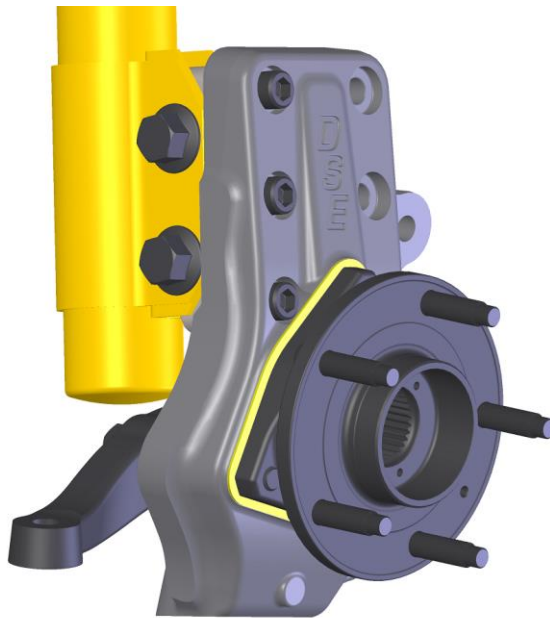


**Detroit Speed**  
**Detroit Speed Lowering Hubpack Uprights, Fox Body Strut**  
**1979-93 Ford Mustang, 1979-86 Mercury Capri**  
**P/N: 030346DS**

The Detroit Speed Forged Aluminum Upright Kit upgrades the handling, braking, and steering performance of your Fox Body Mustang to modern expectations. 2 inches of lowering is built in, the stance and suspension geometry improves cornering ability. Brake mounting accommodates S550 Mustang OE and Aftermarket brake systems. The vastly improved brakes paired with the hubpack bearing allow you to brake later and more aggressive than your competition. Steering improvements provide positive turn in and eliminate undesirable bumpsteer. Many key performance areas of your vehicle are upgrade with this one Made in the USA component.



Item #	Description	Quantity
1	DSE Forged Aluminum Upright Assemblies, LH	1
2	DSE Forged Aluminum Upright Assemblies, RH	1
3	DSE Upright Brake Hardware	1
4	Instructions	1

***IMPORTANT:***

All work should be performed by a qualified technician. Please read the entire set of instructions and fully understand all of the steps involved before beginning the project. Always make sure to wear the appropriate safety equipment for the job and properly support the vehicle. If you have any questions before, during, or after the installation, feel free to contact Detroit Speed by phone at (704) 662-3272 or by email at [tech@detroitsspeed.com](mailto:tech@detroitsspeed.com).

**NOTE:** Additional Parts are required for complete installation of the Detroit Speed Upright.

**Lower Ball Joint:**

For Installation on a 1979-1993 Mustang, Upgrade the lower ball joint to one used on 1994-2004 Mustang.

DSE Recommends Proforged 101-10194 or Moog K8749.

Note: Correct Balljoint is included with Detroit Speed Control Arms.

**Brakes:**

New front brakes are **required** parts for the DSE Upright Kit.

OE-style Ford S550 (2015-2020) front brakes are available.

Aftermarket front brake systems are also available through Baer and Wilwood.

OE-style Brake Options		
Rotor Size	14" "GT" Brakes	15" "Brembo Brakes"
Search Recommendation	2015-2020 Ford Mustang, 4 Piston "GT" Brakes	2015-2023 Ford Mustang, 6 Piston "Brembo" Brakes
Front Caliper, LH	Motorcraft BRCF564	Motorcraft BRCF431
Front Caliper, RH	Motorcraft BRCF563	Motorcraft BRCF430
Rotors/Brake Pads	Customer Preference	Customer Preference
Wheel Requirements	18" Minimum Wheel Diameter, 17.25" Minimum Inner Diameter	19" Minimum Wheel Diameter, 18.25" Minimum Inner Diameter

**NOTE:** For Track use, Detroit Speed has found best performance with aftermarket rotors that channel cooling air from the inside of the rotor. OE Ford rotors pull air from outer face and do not provide sufficient cooling for track oriented brake pads.



Figure 2 Aftermarket Rotor

Fastener Torque Specifications	
Application	Torque (ft.-lbs.)
Lower Ball Joint	120
Strut Mount (M12 Socket Head Screws)	85 (Red Loctite)
Hub Bearing / Steer arm Hardware	95 (Red Loctite)
Strut Hardware	120
Tie Rod	45
Brake Caliper	45 (Blue Loctite)

**Disassembly:** Disassemble components to remove factory spindle. For new installations, skip to step 11

1. Raise the vehicle on jack stands so that the frame is level with the ground. Remove the front wheels from the vehicle.
2. Remove the brake hose from the brake caliper on both sides of the vehicle.  
**NOTE:** Plug the brake line to limit the amount of brake fluid leaking.
3. Remove the brake and caliper from the factory spindle.
4. Remove the cotter pin and castle nut from the outer tie rod. Separate the outer tie rod from the steer arm. Save hardware for reuse
5. Remove the sway bar endlink by removing the hardware. Save hardware for reuse
6. Support the lower control arm with a floor jack. Loosen the 2 strut to spindle mounting bolts. Do not complete remove at this point.
7. Loosen the ball joint nut until it is at the end of the threads on the ball joint. (For 1979-93, remove the cotter pin before loosening nut)
8. Raise the lower control arm with a floor jack. Use a ball joint separator to shock the lower ball joint loose in the spindle so the spindle rests against the castle nut.
9. Remove the strut mounting hardware. Lower the floor jack slowly until the strut separates from the spindle.  
**CAUTION:** The coil spring will be under pressure.
10. With spring tension released, remove the lower ball joint castle nut, then the spindle and brake hub from the lower ball joint.

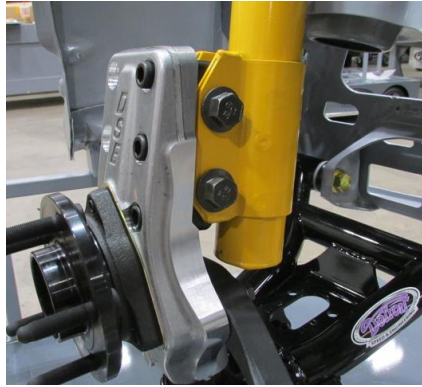
#### **Installation:**

11. **For 1979-1993 Cars Only** Replace the lower ball joints with 1994-2004 spec ball joints. This can be accomplished with a shop press or ball joint service tool.
12. With a floor jack under the lower control arm, place the correct upright assembly onto the lower control arm ball joint stud. Thread the included flange nut onto the lower ball joint to keep the upright assembly in place (Figure 2). **NOTE:** The steer arm on the corner assembly will be pointing towards the front of the vehicle.



**Figure 2 - Install Upright Assembly**

13. Reinstall the coil spring into the lower control arm. Ensure the spring is correctly located and slowly raise the lower control arm with the floor jack so the coil spring fits up into the upper spring pocket in the frame.
14. Install the strut onto the upright strut mount. Install the factory hardware and torque to 120 ft lbs.



**Figure 3 – Attach Strut**

15. Tighten the lower ball joint nut to 120 ft-lbs. No cotter pin is required with the locking flange nut.



**Figure 3 – Install Lower Ball Joint Castle Nut and Cotter Pin**

16. Install the outer tie rod into the steer arm on the upright and tighten the castle nut. Torque the castle nut to 45 ft-lbs. plus additional torque to align and install the cotter pin. Trim the cotter pin as needed (Figure 4).



**Figure 4 – Install Outer Tie Rod**

17. Repeat this process for the opposite side of the vehicle.

18. Install your front brake kit per the manufacturers' instructions. Use the provided four M12-1.75 x 45mm flanged head hex bolts to attach the calipers to the DSE uprights with OE Brake Calipers. Attach the brake hoses and bleed the brake system.

19. Reinstall the sway bar end links to the lower control arms.

20. Install your wheels and tires back onto the vehicle. Lower the vehicle to the ground, and torque to manufacture specs. Jounce the front end of the vehicle while rolling the vehicle back and forth to settle the suspension.

21. You will be required have the front suspension aligned due to the change in geometry.

NOTE: The tie rod will need to be lengthed on both sides due to the improved steering geometry.

Toe Settings		
Use	Setting	Tuning
Street	0 to 1/16" Toe In	Toe in increases stability under braking and turn in.
Autocross / Track	0 to 1/8" Toe Out	Toe out improves turn in reponse for track use, Excessive toe out can cause instability or "dartiness" under braking.

If you have any questions before or during the installation of this product, please contact Detroit Speed at [tech@detroitsspeed.com](mailto:tech@detroitsspeed.com) or 704.662.3272

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