

DIRECT-REPLACEMENT  
**INSTALLATION & USER GUIDE**



*INTELLIGENT QUICK SWITCH*

JEEP WRANGLER JK (2017+)

885-26-145 - PERFORMANCE SERIES 2.0 RESERVOIR IQS



## iQS JEEP JK INSTALLATION

### Tools for shock installation:

- 18 mm Hex wrench/socket
- 16 mm Hex socket
- 3/4" Hex wrench

### Tools for electronics installation:

- 13 mm Hex wrench/socket
- 10 mm Hex wrench/socket
- Trim removal tool
- T30 Torx® bit
- 5/32" Hex wrench

### Kit Contents:

- 1 Box with LF Left Front iQS Shock
- 1 Box with RF Right Front iQS Shock
- 1 Box with LR Left Rear iQS Shock
- 1 Box with RR Right Rear iQS Shock
- 1 Box with iQS Electronics:
  - Wire Harness with Switch
  - 2x Switch Covers
  - ECU
- 1 Box with Hardware for Electronics Installation:
  - 40x Zip Ties
  - ECU Mounting Brackets
  - Nuts and Bolts

### NOTE

This iQS system was designed for left-hand drive vehicles. As such, the parts included and instructions herein may not be compatible with right-hand drive vehicles. Throughout this manual, the terms "driver" and "passenger" may be used interchangeably with "left" and "right" respectively to describe the orientation of parts relative to a left-hand drive vehicle.

Thank you for choosing FOX direct-replacement shocks for your vehicle. FOX products are designed, tested, and manufactured by the finest professionals in the industry.

FOX recommends that you become completely familiar with the handling characteristics of your modified vehicle before operating it under rigorous conditions, helping to avoid potential rollover situations and other loss of control events. FOX further recommends that you use appropriate protective equipment at all times when operating your vehicle.

To achieve the best performance and product longevity, periodic service and maintenance is required. Please refer to the Service and Upgrades section for more information.

## SAFETY INSTRUCTIONS

### WARNING

- FOX direct-replacement, iQS shocks should always be installed with all four shocks for maximum performance.
- Proper installation and service procedures are essential for the safe and reliable installation of chassis parts, requiring the experience and tools specially designed for this purpose. Installation and maintenance procedures for this product must be performed by a qualified service technician to avoid potentially unsafe vehicle handling characteristics, which may result in SERIOUS INJURY or DEATH.
- Modifying your vehicle's suspension will change the handling characteristics of your vehicle. Under certain conditions, your modified vehicle may be more susceptible to loss of control or rollover, which may result in SERIOUS INJURY or DEATH. It is your responsibility to thoroughly understand the modified

vehicle handling characteristics before any rigorous vehicle operation. Wear body protective gear including head protection when appropriate. Installation of vehicle roll bars or cage is highly recommended.

- FOX direct-replacement shocks are gas-charged and are highly pressurized. Placing shocks in a vise or clamp, applying heat, or attempting to open or service the shock without the proper tools and training can result in **SERIOUS INJURY** or **DEATH**. Do not attempt to modify, puncture or incinerate a FOX direct-replacement shock absorber.
- Any attempt to misuse, misapply, modify, or tamper with any FOX product voids any warranty and may result in **SERIOUS INJURY** or **DEATH**.
- Do not switch the system continuously for extended periods of time, as damage to the ECU and actuators may occur.

- **CRUSH HAZARD:** NEVER get under the vehicle until you have checked to ensure that the vehicle will be stable during installation. Placing body parts beneath an unstable vehicle may lead to **SERIOUS INJURY** or **DEATH**.
- FOX direct-replacement shocks are designed to fit your vehicle's shock mounts with no modifications.

## HAZARDOUS WASTE DISPOSAL

The FOX iQS electronics system may contain hazardous material and is considered e-waste in case of disposal, it cannot be thrown away with household waste. Please adhere to your local and federal regulations regarding e-waste and locate a designated e-waste handler or recycler.

## INSTALLATION GUIDELINES

### WARNING

- Always use a chassis lift for the installation of shocks, and make certain that the raised vehicle is securely attached to the lift to prevent the vehicle from slipping, falling, or moving during the installation process.
- DO NOT install any FOX product without the necessary special tools, expertise and chassis lift, or you will subject yourself to the risk of **SERIOUS INJURY** or **DEATH**. If you elect to not use a chassis lift (which election may result in **SERIOUS INJURY** or **DEATH**), ensure that the vehicle is on level ground, that all tires on the ground during installation are blocked to prevent vehicle movement, that at least two tires are on the ground at all times, and that adequately secured jack stands are used to support the vehicle.



## SHOCK ORIENTATION

**IMPORTANT:** Use medium-strength threadlocker (blue) on all bolts.

### Front Shock Orientation (Fig. 1):

The reservoir must be oriented toward the back of the vehicle. The FOX logo on the clamp must be oriented away from the vehicle.

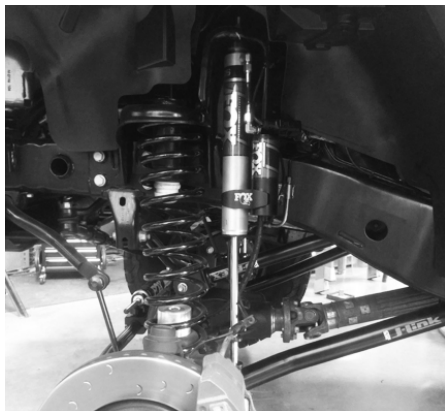


Fig. 1 Front Shock Installed: Left Side of Vehicle Shown

### Rear Shock Orientation (Fig. 2):

The reservoir must be oriented toward the inside of the vehicle. The FOX logo on the clamp must be oriented toward the rear of the vehicle. These shocks come pre-clocked from the factory. If you have an aftermarket exhaust, you might need to modify the clocking of the Right Rear (RR) shock reservoir to avoid damage.



Fig. 2 Rear Shocks Installed: Rear View of Vehicle Shown

## INSTALL THE IQS SHOCKS

You must read the installation guidelines and follow your vehicle manufacturer's instructions on how to properly lift and secure the vehicle.

**WARNING:** Failure to properly follow the installation guidelines and manufacturer's instructions for lifting and securing the vehicle may result in serious injury and/or death.

### REMOVE THE OEM FRONT SHOCKS

1. Remove both front wheels according to your manufacturer's instructions.
2. Use two 18 mm wrenches to remove the locknut and bolt from the lower shock mount.  
**IMPORTANT:** Do not discard these fasteners as they will be used on your new FOX IQS shock.
3. Use a 16 mm wrench to remove the nut and bushing from the upper shock mount.
4. Remove the OEM shock.
5. Repeat steps 1 through 4 to remove the other OEM front shock.

### REMOVE THE OEM REAR SHOCKS

1. Remove both rear wheels according to your manufacturer's instructions.
2. Use two 18 mm wrenches to remove the locknut and bolt from the lower shock mount.  
**IMPORTANT:** Do not discard these fasteners as they will be used on your new FOX IQS shock.
3. Use a 16 mm wrench to remove the two bolts from the upper shock mount.  
**IMPORTANT:** Do not discard these fasteners as they will be used on your new FOX IQS shock.
4. Remove the OEM shock.
5. Repeat steps 1 through 4 to remove the other OEM front shock.

## INSTALL THE IQS FRONT SHOCKS:

1. The front (Fig. 1) shocks must correctly match each corresponding side of the vehicle.  
**IMPORTANT:** Refer to the markings on the bumper cap of each shock that specify its correct vehicle mounting side.
2. Install the two stem bushings and two washers (supplied in the iQS kit), onto the top of the front iQS shock.
3. Use a 3/4" wrench to install the 3/4" hex nut (supplied in the iQS kit) that connects the shock to the upper shock mount. Tighten the nut until 3/4" of the stem is visible.
4. Use an 18 mm wrench to tighten the 18 mm OEM locknut that connect the shock to the lower shock mount. Torque to OEM specification.
5. Repeat steps 1 through 4 to install the other iQS front shock.

## INSTALL THE IQS REAR SHOCKS:

1. The rear (Fig. 2) shocks must correctly match each corresponding side of the vehicle.  
**IMPORTANT:** Refer to the markings on the bump cap of each shock that specify its correct vehicle mounting side.
2. Use a 16 mm wrench to install the two OEM 16 mm bolts through the bar pin of the rear shock and connect the shock to the upper shock mount. Torque to OEM specification.
3. Use an 18 mm wrench to tighten the 18 mm OEM locknut and connect the shock to the lower shock mount. Torque to OEM specification.
4. Repeat steps 1 through 3 to install the other iQS rear shock.

## MOUNT THE ECU

1. Remove the wiper arm cap by hand. Use a socket or end wrench to remove the 13 mm hex nut (Fig. 3).



Fig. 3 Left Side Wiper Arm

2. Pivot the wiper arm outward and carefully pull it straight out to remove it.
3. Use a T30 Torx® to remove the two top cowl panel bolts. (Fig. 4).



Fig. 4 Left Side Top Cowl Panel Bolts

4. Repeat steps 1 through 3 on the opposite side of the vehicle.

- Use a trim removal tool to remove the four push-in rivets from the center grid and take off the top cowl panel (Fig. 5).



Fig. 5 Top Cowl Panel Push-In Rivets

- Clear off the top cowl area on the passenger side where the iQS ECU will be mounted (Fig. 6).



Fig. 6 Top Cowl: Right Side Shown

- Use a 10 mm hex wrench to remove the two side panel bolts. Use a 13 mm hex wrench to remove the two hood hinge bolts.

**IMPORTANT:** Do not discard these bolts as they will be used to secure your new FOX iQS ECU.

- Use the bolts you removed in the last step to mount the two brackets. Do not fully tighten the bolts (Fig. 7 & Fig. 8).



Fig. 7 Side Panel Bracket

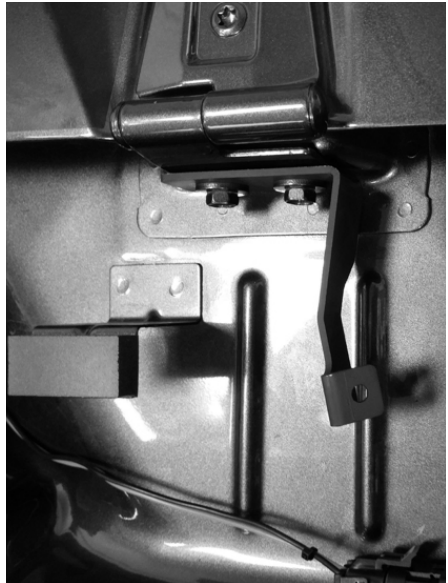


Fig. 8 Hood Hinge Bracket

9. Attach the ECU to the mounting brackets in the orientation shown. Use a 5/32 hex wrench and a 3/8 hex socket to torque the three nuts and bolts to 10 ft-lbs (Fig. 9).

Note: the front, right bolt hole of the ECU will remain unattached, this is ok.



Fig. 9 ECU Attached to Mounting Brackets

10. Torque the side panel bolts and hood hinge bolts to OEM specifications.

## CONNECT THE WIRE HARNESS TO THE ECU

1. Reach from inside the engine bay to plug the ECU into the wire harness connector. The wire harness should come out towards the driver side (Fig. 10).



Fig. 10 ECU and Harness View from Engine Bay (Hood Lifted Up)

2. First, position the lever parallel to the connector face (Fig. 11) and align the pins. Then press the connector in halfway.



Fig. 11 ECU Connector Lever Parallel to Connector Face

3. Pull the lever up to engage the securing mechanism until it clicks and the lever is perpendicular to the connector face (Fig. 12). When the ECU and wire harness connector are properly secured, the connector's red seal will not be visible.



Fig. 12 ECU and Harness Secured, Connector Lever Perpendicular to Connector Face

### INSTALL THE WIRE HARNESS POWER LINES

1. Connect the green wire with the fuse holder connector in the fuse box. This allows for activation of the system by the ignition switch:
  - a. Make a small notch on the fuse box wall towards the engine to avoid pinching the ignition switch wire when closing the lid (Fig. 13).



Fig. 13 Fuse Box Notch for Ignition Switch Wire Routing Shown

- b. Connect the green wire that has a fuse holder (and a 5A fuse on top slot) into the M9 fuse cavity (labeled RR Heated Seat). This will ensure that the system turns on every time the engine starts.
2. Connect the red wire that has an in-line fuse holder (and a 15A fuse) to the positive battery terminal.
3. Connect the black wire that has a blue terminal spade to the chassis ground post beside the fuse box.

### INSTALL THE WIRE HARNESS SHOCK CABLES

1. Position the wire harness around the passenger side of the hood seal (Fig. 14).



Fig. 14 Wire Harness Positioned Around Passenger Side of Hood Seal



## ROUTE THE RIGHT SIDE SHOCK CABLES (RF & RR)

1. Route the RF (Right Front), RR (Right Rear) cables towards the front of the vehicle on the passenger side of the engine (Fig. 15).



Fig. 15 RF (Right Front) and RR (Right Rear) Engine Bay Routing

2. Route the RF and RR cables into the front passenger wheel well through the opening by the oil level dipstick (Fig. 16).



Fig. 16 Opening by the Oil Level Dipstick Shown

3. Attach cable ties to secure the RF & RR cables as far away from the heat shield of the exhaust header as possible. Do not allow the cables to hang loosely.

## INSTALL THE RIGHT FRONT (RF) SHOCK CABLE

1. Locate the RF cable from the left side of the shock mount (Fig. 17).



Fig. 17 Right Front (RF) IQS Shock Installed

2. Plug the RF cable into the top of the right front shock reservoir.
3. Attach a cable tie to secure the RF cable to the reservoir hose.

## INSTALL THE RIGHT REAR (RR) SHOCK CABLE

1. Route the RR (Right Rear) cable following the passenger side chassis frame rail to the rear wheel well (Fig. 18).

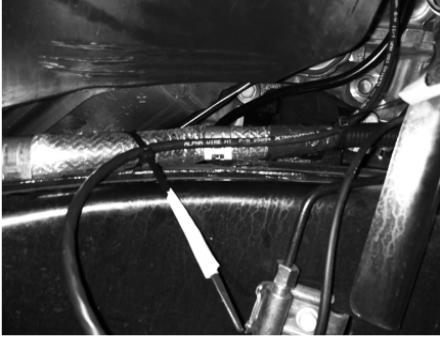


Fig. 18 Passenger Side Chassis Frame Rail Shown from Inside Right Front Wheel Well

2. Attach cable ties every two feet of length to secure the RR cable. As you approach the passenger rear wheel well, secure the cable to the exposed brake line and follow the same routing (Fig. 19).

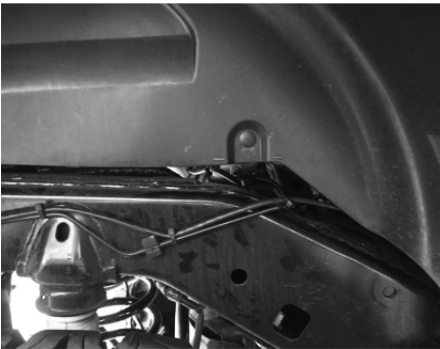


Fig. 19 Passenger Rear Wheel Well Shown

3. Route the RR cable between the right rear shock and the rear axle track bar the right rear shock.

4. Plug the RR cable connector to top of the right rear shock reservoir (Fig. 20).



Fig. 20 RR Cable Routing Between The Right Rear Shock And The Rear Axle Track Bar

5. Attach a cable tie to secure the RR cable to the reservoir hose.

## ROUTE THE LEFT SIDE SHOCK CABLES (LF & LR) AND iQS SWITCH CABLE

1. Locate the long harness cable. Route the cable across the engine bay towards the driver side.  
NOTE: The long harness cable includes the LF (Left Front) and LR (Left Rear) connectors, along with the three-connector bundle for the iQS switch.
2. Attach cable ties to secure the long harness cable to the OEM wire loom that is near the firewall (Fig. 21).



Fig. 21 Driver Side Engine Bay Shown

## ROUTE THE iQS SWITCH CABLE INSIDE THE CABIN

1. Locate the three-connector bundle for iQS switch on the long harness cable.
2. Feed the three-connector bundle through the firewall seal that accesses the cabin. You may need to use a sharp tool to make a hole through the firewall seal. The firewall seal is located to the right of the steering system when looking from the engine bay (Fig. 22), and to the left above the brake pedal when looking from inside the cabin (Fig. 23).



Fig. 22 Driver Side Engine Bay Shown



Fig. 23 Driver Side Floor Pedals Inside the Cabin Shown

3. Attach cable ties to secure the cable away from all foot pedals.

## INSTALL THE LEFT FRONT (LF) SHOCK CABLE

1. Route the LF and LR cables underneath the brake fluid reservoir and down to the driver front wheel well (Fig. 24).

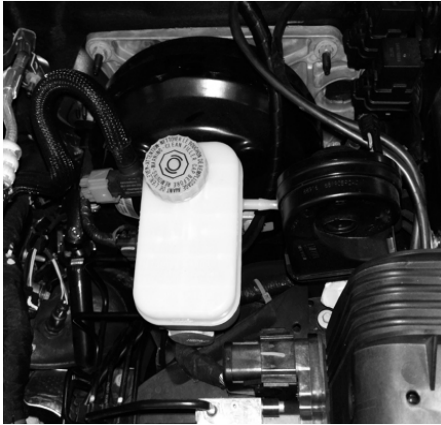


Fig. 24 Engine Bay Driver Side Shown

2. Attach a cable tie to secure the cable to one of the brake lines located on the driver side chassis frame rail.
3. Locate the LF cable from the right side of the shock mount (Fig. 25). Plug the LF cable into the left front iQS shock reservoir.



Fig. 25 Left Front (LF) iQS Shock Installed

4. Attach a cable tie to secure the LF cable to the reservoir hose.

## INSTALL THE LEFT REAR (LR) SHOCK CABLE

1. Route the LR (Left Rear) cable following the brake lines on the driver side chassis frame rail (Fig. 26).



Fig. 26 Driver Side Chassis Frame Rail Shown from Inside Driver Side Front Wheel Well

2. Attach cable ties every two feet of length to secure the LR cable. As you approach the left rear wheel well, secure the cable to the exposed brake line and follow the same routing (Fig. 27).



Fig. 27 Driver Side Rear Wheel Well Shown

3. Route the LR cable between the left rear shock and the rear axle track bar. (Fig. 28)



Fig. 28 LR Cable Routing Between The Left Rear Shock And The Rear Axle Track Bar.

4. Plug the LR cable connector into the left rear shock reservoir.
5. Attach a cable tie to secure the LR cable to the reservoir hose.

## INSTALL THE iQS SWITCH

There are two different configurations available for the iQS switch, a vertical layout and a horizontal layout.

### Vertical Layout

To mount the vertical layout for iQS switch (Fig. 29), locate the red quick connect terminals on the back of the switch. Orient the firm setting and the red quick connect terminals on top (Fig. 30). Then push the cover on until it clicks.

**NOTE:** Switch mounting panel not included.



Fig. 29 Vertical Layout iQS Switch: Lower Center Console Switch Panel Shown



Fig. 30 Vertical Layout iQS Switch: Firm Setting Aligned with Red Quick Connect Terminals on Top

## Horizontal Layout

To mount the horizontal layout iQS switch (Fig. 31), locate the red quick connect terminals on the back of the switch. Orient the firm setting and the red quick connect terminals to the right (Fig. 32). Push the cover on until it clicks.



Fig. 31 Horizontal Layout iQS Switch: A-Pillar Switch Panel Shown



Fig. 32 Horizontal Layout iQS Switch: Firm Setting Aligned with Red Quick Connect Terminals on Right

Once the switch is mounted in the desired location, make sure to mate the two receptacle connectors (3 Pin and 4 Pin) to their respective plug connectors. The plug connectors are routed into the cabin above the foot pedals in order for the system to operate correctly.

## USAGE

Upon ignition and power up, a red light will illuminate on the iQS switch. This is a normal calibration check and the light should turn off on its own after a few seconds.

## SETTINGS

**Firm** - Highest amount of low-speed compression damping - 60% more firm than medium setting. This setting is useful for cornering and higher speed on-road driving situations where minimized body roll and increased suspension control is desirable.

**Medium** - The medium setting is designed to increase off-road performance over stock. This setting provides an optimal balance between ride plushness and bottom-out resistance, making it useful for moderate to more extreme off-roading as well as every day, on-road driving.

**Soft** - Least amount of low-speed compression damping - 60% softer than medium setting. This setting will provide a softer, more plush ride that is useful for slow speed off-roading and rock crawling. Decreasing compression damping allows the vehicle's suspension to move more freely, increasing body articulation while reducing bottom-out resistance.

## TROUBLESHOOTING

If the red light on the iQS switch remains on after ignition and power up, this indicates a fault with one of the shocks or the electronics system. In the event of a fault within the system, the iQS controller is designed to default to the medium setting for safety. Do not use for technical driving applications such as off-roading and contact FOX immediately.

## FOX LIMITED WARRANTY

FOX Factory, Inc., a California corporation having offices at 915 Disc Drive, Scotts Valley, CA 95066 ("FOX"), makes the following LIMITED WARRANTY with respect to its suspension products:

### LIMITED ONE (1) YEAR WARRANTY ON SUSPENSION PRODUCTS

Subject to the limitations, terms and conditions hereof, FOX warrants, to the original retail owner of each new FOX suspension product, that the FOX suspension product, when new, is free from defects in materials and workmanship. Unless otherwise required by law, this warranty expires one (1) year from the date of the original FOX suspension product retail purchase from an authorized FOX dealer or from a FOX authorized Original Equipment Manufacturer where FOX suspension is included as original equipment on a purchased vehicle. If law requires a warranty duration of greater than one (1) year, then, subject to the other provisions hereof, this warranty will expire at the end of the minimum warranty period required by such law.

### TERMS OF WARRANTY

This warranty is conditioned on the FOX suspension product being operated under normal conditions and properly maintained as specified by FOX. This warranty is only applicable to FOX suspensions purchased new from an authorized FOX source and is made only to the original retail owner of the new FOX suspension product and is not transferable to subsequent owners. This warranty is void if the FOX suspension product is subjected to abuse, neglect, improper or unauthorized repair, improper or unauthorized service or maintenance, alteration, modification, accident or other abnormal, excessive, or improper use.

Should it be determined by FOX in its sole and final discretion, that a FOX suspension product is covered by this warranty, it will be repaired or replaced, by a comparable model, at FOX's sole option, which will be conclusive and binding.

THIS IS THE EXCLUSIVE REMEDY UNDER THIS WARRANTY. ANY AND ALL OTHER REMEDIES AND DAMAGES THAT MAY OTHERWISE BE APPLICABLE ARE EXCLUDED, INCLUDING, BUT NOT LIMITED TO, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR PUNATIVE DAMAGES.

This limited warranty does not apply to normal wear and tear, malfunctions or failures that result from abuse, improper assembly, neglect, alteration, improper maintenance, crash, misuse or collision. This limited warranty gives the consumer specific legal rights. The consumer may also have other legal rights which vary from state to state or country to country. Some states and countries do not allow the exclusion or limitation of incidental or consequential damages or warranties, and if dictated by law the above limitations or exclusions may not apply to you. If it is determined by a court of competent jurisdiction that a certain provision of this limited warranty does not apply, such determination shall not affect any other provision of this limited warranty and all other provisions shall remain in full effect.

THIS IS THE ONLY WARRANTY MADE BY FOX ON ITS SUSPENSION PRODUCTS AND COMPONENTS, AND THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION HEREIN. ANY WARRANTIES THAT MAY OTHERWISE BE IMPLIED BY LAW INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED.

## SHOCKS NEED LOVE TOO

### SERVICE & UPGRADES

Have your FOX serviced or upgraded by FOX technicians. Call our Off-Road and Truck Service Center at 619.768.1800 to go over the service and upgrade options available for your shocks. Once you've setup your service or upgrades you will receive a return authorization number and shipping instructions.

### SERVICE INTERVALS

- 100% street use: every 50,000 miles
- 50% street / 50% offroad use: every 10,000 miles

### SERVICE MENUS & PRICING

Please visit [ridefox.com/orservice](http://ridefox.com/orservice).

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© FOX FACTORY, INC. // 1.800.FOX.SHOX or 1.619.768.1800  
750 VERNON WAY SUITE 101, EL CAJON, CA 92020 USA

SALES: [orsales@ridefox.com](mailto:orsales@ridefox.com)

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