

Hello Jeff —congrats on your seven-plus decades and enjoying your 7th generation Mustang!

Thank you for your sacrifice of your sanity and soul during Vietnam, regardless of where you stood. My father was a conscientious objector, but worked for one of the largest Navy shipbuilding contractors. I rebelled against him by joining the Marine Corps to protect national security hands-on. When I got out, I worked in the field for my father, who was the field superintendent. I was able to work in sensitive facilities housing our West Coast Tomahawk Cruise Missiles, Apache helicopter machining, two major West Coast International airport expansion projects, UC research laboratories, and various other Navy/Marine Corps projects. My father eventually recalled me to the shop to help manage the production side. When I turned out, he handed me a complex part of the Navy's cooling loop production for their nuclear-powered ships. Later in my career, I was a general contractor and managed the cooling work on government warehouse expansion projects that store the Cloud. We all protect freedom by just being Americans. We are all connected. You matter and have made the world a safer place, allowing for life, liberty, and the pursuit of happiness. Most generations lack the understanding and respect you deserve, which was often not given. THANK YOU!

I apologize for the lengthy explanations, as there are haters here on this site of most aspects of technology, production, profitability, freedom, and human advances.

First and foremost. The Detroit automakers are a part of our complex system called MICIMATT...Military Industrial Congressional Intelligence Media Academia Think Tank.

Their underlying purpose is to switch over immediately to the manufacturing volume needed for military equipment (i.e., planes & tanks) and all the components and parts to maintain them in a two-front conventional war like World War II.

The knowledge of which is a deterrent in itself and a power held solely by America. America spends nearly 850 billion dollars annually on defense, which is more than the combined defense budgets of the following top 9 allied countries. That's mind-boggling. We represent the free world, and when we all buy American, our money enters a positive feedback loop that supports economic growth, activity, jobs, and our local communities. So thank you, Ford community. For you paranoid individuals, this is just my attempt at a "nudge" to create a reinforcing loop. We can all help by recycling

everything correctly, as resources are necessary when war is imminent. Besides, it's the right thing to do in peacetime.

For you nerds like me, here is the equation:  $Y = C + I + G + (X - M)$ , where Y is yield, C is consumer spending, I is business investment, G is government spending, X is exports, and M is imports.

Or simply known as GDP, Gross Domestic Product

The disruption of this equation by means of government employees' furloughs has measurable adverse effects on GDP, as it did during the 35 days in 2018-2019.

Ok people, a quick bird walk here. Question: "How do you defeat an enemy?" Answer "Divide and conquer".

That's what's going on behind the scenes. Our enemies are using social media to launch an invasion known as "Hard Soft Power." This describes the Russian tactical use of media manipulation and disinformation to divide people and disrupt Western democracy, by pitting the Right and Left against each other by stoking systemic biases on both sides.

Fact: 50% of America's youth have been phished by traffickers through the phone, which parents lack the courage to take away from their kids. Most times, our kids are too frightened to say anything and suffer the clutches of fear, gripped by panic, anxiety, or terror, in silence alone. When Mark Zuckerberg won't let his kids have a phone, that should raise a red flag for everyone.

So the R&D on your Turbo EcoBoost results from refining the manufacturing processes to stay ahead of our inherent enemies.

"Single use" for a long block engine and a turbocharger refers to factory-built components that cannot be remanufactured or rebuilt for resale. Unlike traditional engines (ICE) that can be bored out to accommodate larger pistons, these components are designed to be replaced rather than repaired after a failure.

This is most common in modern, high-performance engines, particularly those with advanced coatings on the thin-walled bores of the cylinders. Ford's single-use long

block is an efficient long block engine assembly that includes the engine block, crankshaft, pistons, connecting rods, cylinder head, and valve train. The term "single use" indicates that the internal components are not designed for repair or individual part replacement.

- Bore coatings: The cylinder walls of high-performance long blocks are sometimes coated with a hard, thin layer of material, such as a plasma-transferred wire arc (PTWA) coating, instead of using traditional steel sleeves.
- No oversizing: This coating provides a slick, durable surface but is too thin to be machined or bored out to fit oversized pistons. If the cylinder walls are damaged, the entire block must be replaced.
- Manufacturing efficiency: This design strategy can reduce the weight and manufacturing costs of the engine, but it sacrifices repairability for long-term durability and performance.

#### Single-use turbo

The term "single use" in relation to a turbocharger refers to a factory-assembled unit that cannot be disassembled and rebuilt using new internal components.

- Sealed units: The bearings and other internal components of some modern turbos are sealed within the housing during the manufacturing process.
- Non-serviceable: If the turbo fails, the entire unit must be replaced. The sealed design means that a mechanic cannot service or replace individual parts of the turbo.
- Cost-effectiveness: For some manufacturers, producing sealed, non-rebuildable units is more cost-effective than offering individual replacement parts for repairs.