Alabama Department of Public Safety
Motor Carrier Safety Unit

Sergeant Ira Jay Whitehead
May 5, 2010
Auxiliary Power Unit

- Auxiliary Power Unit / Idle Reduction Technology
- Called an APU
- Runs AC / Heat power w/o the vehicles engine idling
- Federal EPA of 2005
AUXILIARY POWER UNIT
APU

- Several manufacturers
- Normally mounted as shown in the slides
- Must be fully functional
- Vehicles may be retrofitted
32-9-20(b)

- (b)(1) allowed 400 pounds total to the
- GROSS
- AXLE
- TANDEM
- OR
- BRIDGE Formula Weight Limits
32-9-20(b)

- (b)(2) To be eligible for exception
- Operator must provide written proof
- Or Certification of the APU’s
- WEIGHT
- And
- must DEMONSTRATE or CERTIFY that the APU is fully functional
32-9-20(b)

- (b)(3) written proof or certification of the APU’s weight must be available to officer
- If the vehicle is found to be overweight
- Weight allowed for APU cannot exceed
- 400 pounds or the actual weight proven or
- Certified, whichever is less
APU

- If you encounter a vehicle that is OW
- Check for an APU
- If they have one ask for certification
- They get 400 lbs if they have certificate
- Law became effective on the date
- Governor signed the bill
1 SB288
2 115283-3
3 By Senator Keahey
4 RFD: Energy and Natural Resources
5 First Read: 19-JAN-10
SB288

ENROLLED, An Act,

Relating to weight restrictions on certain vehicles in Alabama; to amend Section 32-9-20, Code of Alabama 1975, to allow weight increases of up to 400 pounds for vehicles equipped with a functioning auxiliary power or idle reduction technology.

BE IT ENACTED BY THE LEGISLATURE OF ALABAMA:

Section 1. Section 32-9-20, Code of Alabama 1975, is amended to read as follows:

"§32-9-20.

"(a) It shall be unlawful for any person to drive or move on any highway in this state any vehicle or vehicles of a size or weight except in accordance with the following:

"(1) WIDTH. Vehicles and combinations of vehicles, operating on highways with traffic lanes 12 feet or more in width, shall not exceed a total outside width, including any load thereon, of 102 inches, exclusive of mirrors or other safety devices approved by the State Transportation Department. The Director of the State Transportation Department may, in his or her discretion, designate other public highways for use by vehicles and loads with total outside widths not exceeding 102 inches, otherwise; vehicles
and combinations of vehicles, operating on highways with
traffic lanes less than 12 feet in width, shall not exceed a
total outside width, including any load thereon, of 96 inches,
exclusive of mirrors or other safety devices approved by the
State Transportation Department. No passenger vehicle shall
carry any load extending beyond the line of the fenders. No
vehicle hauling forest products or culvert pipe on any highway
in this state shall have a load exceeding 102 inches in width.

"(2) HEIGHT. No vehicle or semitrailer or trailer
shall exceed in height 13 1/2 feet, including load.

"(3) LENGTH. No vehicle shall exceed in length 40
feet; except, that the length of a truck-semitrailer
combination, semitrailers, including load, used in a truck
tractor-semitrailer combination, shall not exceed 57 feet;
semitrailers and trailers, including load, used in a truck
tractor-semitrailer-trailer combination, shall not exceed 28
1/2 feet each; and motor vehicles designed, used, or
maintained primarily as a mobile dwelling, office, or
commercial space, commonly called motor homes, shall not
exceed 45 feet. Semitrailers exceeding 53 1/2 feet shall only
be operated on highways designated pursuant to Section 32-9-1
and shall only be operated when the distance between the
kingpin of the semitrailer and the rearmost axle or a point
midway between the two rear axles, if the two rear axles are
tandem axles, does not exceed 41 feet and if the semitrailer
is equipped with a rear underride guard of a substantial
construction consisting of a continuous lateral beam extending
to within four inches of the lateral extremities of the
semitrailer and located not more than 22 inches from the
surface as measured with the semitrailers empty and on a level
surface. For purposes of enforcement of this subdivision,
lengths of semitrailers and trailers refer to the cargo
carrying portion of the unit. Truck tractor units used
exclusively in combinations transporting motor vehicles may
directly carry a portion of the cargo, provided that the
combinations are restricted to truck tractor-semitrailer
combinations only and provided further that the overall length
of these particular combinations shall not exceed 65 feet;
except that the overall length of stinger-steered type units
shall not exceed 75 feet. No truck tractor-semitrailer
combination used exclusively for transporting motor vehicles
shall carry any load extending more than three feet beyond the
front or four feet beyond the rear of the combination. No
other vehicle operated on a highway shall carry any load
extending more than a total of five feet beyond both the front
and rear, inclusive, of the vehicle.

"(4) WEIGHT.

"a. The gross weight imposed on the highway by the
wheels of any one axle of a vehicle shall not exceed 20,000
pounds, or such other weight, if any, as may be permitted by
federal law to keep the state from losing federal funds;
provided, that inadequate bridges shall be posted to define
load limits.

"b. For the purpose of this section, an axle load
shall be defined as the total load transmitted to the road by
all wheels whose centers are included between two parallel
transverse vertical planes 40 inches apart, extending across
the full width of the vehicle.

c. Subject to the limit upon the weight imposed
upon the highway through any one axle as set forth herein, the
total weight with load imposed upon the highway by all the
axles of a vehicle or combination of vehicles shall not exceed
the gross weight given for the respective distances between
the first and last axle of the vehicle or combination of vehi-
cles, measured longitudinally to the nearest foot as set forth
in the following table:

"COMPUTED GROSS WEIGHT TABLE

"For various spacings of axle groupings

"Distance in feet between first
and last axles of vehicle or
combination of vehicles

Maximum load in
pounds on all the
axles
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"Except as provided by special permits, no vehicle or combination of vehicles exceeding the gross weights specified above shall be permitted to travel on the public highways within the State of Alabama.

"No vehicle or combination of vehicles shall be permitted to operate on any portion of the Interstate Highway System of Alabama that shall have a greater weight than 20,000 pounds carried on any one axle, including all enforcement tolerances, or with a tandem axle weight in excess of 34,000 pounds, including all enforcement tolerances, or with an overall gross weight on a group of two or more consecutive axles produced by application of the following formula:

\[
W = 500 \ln N + 12N + 36
\]

where \(W\) = overall gross weight on any group of two or more consecutive axles to the nearest 500 pounds, \(L = \) distance in feet between the extreme of any group of two or more consecutive axles, and \(N = \) number of axles in group under consideration; except, that two consecutive sets of tandem axles may carry a gross load of 34,000 pounds each, provided the overall distance between the first and last axles of the consecutive sets of tandem axles is 36 feet or more; provided,
that the overall gross weight may not exceed 80,000 pounds, including all enforcement tolerances. Nothing in this section shall be construed as permitting size or weight limits on the National System of Interstate and Defense Highways in this state in excess of those permitted under 23 U.S.C. Section 127. If the federal government prescribes or adopts vehicle size or weight limits greater than or less than those now prescribed by 23 U.S.C. Section 127 for the National System of Interstate and Defense Highways, the increased or decreased limits shall become effective on the National System of Interstate and Defense Highways in this state. Nothing in this section shall be construed to deny the operation of any vehicle or combination of vehicles that could be lawfully operated upon the highways and roads of this state on January 4, 1975.

"d. For purposes of enforcement of this subdivision, all weights less than or equal to the sum of the weight otherwise prescribed by this subdivision, plus an additional weight to be calculated by multiplying the weight prescribed by this subdivision by one-tenth (.10) that shall represent a scale or enforcement tolerance, shall be deemed to be in compliance with the requirements of this section, and shall not constitute violations thereof. No evidence shall be admitted into evidence or considered by the trier of fact in any civil action unless the evidence proffered would tend to
prove that the weight of the vehicle exceeded the amount
provided in this subsection. Nothing in this paragraph d.
shall restrict or affect the right of any defendant to place
in evidence such evidence tending to prove the defendant was
in compliance with this section.

"e. Dump trucks, dump trailers, concrete mixing
trucks, fuel oil, gasoline trucks, and trucks designated and
constructed for special type work or use shall not be made to
conform to the axle spacing requirements of paragraph (4)c of
this section; provided, that the vehicle shall be limited to a
weight of 20,000 pounds per axle plus scale tolerances; and,
provided further, that the maximum gross weight of the
vehicles shall not exceed the maximum weight allowed by this
section for the appropriate number of axles, irrespective of
the distance between axles, plus allowable scale tolerances.
All axles shall be brake equipped. Concrete mixing trucks
which operate within 50 miles of their home base shall not be
required to conform to the requirements of paragraph (4)a of
this section; provided, that the vehicles shall be limited to
a maximum load of the rated capacity of the concrete mixer,
the true gross load not to exceed 66,000 pounds, and all the
vehicles shall have at least three axles, each with brake
equipped wheels. It shall be a violation if the vehicles named
under this subdivision travel upon bridges designated and

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posted by the Transportation Director as incapable of carrying
the load.

"f. If the driver of any vehicle can comply with the
weight requirements of this section by shifting or equalizing
the load on all wheels or axles and does so when requested by
the proper authority, the driver shall not be held to be
operating in violation of this section.

"g. When portable scales are used in the enforcement
of this section, the axles of any vehicle described or
commonly referred to as tandem or triaxle rigs or units (that
is, vehicles having two or more axles in addition to a
steering axle), the group of tandem or triaxles shall be
weighed simultaneously, and the total weight so derived shall
be divided by the number of axles weighed in the group to
arrive at the per axle weight, except that if any one axle in
the group exceeds 20,000 pounds in weight, it shall not exceed
the weight of any other axle in the group by more than 50
percent. When portable scales are used to determine the weight
of a vehicle pursuant to this section, the operator of the
vehicle will be permitted to move the vehicle to the nearest
platform scales certified by the Department of Agriculture and
Industries and operated by a bonded operator within a distance
of 10 highway miles, accompanied by an enforcement officer to
verify the accuracy of the portable scales used in determining
the vehicle weight. If the weight of the vehicle is shown by
the platform scales to be within the legal limits of this
section, the operator of the vehicle shall not be held to be
in violation of this section.

"h. The governing body of a county, by appropriate
resolution, may authorize limitations less than those
prescribed herein for vehicles operated upon the county
highways of the county.

"i. The State Transportation Department may post or
limit any road or bridge to weights less than those prescribed
by this section. It is the legislative intent and purpose that
this section be rigidly enforced by the State Transportation
Department, the Department of Public Safety and any other
authorized law enforcement officers of the state, any county,
or city and incorporated towns.

"j. Two and three axle vehicles being used
exclusively for the purpose of transporting agricultural
commodities or products to and from a farm and for
agricultural purposes relating to the operation and
maintenance of a farm by any farmer, custom harvester or
husbandman may not be made to conform to the axle requirements
of paragraph (4)a of this section or the gross weight
requirements of paragraph (4)c of this section.

"(b)(1) Any vehicle utilizing an auxiliary power or
idle reduction technology unit in order to promote reduction
of fuel use and emissions because of engine idling shall be
allowed an additional 400 pounds total to the gross, axle, tandem, or bridge formula weight limits defined in this section.

"(2) To be eligible for the exception provided in this subsection, the operator of the vehicle must provide written proof or certification of the weight of the auxiliary power unit (APU) and demonstrate or certify the idle reduction technology is fully functional at all times.

"(3) Written proof or certification of the weight of the APU must be available to law enforcement officers if the vehicle is found in violation of applicable weight laws. The weight allowed cannot exceed 400 pounds or the actual weight proven or certified, whichever is less.

"(4) It is the intent of this subsection to apply at the state highway level the weight limit increase for vehicles using a functioning auxiliary power or idle reduction technology as provided in the Federal Energy Policy Act of 2005."

Section 2. This act shall become effective immediately following its passage and approval by the Governor, or its otherwise becoming law.
SB288

I hereby certify that the within Act originated in and passed the Senate.

McDowell Lee
Secretary

House of Representatives
Passed: 14-APR-10

By: Senator Keahey

APPROVED April 21, 2010
TIME 9:00 a.m.

Governor

Alabama Secretary Of State
Act Num....: 2010-543
Bill Num.....: S-288
Recv'd 04/21/10 10:27amJJB