Founded 1959

Dixie Vintage Antique Automobile Club, Inc

Newsletter

https://www.facebook.com/dixievintageauto/

January 2024 Hoover, Alabama

Visit **http://WWW.DVAAC.COM** for more information about Dixie Vintage Antique Automobile Club.

You may mail your dues ($20) check to:

Ed Zanaty, 1312 Forest Ridge Court, Birmingham, AL 35226.

Checks should be made payable to Dixie Vintage Antique Automobile Club. Thank you!

Dixie Vintage Events

Happy New Year 2024

DIXIE VINTAGE EVENTS

Dixie Vintage First Saturday Cruise-In:
Saturday, January 6, 2024, 8-11 am.
Hoover Tactical Firearms
1621 Montgomery Highway
Hoover, Alabama 35226

Dixie Vintage Business Meeting:
Tuesday, January 9, 2024, 6 pm.
Dale's Southern Grill
1843 Montgomery Highway
Hoover, Alabama 35226

Dixie Vintage Mid-Month Cruise-In:
Saturday, January 20, 2024, 8-11 am.
Dunkin Lakeshore
300 Commons Drive
Homewood, Alabama 35209

"Dixie Vintage Cruise-in at Hoover Tactical "

We will vacate the lot by 11:00A. Upon arrival at the cruise-in please park in spaces closest to Hwy 31 between Hoover Tactical and O'Reilly Auto parts. The other side of the parking lot is reserved for Hoover Tactical customers.

New Process for Ordering Name Tags

Dixie Vintage has streamlined the process for ordering name tags. This new process will expedite the delivery of your nametag to your home. The member needing a name tag will complete an order form and mail it with payment to Crown Trophy. The finished name tag will be mailed to you.

We encourage each of our members to own and wear a Dixie Vintage Car Club name tag. We really do want to get to know you. The cost of the name tag is $10.00.

Newsletter Editor

Do you have a classic car story?

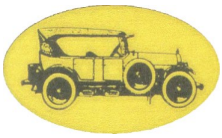
Please let us know.
Text us at 205-276-4423

New Car Members

New Members:

There were no new members registered in the month of December.

Dixie Vintage Antique



Automobile Club

The Dixie Vintage Antique Automobile Club Newsletter is published monthly by Dixie Vintage Antique Automobile Club, Inc., a non-profit Alabama Corporation. The purpose of this Club is to promote interest in restoring and preserving antique, classic, and special interest old cars; and to provide a social club for members and their families of mutual interest to all. Monthly meetings and activities are conducted in a variety of locations. We encourage membership from other automobile clubs and orphan marquees.

The only requirement to become a member of Dixie Vintage Antique Automobile Club, Inc. is an interest in the history and preservation of automobiles.

2024 Board of Directors

Ed Zanaty, Chairman, President, Membership
edward.zanaty@gmail.com
205-942-1312; 205-585-8580

Jim Black
205-527-9346

Steve Owen
205-567-2735

2024 Officers

Ed Zanaty, President, Membership
Dale Baker, Vice President Emeritus
205-807-6581
Ken Knight, Vice president, Communications
205-849-0028
Kevin Johnson, Vice President, Graphic Design
205 563-4580
Steve Owen, Vice President, Activities
205-567-2735
Joe Alfano, Vice President, Marketing
205-222-4577
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John Krauser, Vice President, Newsletter
205-276-4423
Pat Krauser, Secretary
205-276-4423
Mike Likis, Accounting
205-999-4561
Ed Keller, Chaplain
205-832-5424
Gary Adams, Webmaster

Torque

by

John E. Krauser

The word torque is a familiar term for those of us who restore, maintain, and drive classic cars. When used as a **verb,** torque is the process of applying a twisting force to an object. To fasten the wheel on the car you use lug nuts and apply a twisting force to the lug nuts as they rotate on the wheel studs. Apply too much torque and the studs may break or the brake rotator will warp. Engine head bolts are torqued in a pattern and usually in three sequences. Use this procedure to keep from warping the heads or breaking bolts. Proper torque insures maximum engine performance.

A tool known as a torque wrench measures the amount of force applied to a given nut or bolt. Its appearance is like a socket wrench. Different methods are available to read the amount of torque applied to a fastener: One method uses an attached scale for torque measurement; another type of wrench uses a clicking sound when the preset proper torque is reached; and newer torque wrenches use a digital readout that is attached to the wrench. John H. Sharp of Chicago had the first torque wrench patent in 1931.

A unit of torque is called pound-foot (some refer to this as "foot pound", but the correct term is pound foot) and represents one pound of force acting at a distance of one foot from a pivot point. The torque wrench measures this force.

When used as a **noun,** torque is a twisting force that tends to cause rotation. Engine crankshaft rotation comes to mind as this rotation causes the vehicle to move. This engine rotation turns the clutch assembly or flex plate, transmission, driveshaft, differential and finally the wheels.

Karl Benz invented the first engine clutch. In 1905 Professor Henry Selby Hele-Shaw invented the friction clutch. Auto manufacturers used manual transmissions with this clutch design for years to get engine torque to the rear wheels.

In 1921 a Canadian engineer named Alfred Horner produced a better way to get engine torque to the rear wheels. His design was an automatic transmission. He received a patent in 1923. While primitive in its design, it worked.

In 1939 General Motors invented a better automatic transmission known as the Hydra-Matic four speed. Engine torque was getting to the rear wheels more efficiently. Buick's Dynaflow transmission first appeared for the 1948 model year. This automatic transmission used a device known as the torque converter. The unit had five elements that multiplied torque and increased power to the rear wheels.

In 1964, General Motors released yet another new transmission labeled the Turbo Hydramatic. This design was a three-speed transmission that used a torque converter. Gear selections of Park, Reverse, Neutral, Drive, and Low became the standard gear selection used for decades.

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The term fluid coupler has been used to describe a torque converter. A fluid coupler is not a torque converter. A fluid coupler is a two-element device that does not have the ability to multiply torque.

The torque converter's presence in an automatic transmission improved the overall operation of the automobile's drive train. So, how does this device function? Below is an explanation.

A torque converter's operation is dependent on the size of the device. The mathematical calculations used in equations include radius length and are extensive in nature. For example, a 3-inch-long torque converter blade effectiveness is raised to the fifth power (3^5). That equals 243 inches. Multiplication factors are enormous. The rest of the equations used to determine the torque converter's efficiency are beyond the scope of this article.

The torque converter uses at least three rotating elements: impeller; turbine; and stator. The impeller (also known as the pump) rotates at the same speed as the engine. The engine's crankshaft connects to the flex plate. This flex plate turns the entire torque converter housing. The converter's housing has an impeller welded to it. This impeller rotates the turbine. The turbine applies torque to the transmission by turning the transmission's input shaft. When the vehicle is not moving the turbine is not spinning. The stator which is located between the impeller and turbine redirects fluid back to the impeller. This fluid action helps increase torque and operation efficiency. Multiple turbines and stators are yet another method used to increase output torque.

The rotating parts of the torque converter operate in transmission fluid. This fluid is what transfers energy within the torque converter housing.

Although not strictly a part of classic torque converter design, many automotive converters include a lock-up clutch to improve cruising power transmission efficiency and reduce heat. The application of the clutch locks the turbine to the impeller, causing all power transmission to be mechanical, thus eliminating losses associated with fluid drive.

Engine horsepower is a product of torque and rpm. Torque is the work an engine can do while horsepower is its ability to do the work. RPM is the number of crankshaft turns per minute. Here is a simple mathematical formula: horsepower = torque x rpm / 5,252.

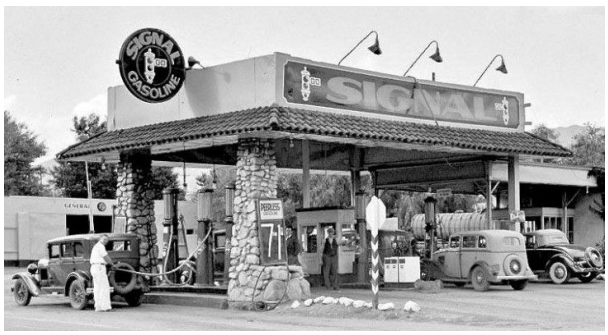
The word torque appears in applications related to our classic rides. We have had the opportunity to use other words (as a verb or a noun) while working on our classic rides. Like the complex formulas used to describe torque converter operation, these words are beyond the scope of this article.

Pictured below are three examples of modern torque converters. Most housing are welded together. A 1956 Packard Ultramatic transmission 's torque converter (lower right) is bolted together.

Free Automotive Paint Products

L&M Rod & Customs in Alabaster is giving away unused paint products, free to Dixie Vintage members. Please call Larry at 205-966-5581 for an appointment to select what you can use. By appointment only.

Gasoline station design varied and changed with time. There were several different brand name fuels found depending on geographic location.



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Dixie Vintage Antique Automobile Club, Inc.

4572 Eagle Point Drive

Birmingham, AL 35242-6942

www.dvaac.com

The 2024 Dixie Vintage Member Decal is now available upon payment ($20) of your 2024 Club Dues.

Each month DVAAC President Ed Zanaty presents the Dixie Vintage Auto Club 's award trophy to two current club paying members.

A picture of the trophy is to the **right.**

Pictured **below**

One example of why the Hoover Tac first Saturday cruise-in for December was cancelled. No one wants their classic ride subjected to this weather.

Pictured **right**

When new, our classic cars may have encountered this type of driving condition. December's Hoover Tac Saturday morning show was cancelled since rain was forecast.