



# UPPER CLASS SERIES GRILLE MAIN GRILLE - #51966 **2018-2019 TOYOTA TUNDRA W/**

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# **PARTS INCLUDED**

(1) - Upper Class Series Main Grille - Part # 51966,

# HARDWARE INCLUDED

- (1) Top Mounting Plate
- (1) Logo Mounting Plate
- (3) Main Grille Bottom Brackets
- (1) Driver Side Overlay Bracket
- (1) Passenger Side Overlay Bracket
- (6) #10 x 1" Stainless Steel Screws
- (10) #8 x 3/4" Stainless Steel Screws
- (6) #8 Extruded "U" Nuts
- (6) #8 Flat Nuts
- (17) #10-32 Nylon Nuts
- (4) #10 x 3/8" Black Spacers
- (1) Wire Holder Plate
- (4) 10-32 x 0.625 Button Head Allen Cap Screws
- (4) #10 Flat Stainless Steel Washers

# TOOLS REQUIRED

- **Prying Tool**
- Various Socket Set
- Various Wrenches Ratchet Tool
- Ratchet Extensions
- Clamps Tie Wraps
- Blanket or Pad

# **INSTALLATION GUIDE**

# **BEFORE YOU BEGIN**

PLEASE READ AND UNDERSTAND ALL INSTRUCTIONS BEFORE INSTALLATION. Auto makers offer varied models to each vehicle and occasionally manufacture more than one body style of the same model. To assure your part is correct; our tech department can be contacted at tech@trexbillet.com to verify fitment and assist with technical questions. All other inquires can be directed to info@trexbillet.com. In the event you do not have internet access please call 1-800-287-5900.

- \* APPLICATION MODELS VARY. WE RECOMMEND TO VERIFY FITMENT BEFORE BEGINNING INSTALLATION PROCESS.
- \* IMAGES FEATURED IN THE INSTRUCTION DOCUMENTS MAY NOT ALWAYS EXACTLY MATCH YOUR MODEL OR PART.

# START HERE

## LED LIGHT BRACKET INSTALLATION

Turn off engine, chalk tires with stop block, open the hood and disconnect battery

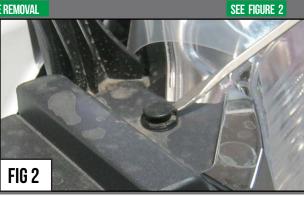


1) Open and unbox the T-REX package. Sort out all components and hardware

#### FACTORY GRILLE REMOVAL STEP 2

2) It is now time to remove the factory grille from the vehicle.

From underneath the hood, begin grille removal by prying free all the Push Pin plastic fasteners from the factory grille located near the head lamps with a prying tool



# PAGE

# **GRILLE REMOVAL - CONTINUED**

**MAIN GRILLE - #51966** 

# 2018-2019 TOYOTA TUNDRA W/TSS







#### STEP 3

# **SEE FIGURE 3**

3) Access TSS (Toyota Safety Sense) power harness and disconnect

#### STEP 4

4) Remove four 10mm bolts that secures plastic radiator cover. Remove and set aside plastic radiator cover to be re-installed.



# STEP 5

# SEE FIGURES 5 & 6

5)Pull the top of the factory grille slightly forward a couple Of inches, reach down behind the factory grille with a long flat screwdriver and press on two plastic latches located on the bottom and ends of the factory grille (as seen in Figure 4) while pulling the bottom of the factory grille forward, remove the factory grille from the vehicle.

## STEP 6

6) Place the factory grille face down on a padded surface (take special care to protect the chrome factory shell). On the back of the grille assembly use a Phillips screwdriver to remove two Phillips screws from each side of the factory grille as seen in Figure 7.

# STEP 7

# **SEE FIGURE 8**

7) Now remove the black plastic grille insert from the factory grille shell by unlatching thirteen plastic latches around the grille with a prying tool and remove the black plastic grille insert (Fig 8).

With a pair of dikes or snipping pliers break off all thirteen clips from chrome plastic frame, this will allow your billet grille to sit flush with the chrome frame during installation as seen in Figure 8 & 9.

# **GRILLE DISASSEMBLY - CONTINUED**

# **GRILLE DISASSEMBLY PROCEDURE**







# **GRILLE DISASSEMBLY - CONTINUED**

# **MAIN GRILLE - #51966**

# 2018-2019 TOYOTA TUNDRA W/TSS



#### STEP 8

## SEE FIGURE 10

8) Remove the TSS Sensor Module and harness from factory grille. Note the TOP side orientation of the sensor.



## STEP 9

# SEE FIGURE 11

9) Remove harness and connector from factory grille tabs

# **GRILLE ASSEMBLY START**

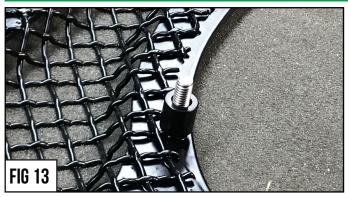


## STEP 10

## **SEE FIGURE 12**

10) Install factory TSS Sensor Module to provided Logo Mounting Plate. Use supplied (4) #10 screws, washers, and lock nuts.

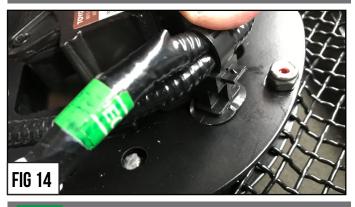
Tighten and torque to 30 in-lbs.



#### STEP 11

## **SEE FIGURE 13**

11) Install the supplied 4  $\pm$ 10 x 3/8" Black Spacers to the mounting provisions on the new T-REX Grille as seen in Figure 13.



#### STEP 12

# **SEE FIGURE 14**

12) Put into place the TSS assembled with the Logo Mounting Plate and install onto T-REX Grille. Use (4) #10 lock nuts and tighten & torque to 30 in-lbs. Note orientation of TOP side of module.

# **GRILLE ASSEMBLY - CONTINUED**



#### STEP 13

# **SEE FIGURE 15**

13) Connect harness to module, press harness cable mounts into position and wiring harness loom into the bracket mounts as seen in Figures #14 & #15.

# **GRILLE ASSEMBLY - CONTINUED**

# **MAIN GRILLE - #51966**

# 2018-2019 TOYOTA TUNDRA W/TSS



# STEP 14 SEE FIGURE 16

14) Assemble provided Top Mounting Plate to T-REX Grille using the pre-determined mounting provisions. Position Top Mounting Plate mounting brackets over the threaded studs. Tighten with nylon lock nuts



# STEP 16

## SEE FIGURE 18

16) Insert the #8 screw through the four side welded brackets and tighten (Fig 10). Place the passenger and driver overlay brackets below the top plate. Use your factory screw to tighten.



#### **STEP 18**

# **SEE FIGURE 20**

18) Drill a hole through each hole on the extension bracket through the factory grille shell. (6 holes).

# **GRILLE ASSEMBLY - CONTINUED**



# STEP 15

#### SEE FIGURE 17

15) Fix the T-REX Grille to the back of factory shell, drill 3/16" holes through the side welded brackets (on the mesh grille) and through the shell plastic as seen in Figure #17 & #18. (4 holes).



# STEP 17

## **SEE FIGURE 19**

17) Place the three extensions brackets on the bottom portion of the shell, inserting the brackets on top the three threaded studs on the back of the mesh grille. (Two will sit on the passenger side of the shell lip and one on the driver side.



#### STEP 19

# **SEE FIGURE 21**

19) Insert a #8 screw through each hole drilled on the previous step (6 holes), insert a flat nut on the opposite, tighten the screws.

# **GRILLE ASSEMBLY - CONTINUED**

# **MAIN GRILLE - #51966**

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#### STEP 20

#### SEE FIGURE 22

20) Install a nylon lock nut onto each of the three threaded studs to secure the extension brackets to the new T-REX Grille.



## **STEPS 22 & 23**

# **SEE FIGURE 24**

22) Place assembled T-REX Grille back onto the vehicle opening by clipping on the bottom to the vehicle then clip the top of plastic chrome frame.

23) At this point, install the T-REX Grille LED Light Power Wiring Harness and route towards battery.



## STEP 26

# **SEE FIGURE 26**

26) Re-install the TSS (Tundra) Access Panel.

# **GRILLE INSTALL - COMPLETE**



#### STEP 21

# **SEE FIGURE 23**

21) On your vehicle unscrew and flip both horns located on the opening. (This will give access to the LED light).

# **GRILLE INSTALL START**



## STEPS 24 & 25

## **SEE FIGURE 25**

24) Now to secure the Top Mounting Plate in the reverse order that it was removed. Insert (6) #10 screws where you first removed the fasteners and the bolts.

25) Plug the TSS Power Harness back in.



# STEP 27

# SEE FIGURE 27

27) Reconnect battery terminals. Install Complete.

Carefully inspect your work and make certain all components have been installed and align correctly as factory fitment.



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# T-REX PRODUCT WARRANTY

#### T-REX PRODUCT WARRANTY

T-REX warrants its grille products to be free from defects in material and workmanship for the lifetime of the grille. T-REX warrants the finish of its grille products for a 3 year period beginning at the time of sale to the end user. These warranties are limited warranties and do not cover abuse, modification or improper installation nor do they cover finish failure caused by caustic cleaning agents, road salts or other chemicals. T-REX reserves the right to repair or replace a defective product at its sole discretion. Any T-REX product must be returned to T-REX for warranty consideration and must be returned at the customer's expense. In the event that the product is deemed to be defective, the repaired or replaced item will be returned via a surface shipping method to the customer at T-REX expense. No provision is made for any labor, rental car or other costs incurred by the failure of its products.

# LED LIGHTING EQUIPMENT INSTALLATION / DISCLAIMER

## WARNING

PLEASE CONSULT YOUR LOCAL AUTOMOTIVE ELECTRICAL PROFESSIONAL FOR INSTALLATION SERVICES AND ADVICE. ZROADZ IS ONLY EQUIPPED TO PROVIDE BASIC TECHNICAL ASSISTANCE DUE TO THE DIVERSITY OF VEHICLES, VEHICLE OPTIONS & MODIFICATIONS AND LIGHTING CONFIGURATION OPTIONS AVAILABLE.

ZROADZ cannot be held liable due to improper component installation and / or faulty wiring.

#### **GENERAL GUIDELINES**

LED Lights & LED Light Bars operate at relatively high currents and should only be installed by qualified personnel with experience in Switched / relayed high draw DC Circuits.

- Light Bars are designed for use only with standard 12v DC power systems Light Bars are for OFF-ROAD USE ONLY. Check your local laws & regulations regarding vehicle mounted lights.
- Some Light Bars are equipped with waterproof connectors while others are simply pig-tailed
- Red Wires = POSITIVE | Black Wires = NEGATIVE
- ALWAYS install your lights on a fused circuit. Basic fusing guidelines: maximum 5A for every 10" of LED Light Bar.

# GENERAL USE, INSTALL AND ADJUSTMENT TIPS

NOTE 1: ZROADZ LED Light Bars themselves are for OFF-ROAD USE ONLY.

NOTE 2: Light Bars depending on the configuration of your vehicle and its options and/or modifications may need to be adjusted for appropriate beam projection. To adjust the angle of your light bars simply loosen the mounting hardware on either side of each Light Bar, rotate the Light Bar to adjust the angle, then tighten the hardware once the desired angle is achieved (please be careful not to over-tighten the mounting hardware or scratch the protective powder-coat finish). It is best to adjust the angle with the vehicle on level ground with the lights facing a wall, garage door or other solid barrier at a distance of approximately 25-30 feet.

NOTE 3: Please consult a qualified automotive electrical professional for light bar wiring installation.

NOTE 4: An optional universal wiring harness (part# Z390020S-A) is also available that includes high-heat & oil/fuel resistant wires, waterproof connector, 12v relay, 12v rocker switch, in-line fuse holder. Our universal wiring harness significantly expedites the installation process but is not a vehicles specific "Plug & Play" product and does not eliminate the need for a professional installation.

Please contact your local ZROADZ dealer for more information or visit www.zroadz.com.

# PRODUCT CARE INFORMATION

#### PRODUCT CARE INFORMATION

Wash regularly as you would when caring for your vehicles. Never use dish soap. Never leave wet water spots as that may leave a blemish.

# MATTE BLACK FINISH

Paint warranty applies to defects in material and / or workmanship, it does not cover the matte finish surface appearance. To enjoy the matte appearance for many years to come, please follow these owner care and maintenance tips. Get a no-shine matte car wash soap that uses no fillers, no silicone, and won't strip your matte paint of its layer of protection. Do not use wax, detail spray, armorall®, or any products made for normal paint. Use only products specifically developed for matte finish paint. Do not use products that are even mildly abrasive, such as polishes, glazes, or rubbing compounds. Do not use mechanical cleaners or polishers. Do not use terry cloth, cloth, or paper towels. Do not rub the finish vigorously, this will burnish the paint finish, causing a permanent shiny spot. Shiny spots cannot be removed.

Do not use commercial car wash facilities or their shine enhancement products. Most car wash brushes, large mechanized "towels", and shine enhancement products can damage matte paint.

Remove foreign substances such as insect remains, tar, and road debris using a soft applicator and a mild solvent; saturate and soak area before cleaning - rub lightly.

Hand-wash with a soft wash mitt and mild cleaning product safe for matte paint. Use microfiber cleaning cloths with alcohol-based window cleaner for basic surface clean-up.

# GLOSS BLACK FINISH

T-REX with Gloss Black Powder Coated Finish may be washed regularly as you would when caring for your vehicles finish using soap and water. T-REX should be waxed at the same time that you wax the vehicle. As a general rule, anything you use to clean your vehicles painted surfaces can be used to clean and maintain your T-REX grille. A Gloss powder Coated Finish can be cared for in the same fashion that you would care for your vehicles factory paint job. Never leave wet water spots as that may leave a blemish.