

2023 FORD F-150® RAPTOR™ LINEUP

TECHNICAL SPECIFICATIONS



Preproduction 2023 F-150 Raptor R shown. Available late 2022.

BODY

| | |
|-------------------------|---|
| Construction/materials | High-strength steel frame, aluminum cabin and bed |
| Body configuration | SuperCrew® |
| Final assembly location | Dearborn Truck Plant |

DRIVETRAIN

| | |
|--------|---|
| Layout | Longitudinally mounted front-engine 10-speed automatic transmission, 2-speed torque on-demand 4x4 with mechanical lock; electronic locking rear differential with 4.10 axle |
|--------|---|

ENGINE

| | Raptor | Raptor R |
|-----------------------|---|--|
| Configuration | High-output 3.5-liter twin-turbocharged, intercooled 60-degree overhead-cam EcoBoost V6 | High-output 5.2-liter supercharged, intercooled 90-degree overhead-cam V8 |
| Block/head material | Aluminum block, aluminum heads | Cast aluminum block and head with plasma transfer wire arc cylinder liners |
| Displacement | 3.5 liters (213 cubic inches) | 5.2 liters (315 cubic inches) |
| Bore x stroke | 3.64 in. x 3.41 in. | 3.70 in. x 3.66 in. |
| Compression ratio | 10.5:1 | 9.5:1 |
| Valvetrain | DOHC, four valves per cylinder, twin independent variable camshaft timing | DOHC, four valves per cylinder, twin independent variable camshaft timing |
| Pistons material | Aluminum alloy | Forged aluminum |
| Ignition system | Distributor-less with coil-on-plug | Distributor-less with coil-on-plug |
| Recommended fuel | Premium unleaded | Premium unleaded |
| Fuel delivery | Port fuel injection with direct injection | Port fuel injection with twin high-flow fuel pumps |
| Engine control system | Electronic | Ford powertrain control module |
| Oil capacity | 6 quarts | 11.5 quarts 5W-50 full synthetic with filter |
| Coolant capacity | 13.0 liters | 12.0 liters (engine), 3.1 liters (supercharger) |
| SAE horsepower* | 450 @ 5,850 rpm | 700 @ 6,650 rpm |
| SAE torque* | 510 lb.-ft. @ 3,000 rpm | 640 lb.-ft. @ 4,250 rpm |
| Build location | Cleveland, Ohio | Dearborn, Michigan |

ELECTRICAL

| | | |
|--------------------|----------------------|----------------------|
| Alternator | Standard single 240A | Standard single 240A |
| Battery group, CCA | H7 AGM 80AH 800CCA | H7 AGM 80AH 800CCA |

TRANSFER CASE

| | | |
|--------------------|---|---|
| Type | Hi-lock transfer case; two-speed automatic four-wheel-drive system with neutral towing capability | Hi-lock transfer case; two-speed automatic four-wheel-drive system with neutral towing capability |
| 4-high drive ratio | 1:1 | 1:1 |
| 4-low drive ratio | 2.64:1 | 2.64:1 |

*Horsepower and torque ratings based on premium fuel per SAE J1349® standard. Your results may vary.

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FINAL DRIVE

| | Raptor | Raptor R |
|---|--------|----------|
| Final drive front/rear axle ratios | 4.10:1 | 4.10:1 |
| Final drive front axle ratio (optional) | 4.10:1 | 4.10:1 |

TRANSMISSION

| | 10-speed SelectShift® Automatic | |
|---------------|--|------|
| Configuration | Electronically controlled hydraulic 10-speed automatic | |
| Gear ratios | First | 4.69 |
| | Second | 2.98 |
| | Third | 2.14 |
| | Fourth | 1.76 |
| | Fifth | 1.52 |
| | Sixth | 1.27 |
| | Seventh | 1 |
| | Eighth | 0.85 |
| | Ninth | 0.69 |
| | 10th | 0.63 |
| | Reverse | 4.86 |
| Cooling | Warm up unit with thermostatic fin cooler | |

SUSPENSION

| | |
|------------------------------------|---|
| Front configuration | Independent double-wishbone with coil-over shock and cast aluminum lower control arm |
| Front shock absorber type/diameter | High-output, gas-pressurized, electronically controlled continuously variable compression damping FOX Racing Shox™, 3.1-inch damper, 0.875-inch rod diameter (standard), 1.0-inch rod diameter with optional 37-inch tires (standard with Raptor R) |
| Rear configuration | Five-link coil with Panhard rod |
| Front travel | 14.0-inch (standard), 13.0-inch with optional 37-inch tires (standard with Raptor R) |
| Rear shock absorber type/diameter | High-output, gas-pressurized, electronically controlled continuously variable compression damping FOX Racing Shox™, 3.1-inch damper, 0.875-inch rod diameter |
| Rear travel | 15.0-inch (standard), 14.1-inch with optional 37-inch tires (standard with Raptor R) |

STEERING

| | Raptor | Raptor R |
|-------------------------------|--|-------------------------|
| Type | Electric power-assisted | Electric power-assisted |
| Ratio | 17.2:1 | 17.2:1 |
| Turning circle (curb to curb) | 35-in. tires – 48.0 ft. 37-in. tires – 50.0 ft. | 37-in. tires – 50.0 ft. |

BRAKES

| | | |
|---|---------------------------------------|---------------------------------------|
| Front type | Power antilock vented disc | Power anti-lock vented disc |
| Booster type | Electronically controlled brake boost | Electronically controlled brake boost |
| Front rotor diameter/thickness/material | 350 x 34 mm Nitro Tough iron | 350 x 34 mm Nitro Tough iron |
| Front caliper configuration | 2 x 51 mm sliding caliper | 2 x 51 mm sliding caliper |
| Front pad material | FER9213 | FER9213 |
| Front swept area | 51,547 mm ² | 51,547 mm ² |
| Rear type | Power antilock vented disc | Power antilock vented disc |
| Rear rotor diameter/thickness/material | 336 x 20 mm Nitro Tough iron | 336 x 20 mm Nitro Tough iron |
| Rear caliper configuration | 1 x 54 mm sliding eiPB | 1 x 54 mm sliding eiPB |
| Rear pad material | GA9105 | GA9105 |
| Rear swept area | 40,998 mm ² | 40,998 mm ² |
| Parking/emergency brake | 25.5 kN electronic parking brake | 25.5 kN electronic parking brake |

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FUEL CAPACITY

| | |
|-----------|----------------------------------|
| SuperCrew | 36 gallons (Raptor and Raptor R) |
|-----------|----------------------------------|

FUEL ECONOMY

| | EPA-estimated fuel economy rating | | |
|--|-----------------------------------|---------|----------|
| | City | Highway | Combined |
| 2022 Raptor | 15 mpg | 18 mpg | 16 mpg |
| 2022 Raptor without Start/Stop | 14 mpg | 18 mpg | 15 mpg |
| 2022 Raptor with 37-in. tires | 15 mpg | 16 mpg | 15 mpg |
| 2022 Raptor with 37-in. tires without Start/Stop | 14 mpg | 16 mpg | 15 mpg |
| 2023 Raptor R without Start/Stop | TBD | TBD | TBD |

SAFETY/CONTROL SYSTEMS

| | Raptor | Raptor R |
|-----------------------|---|---|
| ABS/stability control | Four-wheel antilock brakes, AdvanceTrac with Roll Stability Control | Four-Wheel Anti-Lock Brakes, AdvanceTrac® with Roll Stability Control™ (RSC®) |
| Airbags | Front, driver and passenger Front, driver and passenger seat-mounted side Safety Canopy® side curtains Front, driver and passenger knee | Front, driver and passenger Front, driver and passenger seat-mounted side Safety Canopy® side curtains Front, driver and passenger knee |
| Chassis safety | Tire Pressure Monitoring System (TPMS), SOS Post-Crash Alert System™ | Tire Pressure Monitoring System (TPMS), SOS Post-Crash Alert System™ |

WHEELS AND TIRES

| | | |
|---------------------------|---|---|
| Standard | 17 x 8.5-inch cast aluminum wheels with bright machined face and Magnetic painted pockets, LT315/70R17 BFGoodrich® All-Terrain T/A® KO2 Tires | 17 x 8.5-inch forged aluminum beadlock-capable wheels, Matte Black 10 painted wheel with Magnetic painted ring, available Code Orange ring, L37x12.50R17LT BFGoodrich All-Terrain T/A KO2 Tires |
| Available | 17 x 8.5-inch unique pattern forged aluminum beadlock-capable wheels, Magnetic painted wheel and ring, 37x12.50R17LT BFGoodrich All-Terrain T/A KO2 Tires Load Range "C"-116S | |
| Spare (Under-bed mounted) | Full-size matching spare wheel and tire | Full-size matching spare wheel and tire |

LIGHTING

| | |
|-----------|---|
| Headlamps | Standard LED quad-beam with daytime running lamp or optional adaptive LED projector with automatic leveling, dynamic bending and daytime running lamp |
| Taillamps | LED |
| Auxiliary | Daytime running lamp, cargo lamp, integrated marker lights, tailgate LED, LED side-mirror spotlights, LED cargo box lights, Rigid™ LED fog lamps and off-road driving lamp package (optional) |

EXTERIOR DIMENSIONS

| | SuperCrew with 35-inch tires | SuperCrew with 37-inch tires/Raptor R |
|-------------------------|------------------------------|---------------------------------------|
| Wheelbase | 145.4 | 145.4 |
| Overall length | 232.6 | 232.6 |
| Overall width | 96.0 | 96.0 |
| Width w/o mirrors | 86.6 | 87.0 |
| Overall height | 79.8 | 80.6 |
| Track width, front | 74.0 | 74.3 |
| Track width, rear | 73.6 | 73.9 |
| Ground clearance | 12.0 | 13.1 |
| Approach angle | 31.0 degrees | 33.1 degrees |
| Departure angle | 23.9 degrees | 24.9 degrees |
| Breakover angle | 22.7 degrees | 24.4 degrees |
| Open tailgate to ground | 37.0 | 37.8 |

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INTERIOR DIMENSIONS (INCHES UNLESS OTHERWISE NOTED)

| | Raptor | Raptor R |
|-----------------------|--------|----------|
| Seating | Five | Five |
| Front headroom | 40.8 | 40.8 |
| Maximum front legroom | 43.9 | 43.9 |
| Front shoulder room | 66.6 | 66.6 |
| Front hip room | 62.5 | 62.5 |
| Rear headroom | 40.4 | 40.4 |
| Maximum rear legroom | 43.6 | 43.6 |
| Rear shoulder room | 65.8 | 65.8 |
| Rear hip room | 62.6 | 62.6 |

CAPACITIES (INCHES UNLESS OTHERWISE NOTED)

| | | |
|-----------------------------|--------------|--------------|
| Length at floor | 67.1 | 67.1 |
| Width at wheelhouse | 50.6 | 50.6 |
| Maximum width inside box | 65.2 | 65.2 |
| Rear opening width | 60.3 | 60.3 |
| Cargo volume | 52.8 cu. ft. | 52.8 cu. ft. |
| Maximum payload | 1,400 lbs. | 1,400 lbs. |
| Maximum conventional towing | 8,200 lbs. | 8,700 lbs. |

TECHNOLOGY

| | |
|-----------|---|
| Standard | Ford PowerUp over-the-air-updates, FordPass® Connect (with remote lock/unlock, vehicle status check, schedule remote start times, Trailer Theft Alert, Trailer Light Check and other truck features), 12-inch digital productivity screen, 12-inch touch screen, SYNC® 4, Intelligent Access with push-button start, SecuriCode™ keyless entry keypad, Remote Start System, SiriusXM® with 360L, 4G LTE with Wi-Fi® hotspot, MyKey®, Onboard 400W outlet, MyMode™, pre-wired overhead auxiliary switches with under-hood distribution box, Reverse Sensing System and Adaptive Cruise Control |
| Off-road | Terrain Management System™, Trail Control™, Trail 1 Pedal Drive, Trail Turn Assist |
| Available | 2.0-kilowatt Pro Power Onboard (Raptor only), connected built-in navigation, 360-degree camera with split-view display, 18-speaker B&O sound system Unleashed by Bang & Olufsen with HD Radio™ and rain-sensing wipers, Pro Trailer Hitch Assist |

FORD CO-PILOT360™ TECHNOLOGIES

| | |
|-----------|--|
| Standard | Auto Hold, auto on/off headlamps, auto high-beam headlamps, Forward Collision Warning and Dynamic Brake Support, Hill Start Assist, Pre-Collision Assist with Automatic Emergency Braking (with Pedestrian Detection), rearview camera with Dynamic Hitch Support, Blind Spot Information System with Cross-Traffic Alert, Trailer Coverage and Reverse Brake Assist |
| Available | Active Drive Assist Prep Kit, Distance Alert/Distance Indication, Forward Sensing System, Pro Trailer Backup Assist and Trailer Reverse Guidance |

WARRANTY

| | | |
|---|----------------------------|----------------------------|
| Bumper-to-bumper | Three years/36,000 miles | Three years/36,000 miles |
| Powertrain | Five years/60,000 miles | Five years/60,000 miles |
| Aluminum body panels | Five years/unlimited miles | Five years/unlimited miles |
| Corrosion, sheetmetal (perforation only excluding aluminum) | Five years/unlimited miles | Five years/unlimited miles |
| Paint adhesion | Five years/unlimited miles | Five years/unlimited miles |
| Roadside assistance | Five years/60,000 miles | Five years/60,000 miles |

