4 Bolt

Main bearing

com. 2 January 2018. Retrieved 29 November 2019. "Are 4 bolt main blocks stronger than 2 bolt main blocks?". www.badasscars.com. Retrieved 1 December - A main bearing is a bearing in a piston engine which holds the crankshaft in place and allows it to rotate within the engine block.

The number of main bearings per engine varies between engines, often in accordance with the forces produced by the operation of the engine. Main bearings are usually plain bearings or journal bearings, held in place by the engine block and bearing caps.

Usain Bolt

and the world record holder in the 100 metres, 200 metres, and 4 × 100 metres relay. Bolt is the only sprinter to win Olympic 100 m and 200 m titles at - Usain St. Leo Bolt (; born 21 August 1986) is a Jamaican retired sprinter who is widely regarded as the greatest sprinter of all time. He is an eight-time Olympic gold medalist and the world record holder in the 100 metres, 200 metres, and 4 × 100 metres relay.

Bolt is the only sprinter to win Olympic 100 m and 200 m titles at three consecutive Olympics (2008, 2012, and 2016). He also won two 4 × 100 relay gold medals. He gained worldwide fame for his double sprint victory in world record times at the 2008 Beijing Olympics, which made him the first person to hold both records since fully automatic time became mandatory.

An eleven-time World Champion, he won consecutive World Championship 100 m, 200 m and 4 × 100 metres relay gold medals from 2009 to 2015, with the exception of a 100 m false start in 2011. He is the most successful male athlete of the World Championships. Bolt is the first athlete to win four World Championship titles in the 200 m and is one of the most successful in the 100 m with three titles, being the first person to run sub-9.7s and sub-9.6s races.

Bolt improved upon his second 100 m world record of 9.69 with 9.58 seconds in 2009 – the biggest improvement since the start of electronic timing. He has twice broken the 200 metres world record, setting 19.30 in 2008 and 19.19 in 2009. He has helped Jamaica to three 4 × 100 metres relay world records, with the current record being 36.84 seconds set in 2012. Bolt's most successful event is the 200 m, with three Olympic and four World titles. The 2008 Olympics was his international debut over 100 m; he had earlier won numerous 200 m medals (including 2007 World Championship silver) and held the world under-20 and world under-18 records for the event until being surpassed by Erriyon Knighton in 2021.

His achievements as a sprinter have earned him the media nickname "Lightning Bolt", and his awards include the IAAF World Athlete of the Year, Track & Field Athlete of the Year, BBC Overseas Sports Personality of the Year (three times), and Laureus World Sportsman of the Year (four times). Bolt was included in Time magazine's 100 Most Influential People of 2016. Bolt retired after the 2017 World Championships, when he finished third in his last solo 100 m race, opted out of the 200 m, and pulled up injured in the 4 × 100 m relay final.

Bolt (2008 film)

Bolt is a 2008 American animated adventure comedy film produced by Walt Disney Animation Studios and released by Walt Disney Pictures. It was directed - Bolt is a 2008 American animated adventure comedy film produced by Walt Disney Animation Studios and released by Walt Disney Pictures. It was directed by Chris Williams and Byron Howard and produced by Clark Spencer, from a screenplay written by Williams and Dan Fogelman. The film stars the voices of John Travolta, Miley Cyrus, Susie Essman, Mark Walton, Malcolm McDowell, James Lipton and Greg Germann. This was also one of the final film roles for Lipton before his death in 2020, the other being Metro-Goldwyn-Mayer's Igor, which was released two months before this film.

The film's plot centers on a dog named Bolt, who has spent his entire life on the set of a television series and firmly believes that he has superpowers. When his beloved owner Penny is "kidnapped" on the show, Bolt runs away from the set to rescue her, eventually teaming up with sarcastic alley cat Mittens and a hamster named Rhino who is a fan of Bolt's television series, to embark on a cross-country journey back home.

Bolt premiered at the El Capitan Theatre in Hollywood, Los Angeles, on November 17, 2008, and was released in the United States on November 21. Despite a relatively marginal box-office performance, the film received a strong positive critical reception. It is also regarded for helping to instigate a rebirth of Walt Disney Animation Studios, setting the studio in a new creative direction that led to other critically acclaimed features such as Tangled (2010) and Frozen (2013).

The film was nominated for a series of awards, such as the Academy Award for Best Animated Feature, Golden Globe Award for Best Animated Feature Film; losing both to WALL-E, and also received a nomination for Golden Globe Award for Best Original Song.

Ford small block engine

straight, six-bolt valve covers. Coolant is routed out of the block through the intake manifold. The design was soon bored to 260 cu in (4.3 L) and again - The Ford small-block is a series of 90° overhead valve small-block V8 automobile engines manufactured by the Ford Motor Company from July 1961 to December 2000.

Designed as a successor to the Ford Y-block engine, it was first installed in the 1962 model year Ford Fairlane and Mercury Meteor. Originally produced with a displacement of 221 cu in (3.6 L), it eventually increased to 351 cu in (5.8 L) with a taller deck height, but was most commonly sold (from 1968–2000) with a displacement of 302 cubic inches (later marketed as the 5.0 L).

The small-block was installed in several of Ford's product lines, including the Ford Mustang, Mercury Cougar, Ford Torino, Ford Granada, Mercury Monarch, Ford LTD, Mercury Marquis, Ford Maverick, Ford Explorer, Mercury Mountaineer, and Ford F-150 truck.

For the 1991 model year, Ford began phasing in the Modular V8 engine to replace the small-block, beginning in late 1990 with the Lincoln Town Car and continuing through the decade. The 2001 Ford Explorer SUV was the last North American installation of the engine, and Ford Australia used it through 2002 in the Falcon and Fairlane.

Although sometimes called the "Windsor" by enthusiasts, Ford never used that designation for the engine line as a whole; it was only adopted well into its run to distinguish the 351 cu in (5.8 L) version from the 351 cu in (5.8 L) "Cleveland" version of the 335-family engine that had the same displacement but a significantly different configuration, and only ever used to refer to that specific engine. The designations for each were

derived from the original locations of manufacture: Windsor, Ontario and Cleveland, Ohio.

As of June 2025, versions of the small-block remain available for purchase from Ford Performance Parts as crate engines.

Ford 335 engine

Australian market. All 335 series engines shared the same 4.38 in (111 mm) bore spacing and cylinder head bolt pattern as the Small Block V8 family. There are a - The Ford 335 engine was a family of engines built by the Ford Motor Company between 1969 and 1982. The "335" designation reflected Ford management's decision during its development to produce a 335 cu in (5.5 L) engine with room for expansion. This engine family began production in late 1969 with a 351 cu in (5.8 L) engine, commonly called the 351C. It later expanded to include a 400 cu in (6.6 L) engine which used a taller version of the engine block, commonly referred to as a tall deck engine block, a 351 cu in (5.8 L) tall deck variant, called the 351M, and a 302 cu in (4.9 L) engine which was exclusive to Australia.

The 351C, introduced in 1969 for the 1970 model year, is commonly referred to as the 351 Cleveland after the Brook Park, Ohio, Cleveland Engine plant in which most of these engines were manufactured. This plant complex included a gray iron foundry (Cleveland Casting Plant), and two engine assembly plants (Engine plant 1 & 2). As newer automobile engines began incorporating aluminum blocks, Ford closed the casting plant in May 2012.

The 335 series engines were used in mid- and full-sized cars and light trucks, (351M/400 only) at times concurrently with the Ford small block family 351 Windsor, in cars. These engines were also used as a replacement for the FE V8 family in both the car and truck lines. The 335 series only outlived the FE series by a half-decade, being replaced by the more compact small block V8s.

Chevrolet small-block engine (first- and second-generation)

1968 blocks were made in 2-bolt and 4-bolt versions with the 4-bolt center-three main caps each fastened by two additional bolts which were supported by - The Chevrolet small-block engine is a series of gasoline-powered V8 automobile engines, produced by the Chevrolet division of General Motors in two overlapping generations between 1954 and 2003, using the same basic engine block. Referred to as a "small-block" for its size relative to the physically much larger Chevrolet big-block engines, the small-block family spanned from 262 cu in (4.3 L) to 400 cu in (6.6 L) in displacement. Engineer Ed Cole is credited with leading the design for this engine. The engine block and cylinder heads were cast at Saginaw Metal Casting Operations in Saginaw, Michigan.

The Generation II small-block engine, introduced in 1992 as the LT1 and produced through 1997, is largely an improved version of the Generation I, having many interchangeable parts and dimensions. Later generation GM engines, which began with the Generation III LS1 in 1997, have only the rod bearings, transmission-to-block bolt pattern and bore spacing in common with the Generation I Chevrolet and Generation II GM engines.

Production of the original small-block began in late 1954 for the 1955 model year, with a displacement of 265 cu in (4.3 L), growing over time to 400 cu in (6.6 L) by 1970. Among the intermediate displacements were the 283 cu in (4.6 L), 327 cu in (5.4 L), and numerous 350 cu in (5.7 L) versions. Introduced as a performance engine in 1967, the 350 went on to be employed in both high- and low-output variants across the entire Chevrolet product line.

Although all of Chevrolet's siblings of the period (Buick, Cadillac, Oldsmobile, Pontiac, and Holden) designed their own V8s, it was the Chevrolet 305 and 350 cu in (5.0 and 5.7 L) small-block that became the GM corporate standard. Over the years, every GM division in America, except Saturn and Geo, used it and its descendants in their vehicles. Chevrolet also produced a big-block V8 starting in 1958 and still in production as of 2024.

Finally superseded by the GM Generation III LS in 1997 and discontinued in 2003, the engine is still made by a General Motors subsidiary in Springfield, Missouri, as a crate engine for replacement and hot rodding purposes. In all, over 100,000,000 small-blocks had been built in carbureted and fuel injected forms between 1955 and November 29, 2011. The small-block family line was honored as one of the 10 Best Engines of the 20th Century by automotive magazine Ward's AutoWorld.

In February 2008, a Wisconsin businessman reported that his 1991 Chevrolet C1500 pickup had logged over one million miles without any major repairs to its small-block 350 cu in (5.7 L) V8 engine.

All first- and second-generation Chevrolet small-block V8 engines share the same firing order of 1-8-4-3-6-5-7-2.

Captive bolt pistol

A captive bolt pistol (also known as a captive bolt gun, a cattle gun, a stunbolt gun, a bolt gun, a stun gun and a stunner) is a device used for the - A captive bolt pistol (also known as a captive bolt gun, a cattle gun, a stunbolt gun, a bolt gun, a stun gun and a stunner) is a device used for the stunning of animals prior to slaughter.

A captive bolt pistol is intended to deliver a single, powerful strike to the forehead of an animal in order to quickly induce unconsciousness. Depending on the variation and usage, the bolt may or may not penetrate the skull and cause direct damage to the brain.

The bolt consists of a heavy rod or piston, typically made of a corrosion-resistant material such as stainless steel. The bolt is actuated by a trigger pull and is propelled forward by either compressed air, a spring mechanism, or by the discharge of a blank round. After moving a short distance, spring tension causes the bolt to recoil back into the barrel.

The captive bolt pistol was invented in 1903 by Hugo Heiss, the former director of a slaughterhouse in Straubing, Germany.

Bolt action

Bolt action is a type of manual firearm action that is operated by directly manipulating the turn-bolt via a bolt handle, most commonly placed on the - Bolt action is a type of manual firearm action that is operated by directly manipulating the turn-bolt via a bolt handle, most commonly placed on the right-hand side of the firearm (as most users are right-handed). The majority of bolt-action firearms are rifles, but there are also some variants of shotguns and handguns that are bolt-action.

Bolt action firearms are generally repeating firearms, but many single-shot designs are available particularly in shooting sports where single-shot firearms are mandated, such as most Olympic and ISSF rifle disciplines.

From the late 19th century all the way through both World Wars, bolt action rifles were the standard infantry service weapons for most of the world's military forces, with the exception of the United States Armed Forces, who used the M1 Garand Semi-automatic rifle. In modern military and law enforcement after the Second World War, bolt-action firearms have been largely replaced by semi-automatic and selective-fire firearms, and have remained only as sniper rifles due to the design's inherent potential for superior accuracy and precision, as well as ruggedness and reliability compared to self-loading designs.

Most bolt action firearms use a rotating turn-bolt operation, where the handle must first be rotated upward to unlock the bolt from the receiver, then pulled back to open the breech and allowing any spent cartridge case to be extracted and ejected. This also cocks the striker within the bolt (either on opening or closing of the bolt depending on the gun design) and engages it against the sear. When the bolt is returned to the forward position, a new cartridge (if available) is pushed out of the magazine and into the barrel chamber, and finally the breech is closed tight by rotating the handle down so the bolt head relocks on the receiver. A less common bolt-action type is the straight-pull mechanism, where no upward handle-turning is needed and the bolt unlocks automatically when the handle is pulled rearwards by the user's hand.

Chevrolet big-block engine

427 cu in (7.0 L), available in 1962 and 1963. The engine had 4.84-inch (123 mm) bore centers, two-bolt main bearing caps, a "side oiling" lubrication system - The Chevrolet big-block engine is a series of large-displacement, naturally-aspirated, 90°, overhead valve, gasoline-powered, V8 engines that was developed and have been produced by the Chevrolet Division of General Motors from the late 1950s until present. They have powered countless General Motors products, not just Chevrolets, and have been used in a variety of cars from other manufacturers as well - from boats to motorhomes to armored vehicles.

Chevrolet had introduced its popular small-block V8 in 1955, but needed something larger to power its medium duty trucks and the heavier cars that were on the drawing board. The big-block, which debuted in 1958 at 348 cu in (5.7 L), was built in standard displacements up to 496 cu in (8.1 L), with aftermarket crate engines sold by Chevrolet exceeding 500 cu in (8.2 L).

Pontiac V8 engine

rods). In 1970 the casting number #9799914 Ram Air 400 4-bolt main block also used the 4-bolt main caps on Ram Air applications. The Ram Air IV replaced - The Pontiac V8 engine is a family of overhead valve 90° V8 engines manufactured by the Pontiac Division of General Motors Corporation between 1955 and 1981. The engines feature a cast-iron block and head and two valves per cylinder. Engine block and cylinder heads were cast at Saginaw Metal Casting Operations then assembled at Tonawanda Engine before delivery to Pontiac Assembly for installation.

Initially marketed as a 287 cu in (4.7 L), it went on to be manufactured in displacements between 265 cu in (4.3 L) and 455 cu in (7.5 L) in carbureted, fuel injected, and turbocharged versions. In the 1960s the popular 389 cu in (6.4 L) version, which had helped establish the Pontiac GTO as a premier muscle car, was cut in half to produce an unusual, high-torque inline four economy engine, the Trophy 4.

Unusual for a major automaker, Pontiac did not have the customary "small-block" and "big-block" engine families common to other GM divisions, Ford, and Chrysler. Effectively, production Pontiac V8 blocks were externally the same size (326-455) sharing the same connecting rod length 6.625 in (168.3 mm) and journal size of 2.249" (except for the later short deck 301 and 265 produced in the late 1970s and early 1980s before Pontiac adopted universal GM engines). The crankshaft stroke and main journal size changed among the

years with the more popular 389CI and 400CI having a 3.00" diameter main journal and the 421/428/455 sharing a larger 3.25" diameter main journal.

The V8 was phased out in 1981, replaced by GM "corporate engines" such as the Chevrolet 305 cu in small block V8.