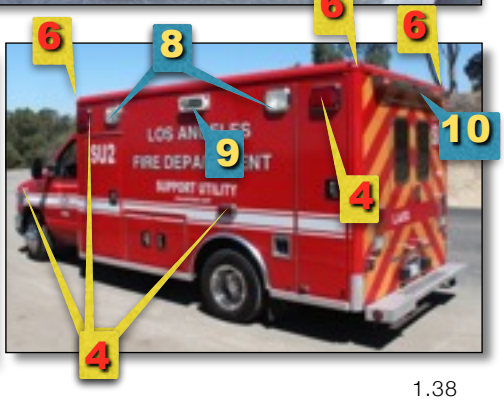
The lighting control console is located between the driver and passenger seats in the cab. The master switch controls all emergency lights, floodlights, and the rear “Patient" compartment’s heat/cool temperature. The emergency lights are controlled by the master switch on the console. Pre-set lights can be activated all at once by throwing the switch. Use warning and rear amber lights verses the emergency red lights for pre-set lights.

Warning Systems

Support Utilities were former rescue ambulances and have all the emergency warning systems that may not be needed for an incident support vehicle. The sirens have been disconnected to prevent misuse during an incident. Some of the emergency lights have been changed to warning lights to make the apparatus unique to support services.

Apparatus Light Control Console





1 Master Lighting Control

The first switch is the master control switch for emergency response lighting. You can pre-set the emergency lights so all you need to do is flip the master control switch and the designated lights come on.

2 Front Lightbar

SU1's front lightbar has a red, amber and clear center lenses. SU2's has only red LED lights. The front lightbar can be activated separately from the other warning lights.

3 Rear Lightbar

The rear lightbar is also equipped with red and amber lenses along with the center brake light and two clear loading lights.

4 Warning Lights

All of the red warning lights come on when the Warning Lights switch is flipped on and are part of the emergency warning system.

5 Rear Amber Lights

The rear amber warning lights are the most used lights in the system. The switch should be preset at the on position to activate the emergency warning system.

6 Corner Flashers

The corner flashers are strobes that operate independently from the running or warning lights.

7 High Beam Flasher

The High Beam Flasher alternates the headlights between high and low beams. This function will only activate when the vehicle is moving.

8 Scene Lights

These are the two side flood lights that can be switched on each side of the vehicle as needed. The scene lights are used to illuminate the work areas at night.

9 Flood Lights

The center flood light on each side can be switched on to provide additional work light.

10 Rear Load

The rear loading lights are located within the rear lightbar and are focused over the rear doors. The lights will activate when the rear doors are opened.

11 Siren/Horn Switch

Transfers the siren control to the horn switch. If the horn is not working, the switch may be set to siren to activate the horn.

Other Siren Controls

There are other siren controls on the panel. Volunteers are not responding to emergencies, therefore, these switches are not to be used.

12 Patient Heat/Cool

This switch activates power to the rear heater or air conditioner controls.

13 PASS SIREN & HORN

The PASS SIREN and PASS HORN switches disable the siren and horn floor switches on the passenger side of the cab. This way the passenger can not accidentally activate the siren or air horn.

Load Manager

The Load Manager is an electronic system that maintains battery voltage by controlling electrical loads. When the battery voltage drops to a preselected setting, the load manager will equalize the electrical loads to compensate for the low voltage. When excessive electrical loads cause a drop in battery voltage the load manager will de-energize loads at approximately 60-second intervals starting with the Corner Strobes. If this action does not solve the low voltage condition, more systems will be shut down in the following order:

1. Rear Flashers, Warning Lights, Rear Lightbar & Front Lightbar. Loads will be removed until the voltage returns to normal.
2. The fast idle system will be maintained for a minimum of 10-minutes until a voltage reading of 14.0 is achieved, even if any system shedding did not occur.
3. The load manage indicator is located on the emergency lighting switch panel. A green LED indicates that the load manager is active, A red LED indicates that the load manager has sensed low voltage.

NOTE: It is important to note that at a minimum, when ALL electrical accessories are turned on and engine is turning at idle (500-759 rpm), the alternator will be unable to keep up with the electrical demands placed on it. At idle with ALL electrical accessories ON, system voltage can drop well below 12.0 Volts. Even when the engine high idle is engaged with all electrical accessories ON, system voltage will vary between 12.9 to 13.1 Volts. This is only a few tenths of a volt above the SHED voltage where the first electrical accessory is turned off. When there is a heavy demand placed on the electrical system such as occurs when idling on scene, alway engage the **HIGH IDLE** feature of the engine. This will prevent shut down of any electrical accessories by the electrical load manager when electrical demand is high. The high Idle system engages when the parking brake is engaged.

Door and Comp. Ajar

The Door and Comp.(compartment) Ajar Indicator will come on when doors are open. CAUTION: Sometimes bulbs burn out. Do not depend on these lights. Walk around the apparatus and check.

Siren Control

The is not to be used by volunteers responding to incidents. We are in a support role, not an emergency role. The controls that can be used on this panel are the AIR HORN, PA (Public Address System) and External Radio Speaker.

Cargo Area Switches

The lights in the cargo area can be controlled by the switches on the action wall.

12 Patient Heat/Cool

This switch activates power to the rear heater or air conditioners.

14 Fan

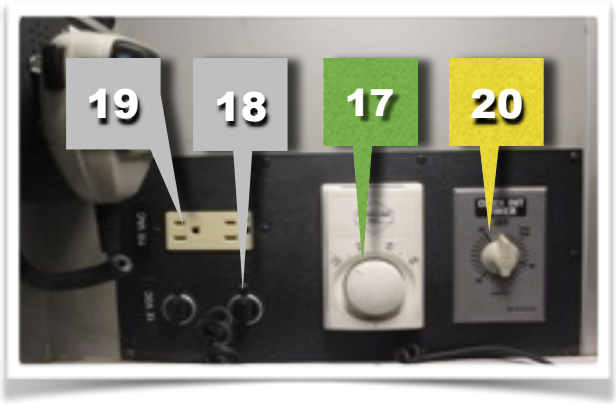
This switch controls the fan speed for the Air Conditioner and Heater. HIGH, MED, LOW.

15 Exhaust Fan

This switch turns on the two fans in the cargo area.

16 Door Locks

One of 3 door lock switches in the cargo area. LOCK or UNLOCK.



17 Thermostat

Will turn the air conditioner and heater on at a designated temperature in the cargo area

18 Power Points

12-volt power points for chargers and other 12-volt products.

19 120V Shore Power

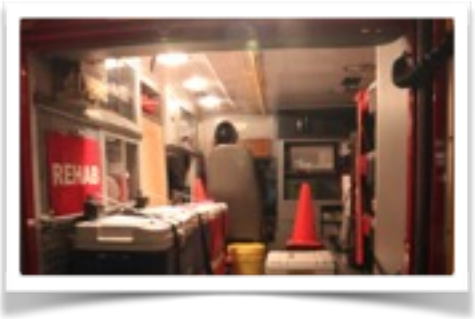
The power supply for Compartment 3 is connected here.

20 Light Timer

The for overhead lights. Lights will shut off after the designated time. Same switch is located at each door.

21 Left Dome

This switch controls the intensity of the Left Side Dome Lights, This control switch is off in Center Position. Lights are high in Up Position . Lights are low in Down Position.



22 Right Dome

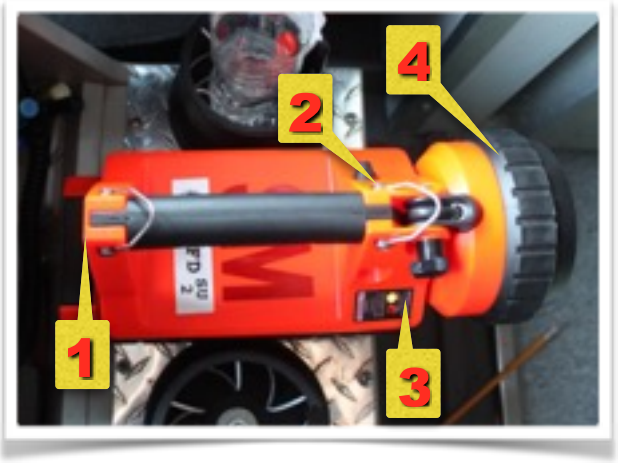
This switch controls the intensity of the Right Side Dome Lights, This control switch is off in Center Position, Lights are high in Up Position. Lights are low in Down Position.

Hand Lantern

Each Support Utility is equipped with two powerful rechargeable hand lanterns. One lantern is located in Compartment No. 6 on the curbside of the rig. The second lantern is located between the seats in the driver's compartment. The lanterns have an adjustable lamp dome that can be tilted when the lantern is set down. The lanterns will charge when the apparatus is connected to shore power. The battery status LED display is located on the side of the lantern.

To Release the Lantern:

Push in on the black release level located at the bottom of the charger unit. Pull the lantern up and out once the lantern clears the charger.



Hand Lantern

1 - Lantern Release

2 - ON /OFF Switch

3 - Charge Status

Green = Ready

Red = Charging

4 - Adjustable Head

Flashlights & Traffic Wand

The Support Utility is equipped with flashlights in the cargo area for easy access during light operations. There is a flashlight located near each seat. Extra flashlights and traffic wands are stored in the cargo area along with extra D-Cell batteries.

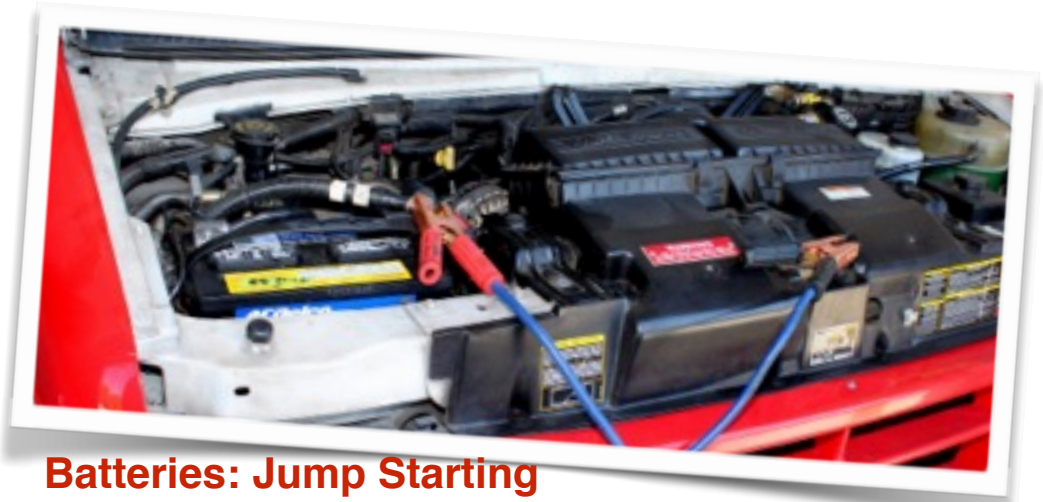
The flashlights can be used as flashlights or traffic wands when the cone is attached. The lens cap can be taken off and the wand attached when traffic wands are needed.

The traffic wands are located on the passenger side door. Use the traffic wand for directing traffic at night in the street or in a staging area. The top of the wand can be removed so that a white beam of light can still be used for illumination.

Hand Spot Light

The Support Utility is equipped with a hand spot light located in the cab of the vehicle. The cord is long enough for use by both the driver or passenger. The cord will also extend outside the driver's door if needed. Store the light on the console between the two seats. The spot light has a push to activate switch on the back of the light that will only be active when you hold it down.

Remember not to shine spot light into driver's eyes.



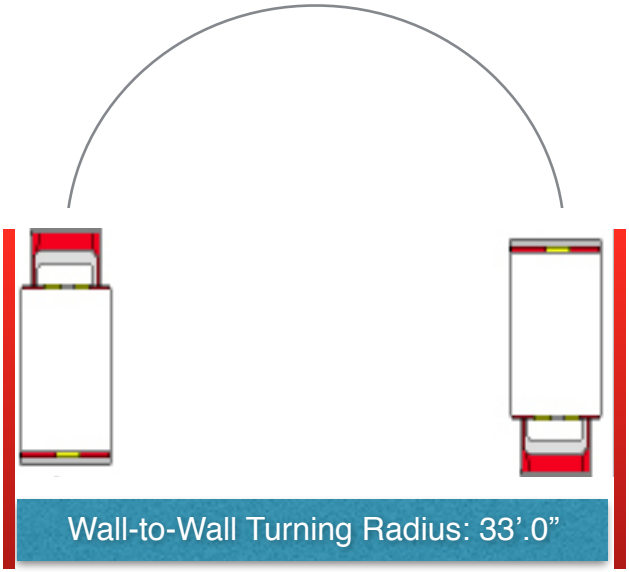
Batteries: Jump Starting

When the battery system has too low of a charge to start the engine, a 12-volt booster battery or jump start may be used. Always connect positive to positive (+), and negative to negative (-). To prevent a battery explosion, the following steps must be taken.

1. Wear safety glasses or goggles.
2. Position the vehicle so the jumper cables will reach easily between the batteries. Do not allow the vehicles to touch.
3. Turn off all electrical accessories in each vehicle. In each vehicle, turn off the engine and the Warning Light Master Switch.
4. Apply the parking brake and shift the transmission to N (Neutral) in both vehicles.
5. Connect the first jumper cable from the positive (+) terminal of the dead battery to the positive (+) terminal on the booster battery.
6. Connect one end of the second jumper cable to the (-) terminal on the booster battery, and the other end to the frame of the disabled vehicle at least 18 inches away from the battery. Do not touch the other end directly to the battery (-) terminal because a spark could occur and cause an explosion of gases.
7. When the jumper is properly attached, start the engine of the vehicle with good (charged) battery. Run the engine at a moderate speed (1000 to 1500 rpm).
8. When the vehicle starts, remove the battery jumper cables by reversing the above sequences.
9. Remove the NEGATIVE cable first.

Turning and Heights

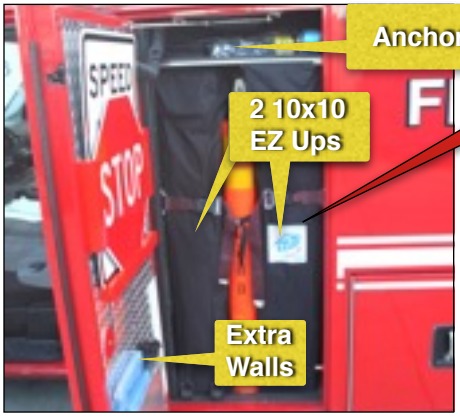
Think about how much room it will take to do a wall-to-wall turns, 33 feet. Also keep in mind that you need 8 feet clearance in height, plus 14" above the roof for the antennas to 9' 1" clearance. The rig requires 9' 6" to clear the side mirrors.

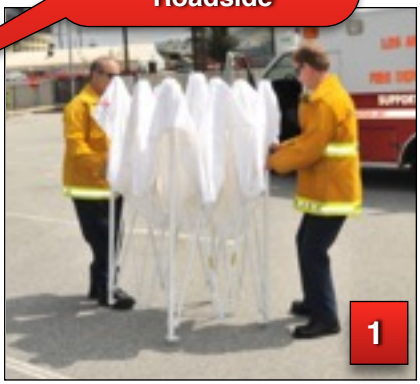


Part II
Operating Equipment

The Support Utility is equipped with specialized equipment. The following equipment will be covered in detail in this chapter:

1. EZ-Up Shelters
2. Coffee Brewer
3. Portable Generators
4. Generator Hookup to Support Utility
5. Fueling Procedures





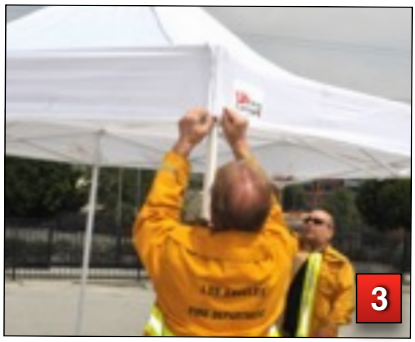
EZ-Up Set-Up Instructions

1. Place your E-Z UP® frame in the center of area to be sheltered. With a person on the opposite side, grasp two outer legs, slightly lift off ground while stepping backwards and stop at full arms' length - approximately 3/4 of it's total size.

2. Grasp the bottom of the diamond shaped area of trusses on opposite sides. Lift up and step backwards until shelter is fully opened, being careful not to pinch fingers.

3. Engage the auto slider at each corner by pushing up with one hand while holding down the top of the leg with the other hand. The quick pin will engage the hole. Then pull down the hem of the top. Repeat at all four corners.

4. Lift two adjacent outer legs up 1" and slide out the inner legs until the toggle button locks. Repeat on the opposite legs - make sure to do two legs at a time.



Taking Down Instructions

1. With partner, slightly lift up two adjacent outer legs 1", depress toggle button and telescope inner legs into outer legs. Repeat on the opposite legs - making sure to do two legs at a time.

2. Release the auto slider at each corner by first lifting hem of top. With one hand, push up on truss near slider, release quick pin by pulling ring.

3. Grasp the top diamond on opposite sides by "close" sticker. Lift the shelter up slightly an shake it while stepping towards your partner until the unit is 3/4 closed.

4. With each partner grasping two outer legs, push frame together to fully close it - **Be careful not to pinch fingers.** When closing the EZ-Up. Store shelter in cover bag.

Setting Up the Support Utility for Making Coffee

When you decide to make coffee on a Support Utility, follow the general setup listed below:

1. Park the Support Utility and setup for rehab. Determine where your power is going to come from and plug into power source:
   - Support Utility Generators
   - Rehab Air Tender
   - Ladder Truck
   - Shore Power

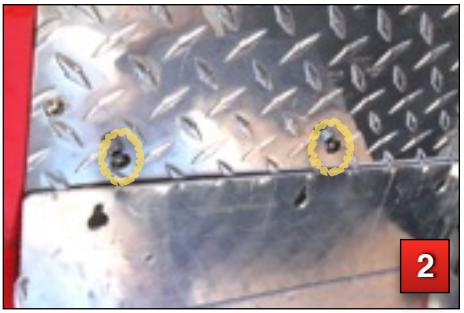
   Plug in the power source into the shore power input for the SU. (At the drivers Door)
2. Plug the power cable into the action wall outlet inside the cargo area.
3. In Compartment 3, plug the coffee brewer into the power outlet located in the upper section of the compartment.
4. Setup the door shelf. Remove items needed to make coffee.
5. When the coffee brewer is brewing and reaches the right temperature, the green light will go on. Follow the instruction for brewing coffee.

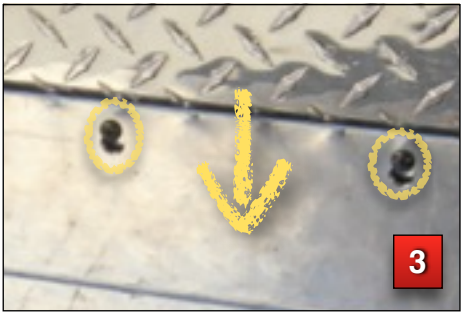
Removable Door Shelf

Located in Compartment No 3 is a removable door shelf that can be attached to the inside of the compartment door to give you an additional work surface when needed.

Removable Door Shelf

1. The shelf is stored next to the coffee brewer inside Compartment No. 3.
2. Find the screws on the inside of the compartment door.
3. Align the holes on the top of the shelf with the screw and push down until the shelf is seated and stable on the door.
4. The shelf can then be used as a work area for light weight items.





BREWING COFFEE
AIRPOT BREWER

1. Pour basket cover
2. Screened water basket
3. Ready to brew light
4. Coffee Filter Basket:
   * Coffee Filter
   * Coffee
5. Filter rails
6. Airpot (1.5 liter)

Coffee Storage

A. Bulk Coffee
B. Coffee Filters
C. Packet Coffee

BREWING COFFEE

Insert a filter into the filter basket.

Pour in fresh coffee.

Shake filter basket gently to level grounds.

Slide filter basket into the funnel rails of the brewer.

Place an empty airpot under the filter basket. Remove the pump stem from the airpot.

Once the “Green” ready light comes on the system is ready.

Pour the water into the screened area on top.

Measure 1.5 Liters of room temperature water (not hot) into the graduate.

The hot brewed coffee will pour into the airpot.

When brewing is completed, discard the hot grounds & filter.

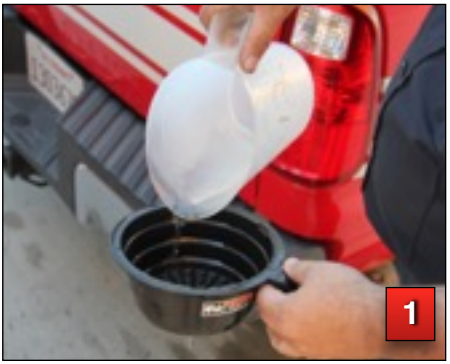
Using Bulk Coffee

Insert a filter into the filter basket.

Pour coffee to the red line in the Measuring cup. (2oz)

Pour the coffee into the filter basket, and follow the instructions outlined in brewing coffee. (steps 4 - 10)

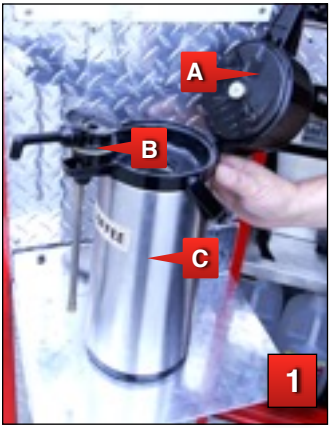
Making Hot Water



Wash out filter basket and airpot.

Insert a filter into the filter basket.

Slide filter basket into the funnel rails of the brewer. Follow steps (5 - 9)



A. The Airpot has a pump lid that opens back.

B. Removable spout, and

C. 1.5 liter thermal container.

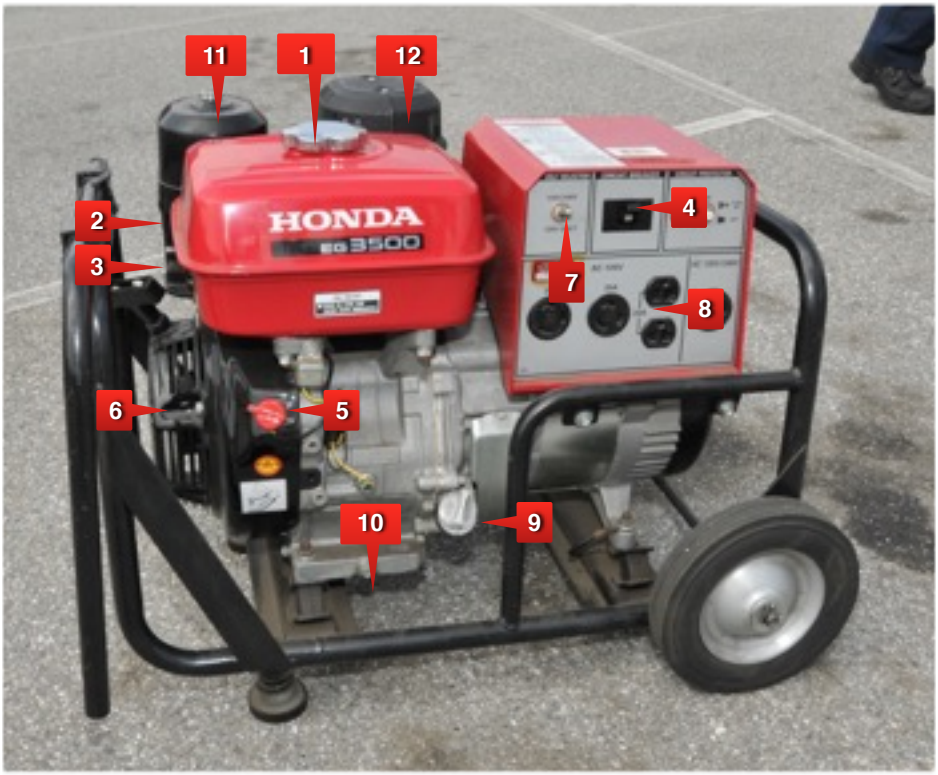
After the container is filled, slip the spout back in the fill hole, setting it through the hole.

Close the lip. Make sure the lip snaps into place and locks down.

Pull the handle up on the pump lid. The handle lock will snap into place (A) enabling the pump. Test the pump by placing a cup under the spout and depressing the handle.

The Support Utility carries three airpots. Two are labeled for coffee and one Hot Water.

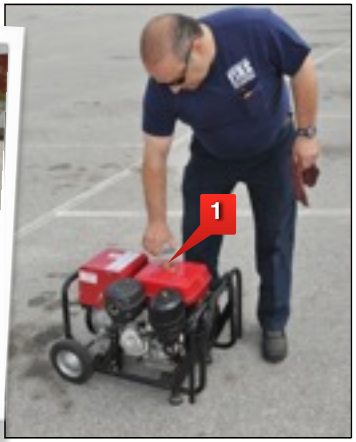
1.5 Liter Thermal Airpot



EG-3500 Portable Generator

The Honda EG-3500 Portable Generator is used on many LAFD resources such as our standard Truck Companies. This generator will handle most power needs with the equipment carried on the Support Utilities. Here is key to the generator components:

1. Gasoline Filler Cap
2. Fuel Valve
3. Choke Lever
4. AC Circuit Breaker
5. Engine Switch
6. Recoil Starter Grip
7. Voltage Selector Switch
8. AC Receptacles
9. Engine Oil Filler Cap
10. Engine Oil Drain
11. Plug Air Cleaner
12. Muffler



Starting Generator

1. Check the FUEL Level by opening the top cap and removing the filter. The Support Utility does not carry extra fuel. If fuel is needed locate a Truck Company which carries extra gasoline

2. Move the choke lever to the CLOSE position.

   NOTE : Do not use the choke if the engine is warm or the air temperature is high.

3. Turn the fuel valve to the ON position.

4. Make sure the AC circuit breaker is in OFF position.

5. Turn the engine switch to the ON position.

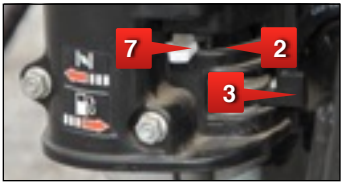
6. Pull the starter grip lightly until you feel resistance, then pull briskly away from the generator.

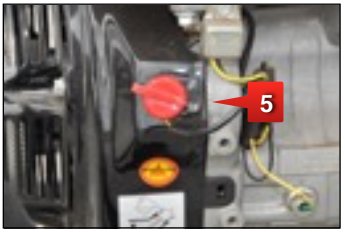
   CAUTION: Do not allow the starter grip to snap back against the engine. Return it gently to prevent damage to the starter.

7. As the engine warms up, gently turn the choke lever to the OPEN position.

8. Turn the AC circuit breaker to the ON position

9. Plug in the equipment.





HONDA EU-1000i & 2000i Portable Generator

This generator is used for fuel pods battery chargers. The generator and charging equipment are stored in Compartment No. 5 on the Support Utility.

The EU-2000 generator has enough power to run the coffee brewer and for long-term incidents this quiet running generator can be used to keep the battery system charged.

Start and Operate

1. Check the fuel level.
2. Make sure that all appliances are disconnected from the AC receptacles.
3. Turn the engine switch to the ON position.
4. To start the engine, pull the starter grip lightly until you feel resistance, then pull briskly away from the generator.

   NOTE:
   Do not allow the starter grip to snap back against the engine. Return it gently to prevent damage to the starter.

5. If the choke lever was moved to the **CLOSED** position to start engine, gradually move the lever to the **OPEN** position as the engine warms up.

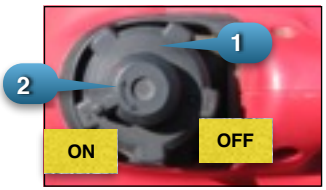
Stop Engine

1. Turn engine switch to the OFF position.
2. Turn the vent lever on the fuel cap to the OFF position when not in use our when storing the generator.

Fuel tank cap vent lever

The fuel tank cap is has a vent lever built-in to seal the fuel tank. The vent lever must be in the on position for the engine to run.

When the engine is not in use, leave the vent lever in the off position to reduce the possibility of fuel leakage.



1. Gasoline Tank Cap
2. Fuel Vent Valve ON & OFF

Generator Fuel

Use regular automotive Unleaded Gasoline. Do to the length of time the fuel is left in the generator between use, we add fuel stabilizer to the fuel tank.

SAFETY CAUTION:

- Gasoline is extremely flammable and explosive under certain conditions. Refuel in a well ventilated area with the engine stopped. Check the generator regularly for fuel leaks.
- Do not smoke or allow flames or sparks in the area where the engine is refueled or where gasoline is stored.
- Do not overfill the tank and make sure the filler cap is securely closed after refueling.
- Be careful not to spill fuel when refueling. Fuel vapor or spilled fuel may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.

Fuel tank capacity : **EG-3500 1.0 gallon**
EU-1000i 0.61 gallon
EU-2000i 0.95 gallon

Generator Tie-Down System

The generator is secured to the apparatus deck by a special tie-down system.

To RELEASE the generator use the following procedures:

1. Remove any equipment from the path of the generator.
2. Un-strap the front of the generator.
3. Slide the generator straight out, releasing it from the mounting bracket.
4. Roll the generator to the edge of the door and have two people lift it out. Use proper lifting procedures. Next page.
5. Move the generator into position. Use starting instructions outlined in this section.

PROPER LIFTING TECHNIQUE

The support of an incident requires a lot of lifting and carrying of heavy equipment and supplies. There are ways to lift and carry that minimize the chance of straining muscles and reduces the chance of back injury. Poor lifting technique can cause acute injury and have serious chronic effects. Using leg and stomach muscles instead of back muscles will prevent back strains and injuries. Keep your back rounded so your vertebrae do not pinch the cushioning disks between them or the nerves that run though them. Learning the right way to lift will help you avoid these problems:

1. **PLAN AHEAD BEFORE LIFTING.**
   Knowing what you do and where you go will prevent you from making awkward movements while holding something heavy. Clear a path. If lifting something with another person, make sure both of you agree on the path.

2. **LIFT CLOSE TO YOUR BODY.**
   Holding objects closer to your body rather than at the end of your reach will give you a more stable and stronger lift. Make sure you have a firm grip on the object and keep it balanced as you lift it close to your body.

3. **FEET SHOULDER WIDTH APART.**
   A solid base of support is important while lifting. Holding your feet too close together is unstable and too far apart will hinder movement. Keep feet about shoulder width apart and take short steps.

PROPER LIFTING TECHNIQUE

4. BEND YOUR KNEES AND KEEP YOUR BACK STRAIGHT

Practice the lifting motion before you lift the object.Think about the motion before you lift. Focus on keeping your spine straight – raise and lower to the ground by bending your knees. Do not over extend your knees past your ankles. Shift your rear back and lean forward as you squat to lift.

5. TIGHTEN YOUR STOMACH MUSCLES.

Tighten your abdominal and glut muscles as you squat to lift. This prevents excessive strain on the spine.

6. LIFT WITH YOUR LEGS.

Legs are many times stronger than back muscles — use your stronger assets, your legs! Squat with tightened abs and gluts to protect your back when lifting.

7. IF YOU'RE STRAINING, GET HELP

If an object is too heavy, or awkward in shape, make sure you have someone around who can help you lift.





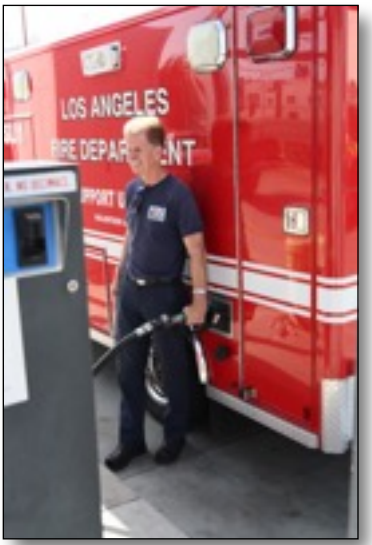
LIFTING TIPS:

- Alway demonstrate proper lifting techniques to avoid injuries.
- Never bend your back to pick something up.
- Never lift by bending forward.
- Hold objects close to your body, not at the end of your reach for more stability.
- ALWAYS tighten your gluts and abs as you squat down. Shift gluts back and lean slightly forward to avoid over extending knees. Straighten your legs to lift.
- Don't twist or bend.
- Face in the direction you are walking. If you need to turn, stop, turn in small steps, then continue walking.
- Keep your eyes level.
- Look forward, not downward, to maintain proper spine posture.
- Never lift a heavy object above shoulder level. Seek assistance if task is required.
- Avoid turning or twisting your body while lifting or holding a heavy object.

"Back Belts - Do They Prevent Injury?" DHHS (NIOSH) Publication No. 94-127.

Fueling at City Facilities

When the Support Utility is under a half tank of fuel, it should be refueled for the next response. Before refueling, let's talk about fuel safety.



FUELING SAFETY

No petroleum supplies in Fire Department custody shall be dispensed to other than Fire Department vehicles or equipment.

1. Turn off the vehicle engine while refueling.

2. During refueling of apparatus, extreme caution shall be exercised. No Smoking, lit matches or use of a lighter shall be permitted within 25 feet of gasoline pumps or the motor vehicle being refueled.

3. The fuel system may be under pressure. If the fuel filler cap is venting vapor or if you hear a hissing sound, wait until it stops before completely removing the fuel filler cap. Otherwise, fuel may spray out and injure you or others.

4. Automotive fuels can cause serious injury or death if misused or mishandled.

FUELING SAFETY

1. Automotive fuels can be harmful or fatal if swallowed. Fuel such as gasoline is highly toxic and if swallowed can cause death or permanent injury. If fuel is swallowed, call a physician or paramedics immediately, even if no symptoms are immediately apparent. The toxic effects of fuel may not be visible for hours.

2. Avoid getting fuel in your eyes. If fuel is splashed in the eyes, remove contact lenses (if worn), flush with water for 15 minutes and seek medical attention. Failure to seek proper medical attention could lead to permanent injury.

3. A spill kit is located next to the fuel pump.

FUELING SAFETY

Observe the following guidelines when handling automotive fuel:

1. Turn the engine/ignition switch to the off position prior to refueling.

2. Always use diesel fuel in both Support Utilities.

3. Do not overfill the fuel tank.

4. Do not use any cellphones or electronic devises when fueling.

5. Care should be taken to avoid inhaling excess fumes.

6. Fuels can be harmful if absorbed through the skin. If fuel is splashed on the skin and/or clothing, promptly remove contaminated clothing and wash skin thoroughly with soap and water. Repeated or prolonged skin contact with fuel liquid or vapor causes skin irritation. Use latex gloves if needed.

LA City Fuel System

When the Support Utility fuel level is under half a tank, you should refuel.

For newer vehicle such as Support Utility 2, you can pull up to the pump, select the diesel fuel and pump the fuel without logging or using the station card reader.

Older vehicles such as Support Utility 1, need to use a fuel card though the station card reader.

Gasoline for generators need to use a master fuel card from Rescue Maintenance. Contact your supervisor for instructions if you need to fuel a generator.

Each vehicle has been issued a City Fuel Card specific to the vehicle. **DO NOT ALLOW ANY OTHER VEHICLE TO USE THIS CARD**. This card should only be used for fueling this vehicle. The shop number (Found under the City seal on all city vehicles) must match the card number in order for the card to work. The system will also calculate the amount of fuel that the vehicle can consume between each fueling. So the exact odometer reading must be entered.

- The Fuel Card is kept above the drivers in the visor.
- Move the Support Utility to the gas pump station.
- The vehicle shop number you entered will only turn on the diesel fuel pump. ONLY USE diesel fuel in the Support Utilities.

- Find the big gray box next to the fuel pump, it works like the fuel pump and most service stations. Insert the fuel card into the slot on the front of the station. The screen will give you the instructions:

  1. Input the type of activity 0 = fueling
  2. Input the Support Utility Shop Number. 11696
  3. Input the Mileage/Odometer number.
  4. Input number 1 for diesel fuel pump.

  The diesel fuel pump is now ready to be used.

Notes

Los Angeles Fire Department
Support Service Volunteer Unit

Support Utility Handbook
Section 1 - Vehicle & Equipment Operations