



# BILLET GRILL MAIN GRILLE - #20571 / 20571B 2018 F-150

### **PARTS INCLUDED**

(1) Billet - 2 PC Main Polished - Part #20571 (1) Billet - 2 PC Main Black - Part #20571B

### **HARDWARE INCLUDED**

(12) Brackets Clamps (12) 10-32 x 10.625 Button Head Allen Cap Screws (12) 10/32" Nylon Lock Nuts (4) #8 U-Nuts (4) #8 x 3/4" SS Black Screws



### \* Image of Hardware

### **TOOLS REQUIRED**

- Screwdriver set (Flat Head)
- Torx Driver
- Torx Bit T-40
- 10mm, 8mm, 7mm Sockets
- Ratchet Tool
- 1/2" Plastic Spatula
- Pocket Knife

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### **GRILLE REMOVAL & GRILLE INSTALLATION GUIDE**

#### **START HERE**

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.

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

#### **GRILLE REMOVAL** STEP 1

### PRO TIP:

1) Turn off engine and chalk tires with stop block. Open Hood. 1. Disconnect negative battery terminal.



**INSERT TYPE INSTALL** STEP 2

SEE FIGURE 1 & 2

2) Identify & locate plastic clips securing plastic shroud engine cover. Carefully pry off to remove and then set aside for reinstallation later. Remove plastic shroud and then set aside for reinstallation later.

#### STEP 3

3) Disconnect active grille harness.

Before you begin, use "3M Painters Tape" to apply a protective guard around the work areas. Attend to the fender and bumper valance. This will help protect the paint and finish of your vehicle



### **GRILLE REMOVAL - CONTINUED**

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5) Prepare to remove Active Grille Shutter Assembly from

the vehicle disconnecting the screws from the top (Fig. 6)

#### STEP 5

& bottom (Fig. 7).

#### SEE FIGURES 6 & 7

4) Remove Plastic Bumper Cap Fascia as seen in Fig. 5 .You may need to remove wheel arch moulding, if equipped.You will need to coax panel out and off catch tabs to remove completely.



#### STEPS 6 & 7

STEP 4

SEE FIGURES 8 & 9

**SEE FIGURES 4 & 5** 

6) Grille Assembly should now be free to remove from vehicle.

7) Place grille component on table & remove small plastic spacer on outside of surround.

#### STEP 8

SEE FIGURE 10

8) Remove the protective Lower Plastic Shroud.

#### STEP 9

SEE FIGURE 12

9) With the vehicle's factory grille separated from the Active Shutter Assembly, place grille face down on a soft cushioned surface and prepare for Grille Insert Installation.

STEP 10

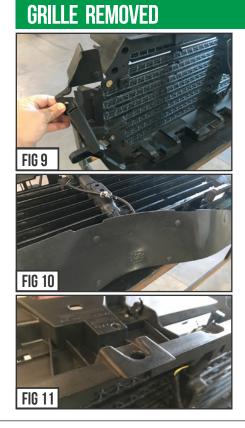
SEE FIGURE 13

10) Identify the factory grille plastic pillars. Mark the vertical pillars on both the top & bottom grill openings.



**GRILLE INSERT INSTALLATION CONTINUED** 

### PAGE 2



### **GRILLE INSERT SETUP**



### **GRILLE INSERT INSTALLATION**

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**STEP 12** 



#### STEP 11 MAIN GRILLE - INSTALLATION

SEE FIGURES 14 - 16

11) Carefully remove each pillar so that the lower and grille openings are clear. Shears, Metal Cutters, or a Cut Off Wheel will do the trick nicely. It should come out as 1 piece as seen in Fig. 16.



SEE FIGURE 16

12) Remove the cut out portions and discard.





#### STEP 13

#### SEE FIGURES 17 - 18

13) With both the Grille's Top & Bottom Opening cut out & removed, carefully touch up the OEM Factory Grille Shell by removing all debri and remaing plastic disc grinder or light sand paper. Be careful to only remove unsightly left over material as needed.

### **GRILLE ASSEMBLY START**

#### STEP 14

#### SEE FIGURE 19

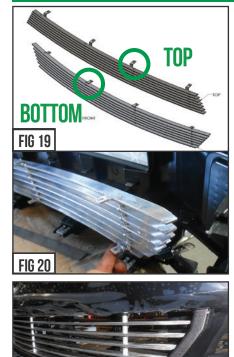
14) Layout the provided TREX Billet Grille 2 pieces. Identify the Top Piece by the angled "in" edge and elevated mounting tabs. Identify the Bottom Piece by the angled "out" edge and flate leveled mounting tabs.

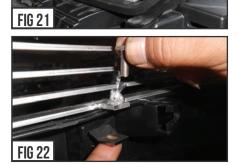
#### STEP 15

SEE FIGURES 20 - 22

15) Put into place the provided TREX Lower Grille Insert into the Vehicle's Lower Grille Opening. Check for proper center alignment and then clamp or pin into position.

### **GRILLE ASSEMBLY START**





### PAGE 3

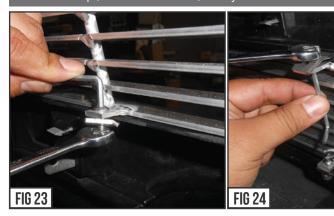
### **GRILLE ASSEMBLY CONTINUED**

## BILLET GRILLE MAIN GRILLE - #20571 / 20571B 2018 F-150

#### STEP 16 LOWER GRILLE - INSERT INSTALLATION

SEE FIGURES 23 - 24

16) When you are satisfied with the new T-REX Grille alignment & position within the Vehicle's Grille Opening, secure the Grille Insert into place by using the provided Bracket Clamps, Button Head Screws, and Nylon Nuts.

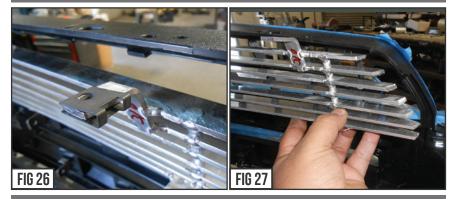


### ASSEMBLY CONTINUED - UPPER GRILLE

#### STEP 18 UPPER GRILLE - INSERT INSTALLATION

#### SEE FIGURES 26 - 27

18) Take the (4) provided extruded "U-Nuts" and install onto the pre-determined TREX Upper Grille's elevated Mounting Tabs. Make sure the threads are on the bottom side.



#### STEP 20

20) Merry the T-REX Upper Grille Insert with the OEM Grille Shell by clamping down with the (4) lower Mounting points. Using the same procedure as in Step 16, use the remaining Bracket Clamps, Button Head Screws, and Nylon Nuts to secure the Grille Insert into place.

#### STEP 21

SEE FIGURES 28 - 29

21) When you are satisfied with the new T-REX Grille alignment & position within the Vehicle's Grille Opening, place assembled Grille Shell onto Active Shutter Unit. It should be put into place just as it was removed and align properly with TREX Upper Grille Insert elevated mounting tabs. Use provided Button Head Screws and tighten down onto mounting tabs and "U-Nuts"

### **GRILLE ASSEMBLY ASSEMBLY - COMPLETE**

#### STE

#### STEP 17

**SEE FIGURE 25** 

17) There are (8) Lower Grille Mounting Points;(4) on the top and (4) on the bottom.



#### STEP 19

#### SEE FIGURE 27

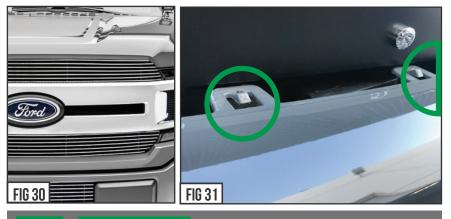
19) Carefully put into place the provided TREX Upper Grille Insert into the Vehicle's Upper Grille Opening. Check for proper center alignment and then clamp or pin into position.





### **GRILLE INSTALL START**

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STEP 22 **INSPECT YOUR WORK** 

Do one last final inspection on TREX Insert / Vehicle OEM Grille Shell components overall look, alignment, and install. Tighten it all up.

22) It is now time to re-install assembled grille back onto vehicle. Using the reverse removal procedure, carefully put back into position and fasten as necassary.





#### STEP 24 & 25

SEE FIGURE 33 & 34

24) Secure sides of Vehicle's Plastic Bumper Cap Fascia back to Vehicle's Front Fender. 25) Install wheel arch moulding back to Vehicle's Front Fender.

#### STEP 27

27) Reconnect negative battery terminal. Carefully close hood & check for clearance.

### **INSPECT YOUR WORK**

#### STEP 28

28) At this point, you want to look over your work and examine the gap alignments around all edges and in between the new T-REX Grille and the vehicle components and body lines. Carefully close the hood for a complete visual inspection. 29) Stand back and enjoy your new custom grille.



23) Re-Install the Vehicle's Plastic Bumper Cap Fascia. fastened into lower brackets. NOTE you may have to pull the inside clip clasp up slightly for the clip to engage.



26) Re-Install top engine plastic shroud cover back onto core support.

**SEE FIGURE 35** 

STEP 26



### **INSTALLATION COMPLETE**

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### LED LIGHTING EQUIPMENT INSTALLAT

#### 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 ADJUSMENT TIPS**

NOTE 1: T-Rex Torch Series Grilles (with LED Light Bars installed), and LED Light Bars themselves are for OFF-ROAD USE ONLY.

NOTE 2: Light Bars in Torch Series Grilles are installed flush with the grille from the factory. This may or may not be the ideal angle for each light depending on the configuration of your vehicle and its options and/or modifications. 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# 639HAR1) is also available that includes high-heat & oil/fuel resistant wires, waterproof connector, 12v relay, 12v rocker switch, inline 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.

### GRILLE CARE INFORMATION

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T-REX grilles are finest in the industry but do require normal care. Wash regularly as you would when caring for your vehicles. Never use dish soap.

#### POLISHED FINISH

T-REX polished grilles should be waxed at the same time that you wax the vehicle and can be cleaned with soap and water. A polished finish can be cared for in the same fashion that would care for your vehicles factory chrome. Never leave wet water spots as that may leave a blemish.

#### MATTE BLACK FINISH

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 terrycloth, 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 Grilles 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 grilles 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.