## MONTHLY NEWS ON APU'S

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   APU Market Again.
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## Frigette Gazette on APU's

VOLUME 2 ISSUE 3

JUNE 2009

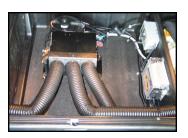
#### Getting The Most Out Of Air Conditioning

Hard to believe, but summer is here again, which means we need to address the subject of air conditioning. In the spectrum of anti-idle technology, making heat and battery charging is easy. The hard part is AIR CONDITION-ING folks! Frigette has 50 years of mobile air conditioning experience and can speak with authority about design, performance and heat rejection principles.

Here are some factors that can really affect the outcome of air conditioning BTU's- the color of the truck (darker colors absorb more heat), the size of the sleeper (larger cubic sq. ft areas are harder to cool than small ones), the amount of window glass, the heat reflection from hot transmissions, engines and asphalt when parked. The number of occupants release heat -even dogs panting with hot breath can emit 400 BTU's of heat energy! To get the maximum performance from

your APU unit, lets start with the condenser. Make sure its clean from grease, and dirt. Wash the coils with a mild degreaser and low pressure garden hose spray. (NOT a pressure washer).

Ensure that the air intake grill and blower fan inside the truck (under the bed) is not clogged or obstructed. Check to make sure the corrugated flex hoses are not crushed, kinked, cut open or disconnected from the evaporator unit or from the





bottom connection points of the vertical duct towers. Whenever possible on a hot day, park the truck in the shade or in the opposite direction of the sun. Use window shade protectors, they work great too.

Here is an important tip-when off duty go into the sleeper and <u>close</u> the <u>curtains</u>. This will reduce the square footage of real estate making the APU much more efficient at cooling the heat down. Open curtains will negatively let the heat in.

Frigette includes duct towers in every APU system we sell.

When installed properly, the duct towers route cold air UP so the heavy cold air will shower down upon the driver as he is resting in bed. Adjustable louvers work great for circulation.



#### **Cummins Leaves APU Business**

A current press release announced that sales of the Cummins APU was disappointing considering the sizeable investment their corporation made in trying to pursue the market. Recent low fuel prices were attributed to a portion of their decision. This is the second time they got in and got out of the APU segment.

# Older Pre-DPF Truck Engines Can Use An APU

#### Are You Confused About C.A.R.B?

The industry is still seemingly confused about the regulations pertaining to APU's in the state of California. Many believe that APU's are banned –but this is not entirely correct.

The California Air Resources Board have written the regulations to allow the use of Auxiliary Power Units with certain conditions:

 Trucks manufactured as model year 2007 with a 2006 model year engine may use a diesel APU-No problem! 2006 or older trucks with 2006 or older model year engines may also operate an APU-No Problem!

The twist comes with NEW trucks equipped with Clean Diesel emissions engines incorporating Diesel Particulate Filters or "DPF's". (2007 and newer) These trucks may NOT operate a diesel powered APU unless it is also equipped with its own DPF -in California only!

Frigette is currently working with a vendor who specializes in DPF

design. This takes time due to the sophistication of the device and certification benchmark timelines required by CARB. Once we are approved by CARB, we will advise everyone on availability.

Remember, there are very few new trucks on the road so far, and millions of older ones that qualify for using an APU in the golden state.

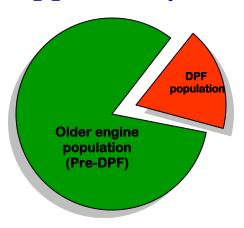
There are 47 other states that do not have this rule leaving an open door for a justifiable APU sale.



#### Lots of APU Opportunity Out There

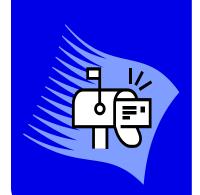
Trucks equipped with new "Clean Diesel" engines are still relatively minor in population compared to the hundreds of thousands of older OEM truck engines on highways today.

It is wrong to assume that all APU's in the state of California must have a DPF also.



For Example:

The big pre-buy in 2006 amounted to 280,000 new trucks sold that year alone. APU's could go on any of them.



#### Dealers: How To Speed Up Warranty Processing

A friendly note to our APU dealers-

The processing of warranty claims can be greatly improved up if we get your defective parts back in a timely manner.

Once you have called for your RMA number and obtained it by email / fax / hard copy in

the mail, box up your parts and include the RMA number inside.

#### Mail the parts to:

Frigette Returned Goods Dept 9320 Southwest Drive Fort Worth, TX 76134

Once we have received the parts for inspection, the process moves to our

accounts payable department so they can credit your account. Any delay in getting the parts back holds everything up.

Always be sure to keep a record of how and when you shipped the parts back.

Thanks for your help in this important step.

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#### Auto Start For Low Battery Voltage is Here!



Good news for many of you who have requested the feature called "Low Battery Voltage Auto Start"

It is now here and available as an option and will

retro-fit backwards to units built after June 2006 and have control panels with the red/green L.E.D. lights on it.

Here is how the new feature works:

By installing the new kit, the system will monitor truck batteries and automatically start the APU if battery voltage drops below 12.3V DC and will run for 90 minutes or until the batteries are fully charged then automatically shut down.

This will allow the battery charger component of our system to boost or trickle the batteries back to a safe level of charge.

The kit has a new control head (which replaces the old one), wiring harness, safety switch for the box lid (to prevent a start up while being serviced), and instructions. Estimated time to upgrade an existing system with this feature is 2-3 hours.

The part number for the auto start kit is: #093-00814, and will be available through Frigette APU dealers.

The old hour meter from the previous control head needs to be removed and easily installed into the new one. To de-activate the "Auto" control feature, just click the switch to the off position.

Kit includes a new control panel with "auto start" switch



#### Newest Water Valve Has A Protective Cover

The latest version of the water valve will be recognizable by the plastic vacuum formed housing that seals the motor assembly.

A pigtail wire connector comes out of the housing for a quick attachment to the wiring harness.

This new version was developed to increase its durability against corrosion and moisture elements

that seem to eat everything up on vehicles.

The "T" type smart valve was a much improved enhancement to the older "linkage" style dual motor assembly from 2 years ago.

This thermoplastic assembly was custom tooled by one of the largest valve suppliers to meet the needs of a truck application.

The part number is #034-00138.



Newest Water
Valve has a
protective
cover with
silicone sealing
to further
enhance
corrosion
protection

#### The Mega-Fuse-What Does It Do??

The Frigette APU system comes with a red, 2 gauge power cord battery cable shipped loose in the master pack.

The power cord enables the truck batteries to supply I2Volts DC electricity to the APU starter.

For safety reasons, the power cord is fused with a 150-amp MEGAFUSE that has a ringlet which attaches to the positive battery post of the truck

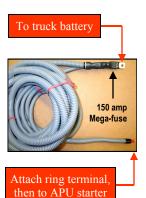
battery bank.

The other end of the cable is supplied with a loose aluminum eyelet that gets crimped on and attached to the APU starter bolt.

The MEGAFUSE is important to prevent an electrical short anywhere in the I2Volt APU system from causing major problems. Amazingly, this makes sense when you think about it.

However, in recent years we know of many instances where the mega fuse was incorrectly installed BACKWARDS, meaning someone installed the mega-fuse at the APU starter bolt location instead.

The mega-fuse performs an important safety function. If it is blown, there is a reason why, and a mechanic should investigate the cause further or call tech service for help.





#### Reach us at:

1200 West Risinger Road Fort Worth, Texas 76134 Phone; 817-293-5313

Fax: 817-293-8014

#### **TECH SERVICE QUESTIONS?**

Phone I-800-275-7524 Fax: 817-293-6477

E-mail: techservice@scsfrigette.com

Newsletter topics or questions? Contact- kholze@scsfrigette.com Frigette Truck Climate Systems manufactures fuel efficient anti-idle solutions for the over the road heavy duty truck market. With rising energy costs and increasing idling legislation, trucking operators seek a better alternative to wasteful fuel burning practices. The Frigette APU delivers the ultimate compact package of comfort heating and cooling performance, battery charging and household electricity. The days of engines idling in parking lots is over. Make your next investment a Frigette APU.



### Frigette APU Specifications

Cooling BTU's 12,000
Heating BTU's 10,000
Evaporator Blower 330 CFM

Evaporator Blower 330 Ci i i

Refrigerant R134a

Engine Make Kubota EA300

Engine Cooling Liquid Cooled

Fuel Diesel

Battery Charging 60 amps DC

Household Power 3300 watts AC

System Weight 418 approx.

Enclosure Material Aluminum

Duplex Plug-ins Four
Airflow Ductwork Yes

Optional Step for box Yes

Dimensions 30.5" x 25.5" x 16"



A Frigette APU has ability to fit under the passenger door of many trucks when competitors can't!

