



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



APU UNIT



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)

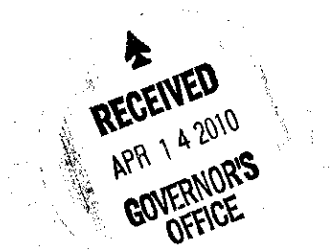
- (b)(3) written proof or certification of the
- APU's weight must be available to officer
- If the vehicle is found to be Overweight
- Weight allowed for APU cannot exceed
- 400 pounds or the actual weight proven or
- Certified, whichever is less

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

ACT No. 2010 - 543

1 SB288
2 115283-3
3 By Senator Keahey
4 RFD: Energy and Natural Resources
5 First Read: 19-JAN-10



1 SB288

2

3

4 ENROLLED, An Act,

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

10 BE IT ENACTED BY THE LEGISLATURE OF ALABAMA:

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

13 "§32-9-20.

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

17 "(1) WIDTH. Vehicles and combinations of vehicles,
18 operating on highways with traffic lanes 12 feet or more in
19 width, shall not exceed a total outside width, including any
20 load thereon, of 102 inches, exclusive of mirrors or other
21 safety devices approved by the State Transportation
22 Department. The Director of the State Transportation
23 Department may, in his or her discretion, designate other
24 public highways for use by vehicles and loads with total
25 outside widths not exceeding 102 inches, otherwise; vehicles

1 and combinations of vehicles, operating on highways with
2 traffic lanes less than 12 feet in width, shall not exceed a
3 total outside width, including any load thereon, of 96 inches,
4 exclusive of mirrors or other safety devices approved by the
5 State Transportation Department. No passenger vehicle shall
6 carry any load extending beyond the line of the fenders. No
7 vehicle hauling forest products or culvert pipe on any highway
8 in this state shall have a load exceeding 102 inches in width.

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

11 "(3) LENGTH. No vehicle shall exceed in length 40
12 feet; except, that the length of a truck-semitrailer
13 combination, semitrailers, including load, used in a truck
14 tractor-semitrailer combination, shall not exceed 57 feet;
15 semitrailers and trailers, including load, used in a truck
16 tractor-semitrailer-trailer combination, shall not exceed 28
17 1/2 feet each; and motor vehicles designed, used, or
18 maintained primarily as a mobile dwelling, office, or
19 commercial space, commonly called motor homes, shall not
20 exceed 45 feet. Semitrailers exceeding 53 1/2 feet shall only
21 be operated on highways designated pursuant to Section 32-9-1
22 and shall only be operated when the distance between the
23 kingpin of the semitrailer and the rearmost axle or a point
24 midway between the two rear axles, if the two rear axles are
25 tandem axles, does not exceed 41 feet and if the semitrailer

1 is equipped with a rear underride guard of a substantial
2 construction consisting of a continuous lateral beam extending
3 to within four inches of the lateral extremities of the
4 semitrailer and located not more than 22 inches from the
5 surface as measured with the semitrailers empty and on a level
6 surface. For purposes of enforcement of this subdivision,
7 lengths of semitrailers and trailers refer to the cargo
8 carrying portion of the unit. Truck tractor units used
9 exclusively in combinations transporting motor vehicles may
10 directly carry a portion of the cargo, provided that the
11 combinations are restricted to truck tractor-semitrailer
12 combinations only and provided further that the overall length
13 of these particular combinations shall not exceed 65 feet;
14 except that the overall length of stinger-steered type units
15 shall not exceed 75 feet. No truck tractor-semitrailer
16 combination used exclusively for transporting motor vehicles
17 shall carry any load extending more than three feet beyond the
18 front or four feet beyond the rear of the combination. No
19 other vehicle operated on a highway shall carry any load
20 extending more than a total of five feet beyond both the front
21 and rear, inclusive, of the vehicle.

22 "(4) WEIGHT.

23 "a. The gross weight imposed on the highway by the
24 wheels of any one axle of a vehicle shall not exceed 20,000
25 pounds, or such other weight, if any, as may be permitted by

1 federal law to keep the state from losing federal funds;
2 provided, that inadequate bridges shall be posted to define
3 load limits.

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

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

17 "COMPUTED GROSS WEIGHT TABLE

18 "For various spacings of axle groupings

19 "Distance in feet between first	Maximum load in
20 and last axles of vehicle or	pounds on all the
21 combination of vehicles	axles

		2 axles	3 axles	4 axles	5 axles	6 axles
1						
2	"8 or	36,000	42,000	42,000		
3	less					
4	"9	38,000	42,500	42,500		
5	"10	40,000	43,500	43,500		
6	"11		44,000	44,000		
7	"12		45,000	50,000	50,000	
8	"13		45,500	50,500	50,500	
9	"14		46,500	51,500	51,500	
10	"15		47,000	52,000	52,000	
11	"16		48,000	52,500	58,000	58,000
12	"17		48,500	53,500	58,500	58,500
13	"18		49,500	54,000	59,000	59,000
14	"19		50,000	54,500	60,000	60,000
15	"20		51,000	55,500	60,500	66,000
16	"21		51,500	56,000	61,000	66,500
17	"22		52,500	56,500	61,500	67,000
18	"23		53,000	57,500	62,500	68,000
19	"24		54,000	58,000	63,000	68,500
20	"25		54,500	58,500	63,500	69,000
21	"26		56,000	59,500	64,000	69,500

SB288

1	"27	57,000	60,000	65,000	70,000
2	"28	59,000	60,500	65,500	71,000
3	"29	60,000	61,500	66,000	71,500
4	"30		62,000	66,500	72,000
5	"31		63,500	67,000	72,500
6	"32		64,500	68,000	73,500
7	"33		65,000	69,000	74,000
8	"34		65,500	70,000	74,500
9	"35		66,500	71,000	75,000
10	"36		67,000	72,000	76,000
11	"37		68,000	73,000	77,000
12	"38		69,000	74,000	78,000
13	"39		70,000	75,000	79,000
14	"40		71,000	76,000	80,000
15	"41		72,000	77,000	81,000
16	"42		73,000	78,000	82,000
17	"43		74,000	79,000	83,000
18	"44 and		75,000	80,000	84,000
19	over				

1 "Except as provided by special permits, no vehicle
 2 or combination of vehicles exceeding the gross weights
 3 specified above shall be permitted to travel on the public
 4 highways within the State of Alabama.

5 "No vehicle or combination of vehicles shall be per-
 6 mitted to operate on any portion of the Interstate Highway
 7 System of Alabama that shall have a greater weight than 20,000
 8 pounds carried on any one axle, including all enforcement tol-
 9 erances, or with a tandem axle weight in excess of 34,000
 10 pounds, including all enforcement tolerances, or with an over-
 11 all gross weight on a group of two or more consecutive axles
 12 produced by application of the following formula:

$$\begin{array}{r}
 W=500 \quad LN \quad + \quad 12N \quad + \quad 36 \\
 N-1
 \end{array}$$

15 where W = overall gross weight on any group of two
 16 or more consecutive axles to the nearest 500 pounds, L =
 17 distance in feet between the extreme of any group of two or
 18 more consecutive axles, and N = number of axles in group under
 19 consideration; except, that two consecutive sets of tandem
 20 axles may carry a gross load of 34,000 pounds each, provided
 21 the overall distance between the first and last axles of the
 22 consecutive sets of tandem axles is 36 feet or more; provided,

1 that the overall gross weight may not exceed 80,000 pounds,
2 including all enforcement tolerances. Nothing in this section
3 shall be construed as permitting size or weight limits on the
4 National System of Interstate and Defense Highways in this
5 state in excess of those permitted under 23 U.S.C. Section
6 127. If the federal government prescribes or adopts vehicle
7 size or weight limits greater than or less than those now
8 prescribed by 23 U.S.C. Section 127 for the National System of
9 Interstate and Defense Highways, the increased or decreased
10 limits shall become effective on the National System of
11 Interstate and Defense Highways in this state. Nothing in this
12 section shall be construed to deny the operation of any
13 vehicle or combination of vehicles that could be lawfully
14 operated upon the highways and roads of this state on January
15 4, 1975.

16 "d. For purposes of enforcement of this subdivision,
17 all weights less than or equal to the sum of the weight
18 otherwise prescribed by this subdivision, plus an additional
19 weight to be calculated by multiplying the weight prescribed
20 by this subdivision by one-tenth (.10) that shall represent a
21 scale or enforcement tolerance, shall be deemed to be in
22 compliance with the requirements of this section, and shall
23 not constitute violations thereof. No evidence shall be
24 admitted into evidence or considered by the trier of fact in
25 any civil action unless the evidence proffered would tend to

1 prove that the weight of the vehicle exceeded the amount
2 provided in this subsection. Nothing in this paragraph d.
3 shall restrict or affect the right of any defendant to place
4 in evidence such evidence tending to prove the defendant was
5 in compliance with this section.

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

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

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

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

1 the platform scales to be within the legal limits of this
2 section, the operator of the vehicle shall not be held to be
3 in violation of this section.

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

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

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

23 "(b) (1) Any vehicle utilizing an auxiliary power or
24 idle reduction technology unit in order to promote reduction
25 of fuel use and emissions because of engine idling shall be

1 allowed an additional 400 pounds total to the gross, axle,
2 tandem, or bridge formula weight limits defined in this
3 section.

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

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

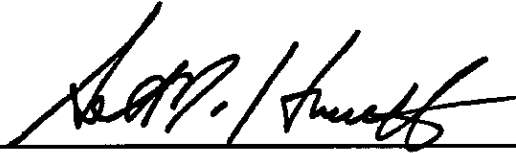
14 "(4) It is the intent of this subsection to apply at
15 the state highway level the weight limit increase for vehicles
16 using a functioning auxiliary power or idle reduction
17 technology as provided in the Federal Energy Policy Act of
18 2005."

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

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President and Presiding Officer of the Senate



Speaker of the House of Representatives

SB288


Senate 03-MAR-10

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