

# RACING SEAT INSTALL

Ikon Motorsport seats · Planted Technology brackets · NRG sliders – 2013 BMW F30

<b>PLATFORM</b>	2013 BMW F30 320i · N20 Engine
<b>SEAT</b>	Ikon Motorsport Racing Seat
<b>BRACKETS</b>	Planted Technology – F30 Specific
<b>SLIDERS</b>	NRG Innovations (replaces Ikon sliders)
<b>DIFFICULTY</b>	Intermediate · ~2-3 Hours
<b>SKILL</b>	DIY – All work performed by owner

Disclaimer: Perform all work safely. Use jack stands. This guide describes one owner's experience – always verify specs for your application.

Companion video available at [crenshawengineering.com/guides](https://crenshawengineering.com/guides)

## // SECTION\_01 - OVERVIEW &amp; CONTEXT

Installing aftermarket racing seats in the BMW F30 requires a seat bracket that adapts the seat's bottom mounting holes to the OEM floor rail bolt pattern. Planted Technology manufactures an F30-specific bracket machined for the four OEM floor mounting points on the driver and passenger sides. The bracket bolts directly to the chassis using the same four holes as the stock seat assembly - no drilling required.

The Ikon Motorsport seat ships with its own sliders, but the Ikon slider bolt pattern does not align with the Planted Technology F30 bracket. NRG Innovations seat sliders are a confirmed compatible replacement. The Ikon sliders must be set aside and the NRG sliders substituted before assembly. All slider-to-seat and slider-to-bracket hardware must be sourced to fit the NRG slider mounting pattern.

The OEM BMW seat floor bolts are Torx-head and cannot be reinstalled in the Planted bracket due to head clearance constraints at the floor. Hex-head bolts of matching thread spec are required so that a stubby combination wrench can be used in the tight floor clearance. A 1/4" drive stubby ratcheting wrench is separately required for the slider-to-seat and slider-to-bracket fasteners - a full-size ratchet will not clear the seat frame.

## ■ READ BEFORE STARTING

The seat mounting bolts are safety-critical fasteners - they retain the seat in a collision and must be torqued to specification. The factory wiring harness under the seat includes the airbag occupancy sensor. Battery disconnect and a 10-minute capacitor discharge wait are mandatory before any under-seat work. Do not disturb or cut any yellow-sheathed SRS wiring at any point during this procedure.

## // SECTION\_02 - PARTS &amp; CONSUMABLES

COMPONENT	SPECIFICATION / NOTES	QTY	SOURCE
Ikon Motorsport Racing Seat	As purchased - Ikon sliders included but set aside	1	Ikon Motorsport
Planted Technology Bracket	F30-specific - confirm driver or passenger side	1	Planted Technology
NRG Seat Sliders	Replaces Ikon sliders - compatible bolt pattern	1	NRG Innovations
Hex Head Floor Bolts	Match OEM thread spec - hex head for stubby access	4	Hardware / dealer
Slider-to-Bracket Bolts	From Planted hardware kit - confirm length	4	Planted kit
Seat-to-Slider Bolts	From Ikon or NRG kit - confirm thread match	4	Ikon / NRG kit

→ Ikon sliders are included with the seat but do NOT fit the Planted F30 bracket hole pattern. Order NRG sliders before starting. Dry-fit sliders to bracket before building the full stack.

## // SECTION\_03 – TOOLS REQUIRED

TOOL	SPEC / MODEL	NOTES
1/4" Stubby Ratcheting Wrench	1/4" drive, any brand	Slider-to-seat & slider-to-bracket bolts
Stubby Combination Wrench	Size to match hex bolt head	Bracket-to-floor hex bolts in tight clearance
Torque Wrench	In-lb or ft-lb, appropriate range	Floor bolt final torque – mandatory
Socket Set	Metric, various sizes	OEM seat removal; general hardware
Torx Socket Set	E-Torx and standard Torx, metric	OEM seat floor bolt removal
Panel Trim Tool	Plastic pry tool preferred	Seat track covers and trim clips
Flathead Screwdriver	Medium blade	Wiring harness clip release
10mm Wrench / Socket	1/4" or 3/8" drive	Battery negative terminal disconnect

## // SECTION\_04 – PRE-WORK &amp; SAFETY

Before any under-seat work, disconnect the vehicle battery and wait a minimum of 10 minutes. The BMW F30 SRS system stores capacitor energy sufficient to deploy the seat-mounted or side curtain airbags if the harness is disturbed before discharge. The occupancy mat sensor connector is located under the seat – do not pull, lever, or cut any yellow-sheathed wiring at any point in this procedure.

**01 Disconnect battery negative terminal**

Open the trunk and locate the battery under the trunk floor panel. Use a 10mm wrench to loosen the negative (-) terminal clamp bolt. Slide the clamp off the post and tuck it away from the terminal. Wait a minimum of 10 minutes before proceeding under the seat.

**02 Slide OEM seat fully forward – remove rear floor bolts**

Slide the OEM seat to its full forward position to expose the two rear floor bolt covers. Pop the plastic covers with a trim tool. Remove the two rear Torx-head floor bolts (E12 or E14 external Torx socket – confirm your build). Set aside for reference; these bolts will not be reused with the Planted bracket.

**03 Slide OEM seat fully rearward – remove front floor bolts and harness**

Slide the seat to the full rearward position to expose the two front floor bolt covers. Remove covers and front floor bolts in the same manner. With all four bolts removed, disconnect the wiring harness connectors under the seat – press each locking tab and pull straight apart. Photograph connector locations before unplugging if needed. Lift the OEM seat assembly out of the vehicle.

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**// SECTION\_05 - BENCH ASSEMBLY**

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Build the complete seat stack - bracket, NRG sliders, Ikon seat - on a workbench or clean floor before installing in the vehicle. Bench assembly provides full access to all fastener locations without cabin clearance constraints. Dry-fit every component and confirm hardware alignment before driving any fasteners.

**04 Inspect Planted bracket and confirm correct side**

Planted Technology brackets are side-specific. Confirm the bracket is marked for the correct side (driver or passenger). Lay the bracket flat with the floor mounting tabs facing down. Identify the four NRG slider mounting holes on the top face. Locate the included hardware bag and confirm bolt count before starting assembly.

**05 Set aside Ikon sliders - dry-fit NRG sliders to bracket**

The Ikon sliders shipped with the seat do not align with the Planted F30 bracket bolt pattern. Set the Ikon sliders aside. Position the NRG sliders on the Planted bracket, aligning the NRG bottom mounting holes with the bracket top mounting holes. Confirm all four holes line up cleanly before threading any hardware.

**06 Torque slider-to-bracket bolts with 1/4" stubby ratchet**

Thread the slider-to-bracket bolts in by hand through all positions before tightening any. Use the 1/4" drive stubby ratcheting wrench to tighten - a full-size ratchet will not clear the slider frame rail. Tighten in a cross pattern to the NRG hardware specification. After tightening, cycle the sliders through full fore-aft travel to confirm no binding. Over-tightening can deform the rail geometry.

**07 Position Ikon seat on NRG sliders and align mounting holes**

Place the Ikon Motorsport seat onto the NRG sliders, aligning the seat bottom mounting holes with the NRG slider top mounting holes. Confirm the seat sits squarely - no tilt or lateral offset. Thread the seat-to-slider bolts in by hand through all four positions before tightening any fastener.

**08 Torque seat-to-slider bolts with 1/4" stubby ratchet**

Use the 1/4" drive stubby ratcheting wrench to tighten the seat-to-slider bolts. Clearance between the Ikon seat frame and the NRG slider rail is minimal - only the stubby ratchet will fit at these locations. Tighten in a cross pattern. Confirm the seat does not rock or shift after all bolts are fully tightened.

**■ VERIFY SLIDER TRAVEL BEFORE CHASSIS INSTALL**

With the full stack built (bracket + NRG sliders + Ikon seat), cycle the sliders through full fore-aft travel on the bench. The seat must move smoothly with no binding, no rail contact noise, and no lateral slop. Resolve any binding before the assembly goes into the vehicle - it is significantly harder to diagnose once installed.

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**// SECTION\_06 - CHASSIS INSTALLATION**

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With the bracket-slider-seat assembly verified on the bench, the full stack drops into the vehicle as a unit. The Planted bracket floor tabs align with the four OEM floor mounting holes. Hex-head bolts replace the original Torx-head OEM hardware to allow a stubby combination wrench to achieve proper torque in the confined floor clearance.

**09 Lower seat assembly into vehicle and align floor tabs**

Lower the seat assembly into the vehicle, guiding the four Planted bracket floor tabs over the OEM floor mounting holes. The bracket should sit flat on the floor with all four holes aligned. Do not force - if the bracket rocks, clear any debris remaining from OEM seat removal before proceeding.

**10 Thread hex head floor bolts in by hand**

Thread the four hex-head floor bolts through the bracket tabs and into the OEM floor threaded inserts by hand. The hex-head profile is required because the Planted bracket geometry leaves insufficient clearance for a Torx socket driver at floor level. If any bolt resists threading, stop and inspect alignment - do not force. Cross-threading a floor insert requires helicoil repair.

**11 Torque floor bolts with stubby combination wrench**

Use a stubby combination wrench sized to the hex bolt head to torque all four floor bolts. A standard-length wrench will contact the seat frame or bracket before reaching the bolt head - stubby length is required. Tighten in a cross pattern. Confirm against the Planted Technology installation sheet for your bracket - typical BMW F30 seat mounting torque is 45 Nm / 33 ft-lb.

**12 Reconnect all wiring harness connectors**

Reconnect all harness connectors that were unplugged during OEM seat removal. The occupancy mat sensor connector must be firmly seated until the locking tab clicks audibly. A disconnected occupancy sensor triggers an SRS fault and illuminates the airbag warning light. Route all harness slack to prevent pinching under the bracket during slider travel.

**13 Reconnect battery and verify no warning lights**

Reconnect the battery negative terminal and tighten the clamp bolt. Cycle the ignition on and confirm no warning lights - specifically SRS/airbag. Cycle the seat sliders through full fore-aft travel inside the vehicle. Confirm no harness is pinched, no wiring pulls taut at any slider position, and no contact noise from the bracket or floor.

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**// SECTION\_07 - VERIFICATION**

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**Scan for SRS fault codes**

Scan for fault codes with an ISTA-compatible tool or an OBD-II scanner that reads BMW SRS faults. Any active airbag or occupancy sensor fault must be resolved before driving. Most common cause: occupancy mat connector not fully seated, or harness pinched under bracket.

**Seat position and harness clearance check**

Planted brackets raise the seat height slightly compared to OEM. Confirm acceptable headroom with the seat in your driving position. If running a racing harness or harness bar, re-evaluate shoulder belt geometry at the new seat height before driving.

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**// SECTION\_08 - COMMON MISTAKES**

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**X Using Ikon sliders with the Planted bracket**

The Ikon Motorsport sliders shipped with the seat do not match the Planted F30 bracket hole pattern. Forcing them risks unsupported or misaligned bolts. NRG sliders are a confirmed drop-in replacement - order them before starting the install.

**X Using a full-size ratchet for slider and bracket hardware**

The slider-to-seat and slider-to-bracket bolt locations do not have clearance for a standard ratchet handle. A 1/4" stubby ratcheting wrench is required at both locations. Using pliers or an improper tool risks rounding fastener heads or leaving safety-critical joints under-tightened.

**X Reusing OEM Torx-head floor bolts**

The OEM floor bolts require Torx socket driver clearance that is not available with the Planted bracket installed. Hex-head bolts of the correct thread specification must be sourced separately. Attempting to use Torx bolts in this clearance will strip the head or leave the fastener improperly torqued.

**X Skipping battery disconnect and 10-minute wait**

Working under the seat without disconnecting the battery risks disturbing SRS wiring and triggering airbag deployment or setting fault codes. Disconnect the negative terminal and wait 10 minutes before touching anything under the seat.

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**// SECTION\_09 - BUILD NOTES - FROM THE OWNER**

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The Ikon Motorsport seats arrived with sliders included, but mocking up the assembly made it immediately clear the Ikon slider bolt holes did not line up with the Planted bracket. NRG sliders were ordered as a replacement and aligned correctly with the Planted F30 bracket pattern on the first fit - no modification to the bracket or sliders was required.

The OEM floor bolts are Torx-head and there is no room for a Torx socket driver once the Planted bracket is sitting on the floor. Hex-head bolts in the correct thread spec solved this - a stubby combination wrench reached all four floor positions cleanly. A standard-length wrench contacts the bracket or seat frame before the bolt head.

The 1/4" stubby ratcheting wrench was essential at two points: the slider-to-bracket bolts and the seat-to-slider bolts. Neither location has clearance for a standard ratchet. Without the stubby, those bolts stay hand-tight or get rounded with pliers - neither is acceptable on safety-critical seat fasteners.

Total bench assembly time was approximately 30-40 minutes. In-vehicle installation added another 30-45 minutes, mostly harness re-routing and confirming no wiring was pinched through the full slider travel range. No fault codes after battery reconnect.

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