

# YXZ 1000r Supercharger Installation Guide

## Application:

2016-2018 Yamaha YXZ 1000r

## Important Notes:

- Before installing your Agency Power Supercharger, please read the installation manual and verify that all items are present. If you are missing hardware or have any questions, please contact Agency Power at 1-(480) 921-7421 or email Sales@Agency-power.com
  - **VERY IMPORTANT!! The Supercharger unit DOES NOT come pre-filled with oil! You must add 100ml of oil before starting the vehicle! Failure to do so will void your warranty and cause damage to the supercharger.**
  - This Supercharger system requires your Yamaha YXZ's ECU to be flashed before starting/operating the vehicle. Please see page #4 for more information regarding this process.
- 
- Professional Installation recommended
  - Estimated Install time 4-5 Hours



Description	Qty	Packed by
Supercharger Compressor With Pre-Installed Outlet Flange, Mount and Idler Bracket	1	
Idler Tensioner Part #419125	1	
6 Rib Serpentine Belt A-305K6	1	
Boost Solenoid	1	
Clamp-On Breather Filter - 5/8"	1	
Air Filter With Hose Clamp #44	1	
Air Filter Heat Shield	1	
Trident Manifold	1	
Bypass Valve With Pre-Installed Spacer 5 psi	1	
Boost Solenoid Adapter Harness	1	
Straight Coupler - 2" x 3"	3	
Reducer Coupler - 2" x 2.5"	1	
90 Degree Reducer Elbow - 2.25" x 2.5"	2	
Crank Pulley	1	
Crank Pulley Nut	1	
Crank Pulley Adapter	1	
Frame Half Mount	1	
Crank Oil Seal - 30 x 40 x 7	1	
O-Ring - 113 Buna	1	
O-Ring - 127 Buna	1	
O-Ring - 229 Buna	1	
O-Ring - 230 Buna	1	
5/8" Rubber Valve Cover Caps	2	
Bypass Valve / Charge Pipe - 2.5"	1	
Intake Tube - 2.5"	1	
Hose Clamps #8	7	
Hose Clamps #32	9	
Hose Clamps #36	2	
Hose Clamps #40	3	

Barbed Plastic Vacuum Tee - 3/16"x 3/16" x 3/16"	1	
Vacuum Hose - 5/32" - 13" Length	1	
Vacuum Hose - 5/32" - 40" Length	1	
Vacuum Hose - 5/32" - 19" Length	1	
Vacuum Hose - 1/8" - 1 3/4" Length	1	
Stainless Steel Braided Oil Lines - 5/8" - 25 1/4" Length	1	
Stainless Steel Braided Oil Lines - 5/8" - 19 1/2" Length	1	
Zip Ties - 4"	10	
Stainless Socket Head Cap Screw - M5 - 0.8mm x 10mm	1	
Stainless Flanged Hex Bolt - M6 - 1mm x 16mm	8	
Stainless Bolt - M6 - 1mm x 30mm	1	
Stainless Flat Washers - M6	3	
Stainless Nylon-Insert Locknut - M6 x 1mm	3	
Stainless Flanged Hex Bolt - M8 - 1.25mm x 25mm	7	
Stainless Socket Head Bolt - M8 - 1.25mm x 10mm	2	
Zinc-Plated Steel Hex Nut - M8 - 1.25mm	4	
Stainless Flanged Hex Bolt - M10 - 1.5mm x 60mm	1	
Zinc Bolt - M12 - 1.25mm x 100mm	1	
Stainless Flat Washer - M12	1	
100ML Oil for Compressor	1	

**EQUIPMENT AND TOOLS RECOMMENDED FOR INTALL:**

- 3/8" & 1/4" and 1/2" Ratchet
- 3/8" & 1/4" Extensions (6")
- 8mm Socket
- 10mm Socket
- 10mm Wrench
- 12mm Socket
- 13mm Socket
- 19mm Socket 1/2"
- Large 19mm Wrench
- Breaker Bar
- T30 Torx Bit Socket
- 4mm Allen Wrench
- 4mm Allen Socket Bit
- 10mm Allen Wrench
- Flat Head Screw Driver
- Diagonal Pliers
- Large Pliers
- Large Round Alignment Prybar
- Red Loctite Threadlocker
- Replacement Engine oil and Filter *(Please refer to your Yamaha YXZ owners manual for recommended oil type and amount required)*

**ECU Tuning**

The Agency Power Supercharger Kit for the Yamaha YXZ 1000r requires the ECU to be prograded prior to use. If you did not purchased the FTECU Flash cable (optional) you will need to ship your ECU to Agency Power, please fill out the information form below and attach with the ECU. If you have any questions please contact us 1-480-921-7422 M-F 9am-6pm MST

We recommend wrapping the ECU in bubble wrap and sending it in a small box. **PLEASE DO NOT** ship your ECU to us in an envelope or bubble mailer. We will not be held liable for damages caused from being improperly packaged.

**Please ship ECU to:**

1429 W. Scott Ave Gilbert, AZ 85233 USA



**PLEASE FILL OUT FORM AND INCLUDE WITH ECU**

FIRST NAME \_\_\_\_\_ YEAR \_\_\_\_\_

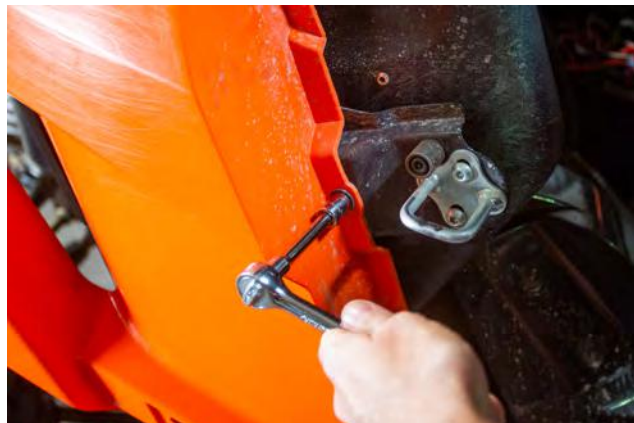
LAST NAME \_\_\_\_\_ MAKE \_\_\_\_\_

ORDER NUMBER \_\_\_\_\_ MODEL \_\_\_\_\_

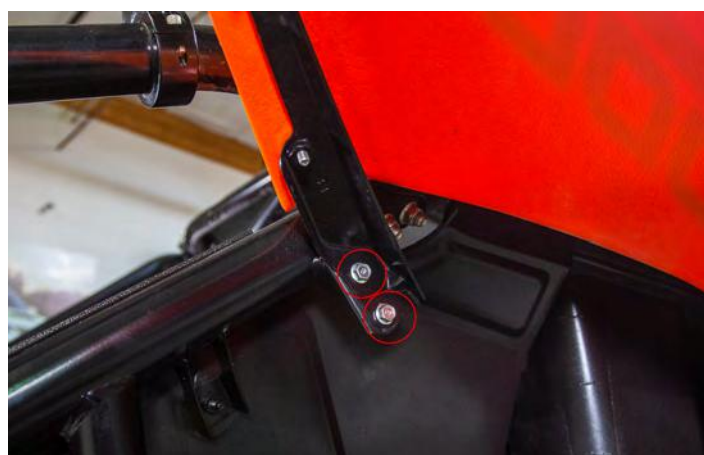
SECTION A - DISASSEMBLY | Removal of driver and passenger rear fenders



1. Remove the 2 bolts (4mm allen) on the outside of the fender



3. Open the door and remove the (2) bolts located on the inside of the door jam. (10mm Socket)



2. Remove the (2) fender bracket bolts (10mm socket)  
These bolts are located on the underside of the fender.  
The bracket will remain attached to the fender.

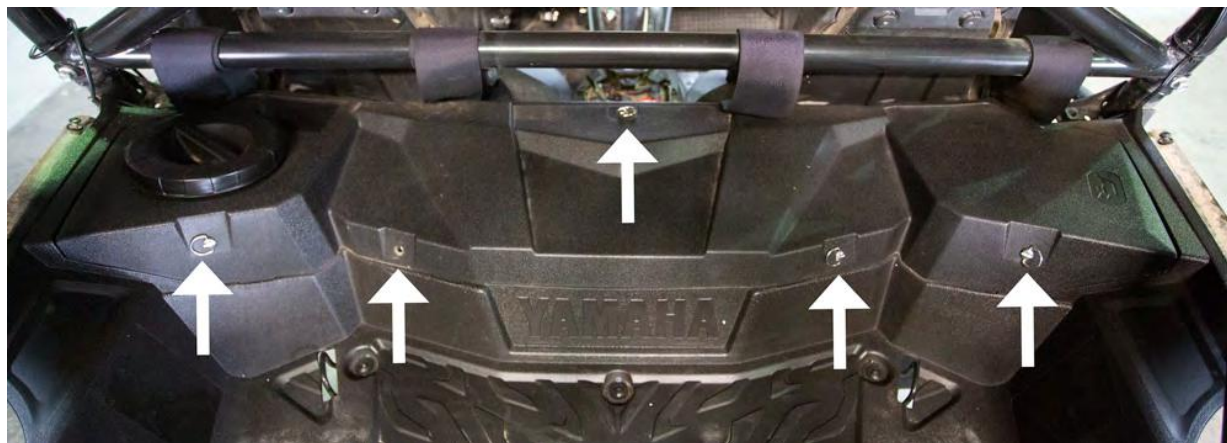


4. Use a flat head screw driver to remove the (2) plastic clips.

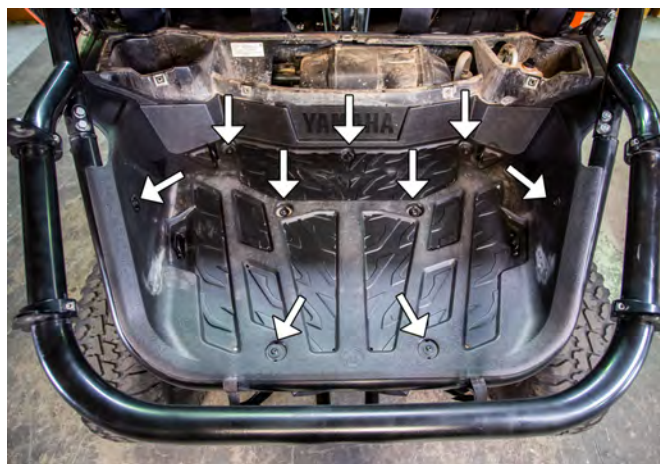


5. Remove fender from vehicle. Repeat steps 1-5 to remove the driver side fender.

SECTION A - DISASSEMBLY | Removal of rear cargo bed



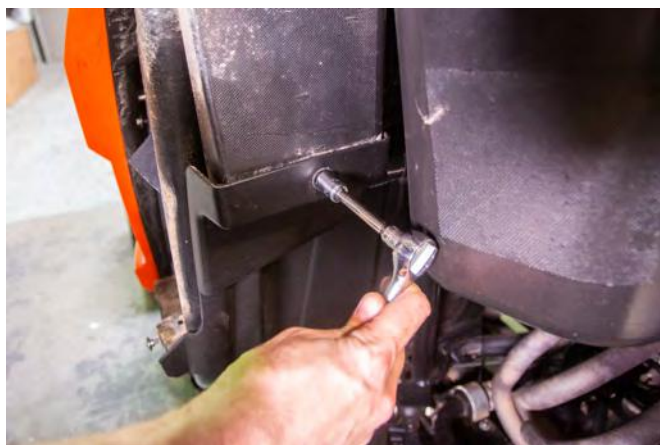
6. Remove the (5) 1/4 turn quick fasteners on the cargo bed cover



8. Remove the (9) screws located on the floor of the cargo bed. (Torx T30 Bit)



7. Remove cargo bed cover from vehicle.



9. Remove the bolt on the back of the driver side firewall (10mm socket)

# Yamaha YXZ 1000r Supercharger Kit



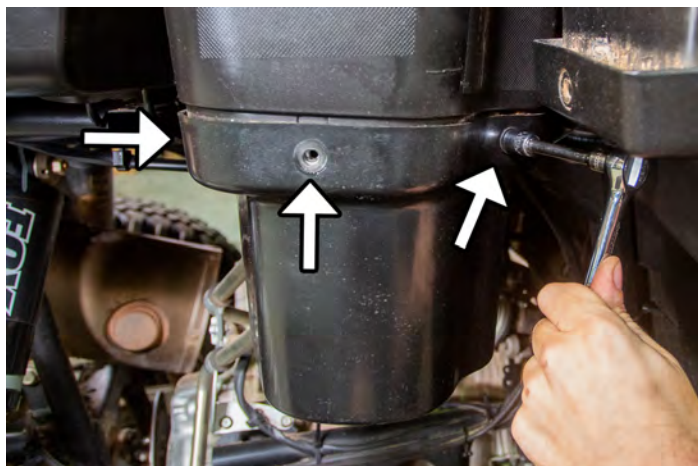
## SECTION A - DISASSEMBLY | Removal of rear cargo bed



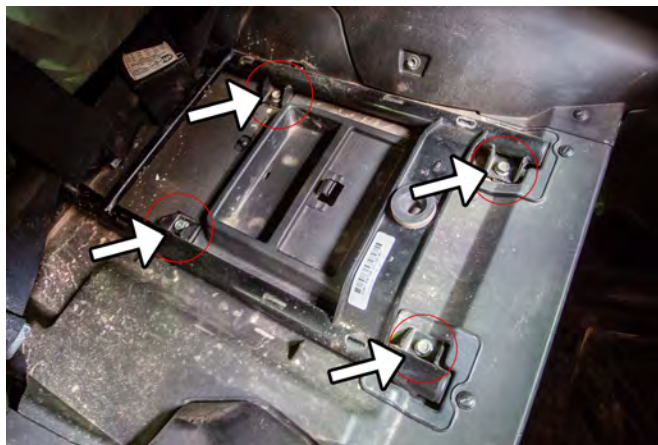
10. Remove the bolt on the back of the Passenger side firewall (10mm socket)



13. Remove the passenger seat cushion by lifting up



11. Remove the (3) bolts on the oil reservoir cover (10mm socket)



14. Remove the (4) seat bracket bolts (12mm Socket)



12. Remove the oil reservoir cover from the vehicle.

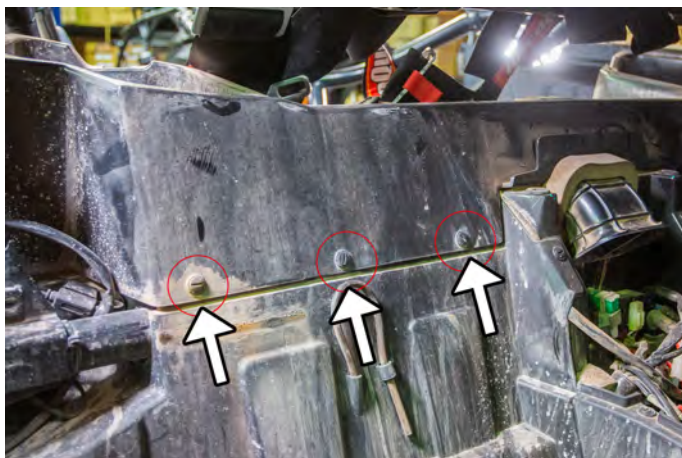


15. Remove the Passenger seat from the vehicle.

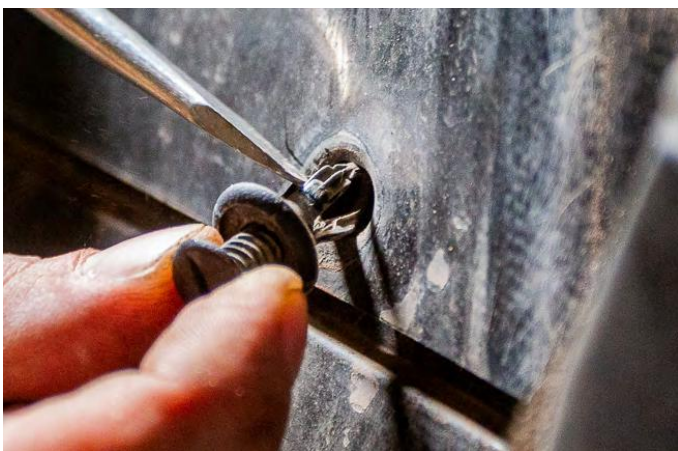


## Yamaha YXZ 1000r Supercharger Kit

### SECTION A - DISASSEMBLY | Removal of rear cargo bed



16. Use a flat head screw driver to remove the (6) plastic clips on back of the firewall. To access the other (3) clips not shown in image. Slide the driver seat forward



17. Remove the cargo bed from the vehicle by pushing inward and lifting up at one side. If needed have someone assist during this step.



SECTION A - DISASSEMBLY | Removal of Air Intake housing and vent lines



18. Remove the bolt (10mm socket) located on the back of the air-box between the driver and passenger seats.



20. Remove the (2) air intake support bracket bolts located on the top of the bed support frame. (10mm socket)



19. Remove the bolt on the front of the airbox bracket (10mm socket)



21. Remove the intake support bracket from the vehicle.



22. Use pliers to slide off clamp and remove rubber vent hose from oil catch bottle.

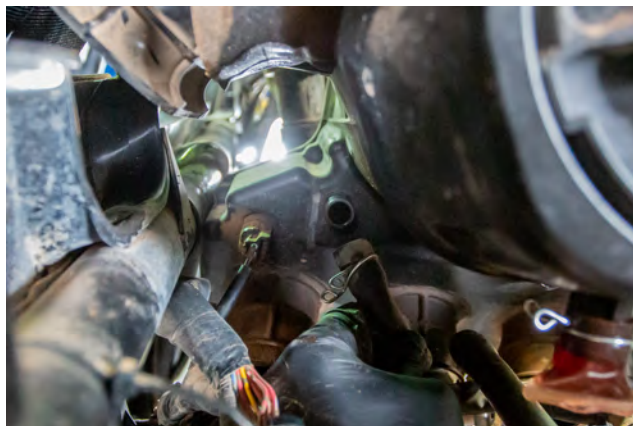
SECTION A - DISASSEMBLY | Removal of Air Intake housing and vent lines



23. Remove the rubber vent hose from bottom of the intake housing.



24. Loosen the (3) hose clamps that connect the air housing to the throttle bodies. (4mm allen)



25. partially lift up air intake housing to gain access to another rubber vent hose and electrical sensor located on the back side of the intake housing

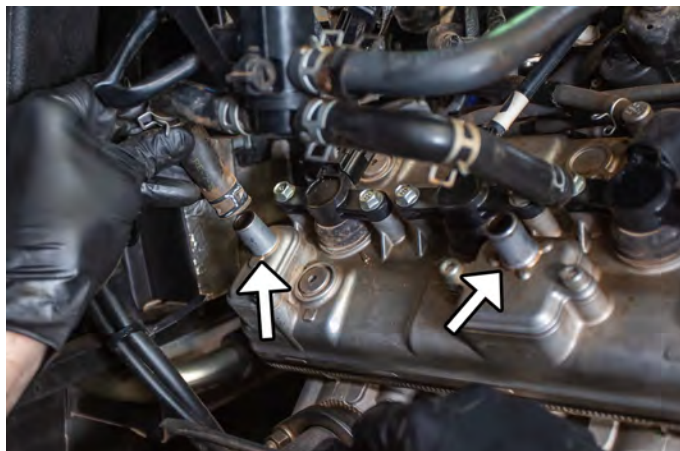


26. Disconnect the air temp sensor



27. Remove the intake housing from the vehicle.

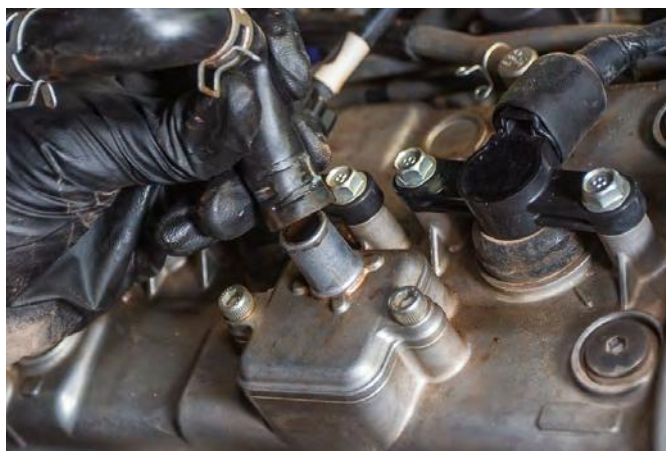
SECTION A - DISASSEMBLY | Removal of Air Intake housing and vent/oil lines |



28. Remove the two rubber vent hoses from the valve cover



30. Remove solenoid valve and rubber vent hoses from vehicle.



31. Drain engine oil from oil reservoir by removing oil drain bolt (12mm socket) Loosen oil cap slightly to help oil drain quicker



29. Disconnect the solenoid sensor



32. When oil is finished draining, replace oil drain bolt and tighten.

## Yamaha YXZ 1000r Supercharger Kit

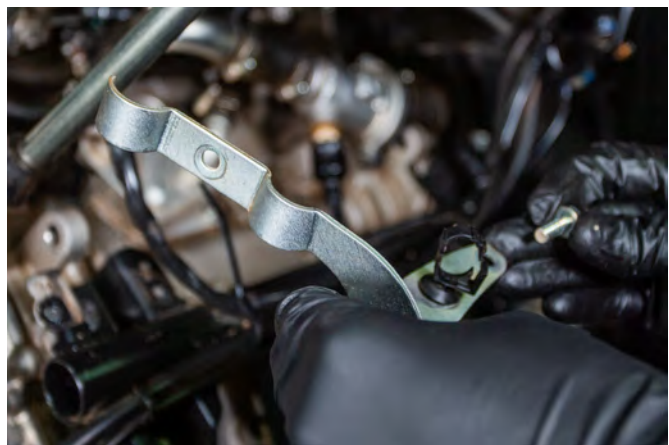
### SECTION A - DISASSEMBLY | Removal of oil lines



**33.** Remove the (3) oil line bracket bolts and remove wires from plastic clips (10mm Socket)



**35.** Use pliers to slide back the clamps on the oil lines. Repeat this for both upper and lower oil lines.



**34.** Remove oil line bracket from vehicle



**36.** Remove both upper and lower oil lines from the vehicle

## Yamaha YXZ 1000r Supercharger Kit

### SECTION B - ASSEMBLY Installation of braided oil lines.



**37.** Install included (2) Stainless Steel Braided Oil Lines 25 ¼" & 19 ½" with (4) #4 hose clamps.



**38.** Use the longer 25 ¼" Stainless Steel Braided Oil Line for the lower oil line. Use Provided #4 worm drive clamps.



**39.** Use the short 19 ½" Stainless Steel Braided Oil Line for the upper oil line. Use Provided #4 worm drive clamps.

## Yamaha YXZ 1000r Supercharger Kit



### SECTION B - ASSEMBLY | Installation of Crank Pulley



40. Remove the (3) oil line bracket bolts and remove wires from plastic clips (10mm Socket)



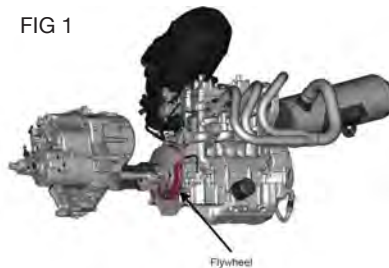
41. Remove the crank bolt cover using a 10mm Allen



42. Use a similar round alignment pry bar for the next step.



FIG 1



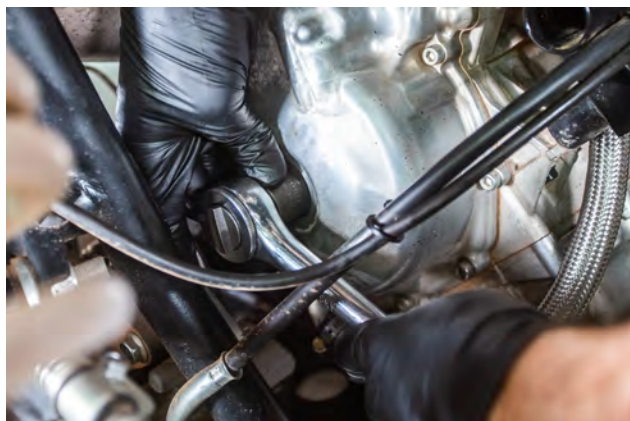
Flywheel

FIG 2



holes

43. Place the pry bar through one of the holes on the flywheel to stop the crank from spinning (**Fig 2**). Rotate the crank bolt slowly until the pry bar pins its self, locking the crank/flywheel from spinning.



44. Remove the crank bolt. (19mm socket) Use a breaker bar to assist with removal if necessary. If the crank spins with the bolt. Check that the pry bar is still in place.



45. Remove the crank bolt and large washer. These will not be reused for re-installation



46. Set the provided small o-ring into the groove of the crank pulley adapter.



47. Set the larger provided o-ring into the groove of the the crank pulley nut (threaded side)



48. Insert the crank pulley adapter through the crank pulley nut with new M12 1.25 x100 Crank Bolt and M12 Washer as shown above. NOTE: **Apply Loctite to the M12 Bolt**



49. Install the crank pulley adapter, crank pulley nut and M12 hardware. Thread both the crank nut and M12 bolt by hand to avoid cross threading. Do not fully tighten the M12 crank bolt yet.



50. Use a set of large pliers or crescent wrench to snug up the crank pulley nut. Make sure to not overtighten the crank pulley nut.

## Yamaha YXZ 1000r Supercharger Kit

# Agency Power

### SECTION B - ASSEMBLY | Installation of Crank Pulley



51. Tighten M12 bolt (19mm wrench) Because of the confined space a 19mm socket can not be utilized. Use a larger 19mm wrench or breaker bar that will provide excellent leverage.



52. Install Crank Pulley with the provided 6 M8x25mm Staninless Steel Flanged Bolts. NOTE: **Apply Loctite to M8x25mm hardware**



53. Tighten M8 bolts (10mm socket or open end wrench)

54. NOTE: Once completed with installation of the Crank Pulley make sure to **REMOVE PRY BAR FROM FLYWHEEL**



### SECTION B - ASSEMBLY | Installation of Supercharger Bracket



55. Cut zip ties and move wires away from Passenger side motor mount.





## Yamaha YXZ 1000r Supercharger Kit

### SECTION B - ASSEMBLY | Installation of Supercharger Bracket



56. Remove both upper and lower motor mount bolts. (12mm Socket)



57. Install supercharger bracket by reusing the following OEM hardware that was previously removed.

- (x2) OEM motor mount bolts (removed on step 56)
- (x2) OEM oil line bracket hardware (removed on step 33)

## Yamaha YXZ 1000r Supercharger Kit

### SECTION B - ASSEMBLY | Installation of Supercharger

**VERY IMPORTANT:** The Supercharger unit does not come pre-filled with oil.

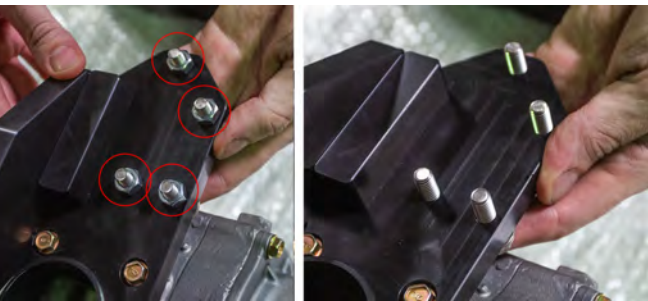
We ship the kit with individually filled bottles containing 100ml of oil that **MUST BE** added before operation!!

**FAILURE TO ADD OIL WILL DAMAGE THE SUPERCHARGER\*\*\***

Recommended oil: Mobil 1 Synthetic Gear Oil 75w-90



58. Remove oil drain bolt on supercharger and add 100ml of oil. Once filled replace bolt and tighten.



59. Remove the (x4) M8 Nuts on the supercharger assembly and set aside. These M8 nuts will not be used for installation and are only to hold the hardware in place during shipping.



60. Apply locktite thread-locker to the (x4) M8 Bolts on supercharger assembly



61. Install Supercharger assembly onto the supercharger bracket. (13mm socket & 13mm open end wrench)

# Yamaha YXZ 1000r Supercharger Kit



## SECTION B - ASSEMBLY | Installation of Trident Intake Manifold



62. Remove temp sensor from factory air box and install into the new trident intake manifold using supplied M5x10mm Stainless Steel Screw (Phillips screw driver & 4mm Allen)

64. Locate the rubber intake breather hose near the throttle body and cut the hose approximately 2 inches up from the 90 degree bend that is located near the bottom of the throttle body. Cut the hose in the portion that is straight. See images above for reference.



63. Attach couplers to Trident Manifold and position evenly. Use supplied hose clamps. Tighten the clamps to manifold and keep the remaining (3) Clamps on the throttlebody side loose. (8mm socket or 8mm nut driver)



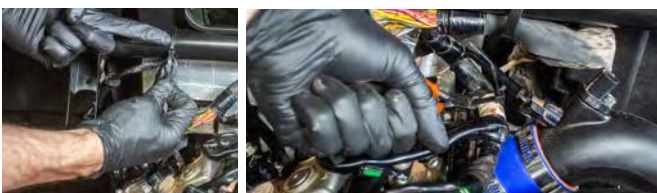
65. Attach the trimmed rubber vent hose to port located on the bottom of the trident manifold. Attach using #4 hose clamp.



SECTION B - ASSEMBLY | Installation of Trident Intake Manifold



66. Attach trident manifold to throttle bodies and tighten hose clamps. Make sure couplers are fully seated onto throttle bodies. (8mm socket or 8mm nut driver)



67. Cut the zip ties on the engine wiring harness and maneuver the wiring until the temp sensor plug will reach the temp sensor located on the top of the trident manifold.



68. Plug-in the temp sensor

SECTION B - ASSEMBLY | Installation of charge pipe and bypass valve



69. Install the Bypass valve onto the flange of the charge pipe. Make sure the o-ring is properly seated between the valve and flange. Attach using provided clamp. Use 4mm allen to snug v-band clamp. Do not fully tighten yet.



**NOTE:** The Bypass valve has been modified to work specifically for 5 psi of boost. Please make sure the valve is fully turned clockwise to the hardest setting before operating the vehicle.

# Yamaha YXZ 1000r Supercharger Kit



## SECTION B - ASSEMBLY | Installation of charge pipe and bypass valve



70. Install charge pipe to the supercharger outlet and trident manifold. Use the supplied 8x10mm stainless steel bolt to attach the charge pipe support bracket to the existing mounting tab located below the supercharger outlet.

## SECTION B - ASSEMBLY | Installation of High Flow Intake & Shield



71. Install the 90 degree coupler to inlet of the supercharger. Use provided hose clamps and snug up the clamp on the inlet. Do not fully tighten yet.



72. Place the intake pipe into the 90 degree coupler. (fig 1) Line up the holes on the intake bracket to the existing holes located on the YXZ's center brace (fig 2) use the supplied (2x) M6 Screws and (2) M6 nylon locking nuts hardware to bolt the intake in place. (fig 3)



# Yamaha YXZ 1000r Supercharger Kit



## SECTION B - ASSEMBLY | Installation of High Flow Intake & Shield



73. Tighten clamps on 90 degree coupler (8mm socket or 8mm nut driver)



74. Install aluminum shield and air filter onto the intake pipe.



75. Use the two rubber block off caps and #8 hose clamps to block off the two open ports on the valve cover.

## SECTION B - ASSEMBLY | Installation of Vacuum lines & solenoid



76. Mount the boost solenoid by sliding it onto the existing tabs located on the driver side of the engine bay



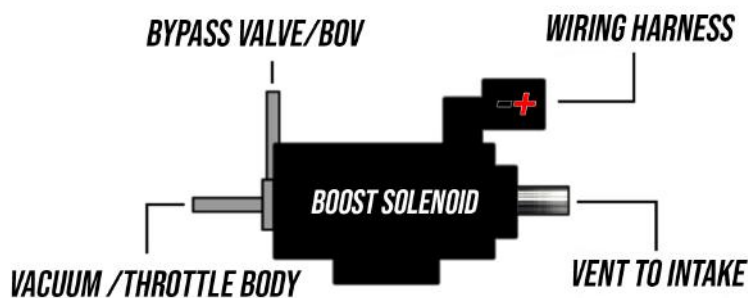
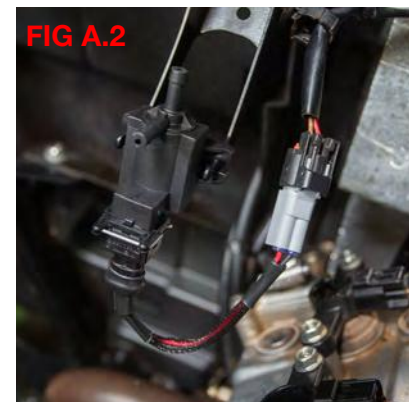
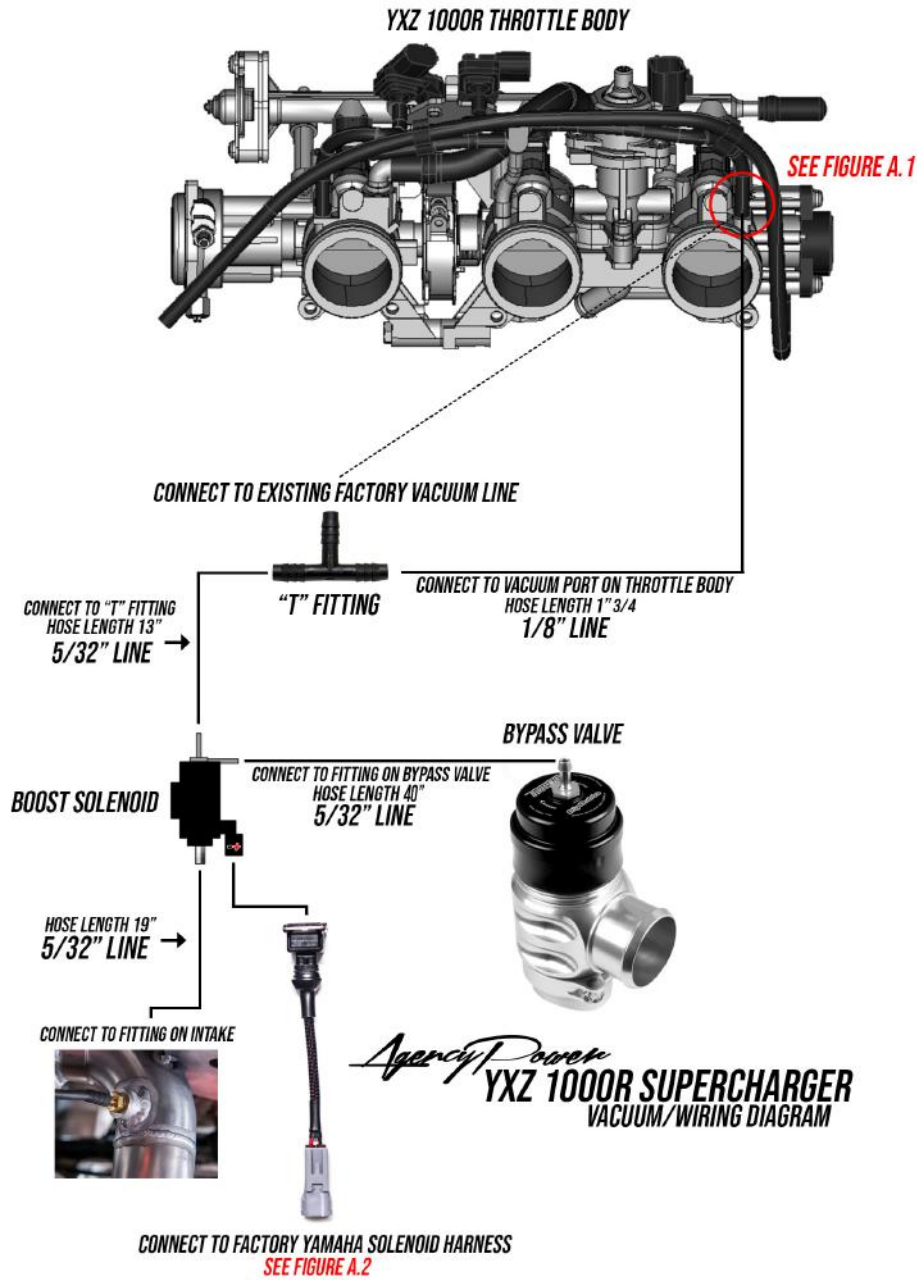
77. Use the supplied wiring harness adapter to plug the boost solenoid into the factory wiring harness.



# Yamaha YXZ 1000r Supercharger Kit



## SECTION B - ASSEMBLY | Installation of Vacuum lines & solenoid



## Yamaha YXZ 1000r Supercharger Kit



### SECTION B - ASSEMBLY | installation of boost recirculation hose, oil breather and supercharger belt



Belt PN# 305K66PK0775



78. Attach the boost recirculation hose to the 2" port on the Bypass Valve and run the hose over the trident/manifold and connect to the 2" port on the intake pipe. Attach using the supplied #032 hose clamps. Rotate the bypass valve for more clearance if needed. Tighten Bypass valve v-band once completed (4mm allen wrench, flat head screw driver or 8mm socket/nut driver)



79. Install breather filter onto oil resevoir catch can



80. Install the supercharger belt by using a 3/8 ratchet or 3/8 breaker bar to rotate tensioner and remove tension from belt. Gradually work the belt onto the pulley. If needed use a 10mm socket to rotate the pulley and help work the belt on.

**NOTE:** Due to the high belt tension required to keep the belt from slipping this step requires a good amount of patience and force to get the belt onto the pulley. We found it necessary to have a friend help remove tension from the tensioner, while we used a 10mm socket to slowly rotate the pulley working the belt on.



# Yamaha YXZ 1000r Supercharger Kit



## SECTION B - ASSEMBLY | Installation of belt guard and final check over



81. To install supercharger belt guard remove the two lower bolts located on the belt tensioner bracket (13mm socket)



82. Install belt guard using the previously removed hardware from (step 81) and provided stainless steel allen bolt. (13mm socket)



If you haven't already make sure to complete the oil change. Refer to your owners manual for the amount and recommended engine oil.



**Final step!** Double check your work to ensure all hoses and lines tightly secured. Use the provided zip ties to tie up any loose wires or vacuum hoses.

**PLEASE NOTE:** The ECU must be TUNED before operating the vehicle. Please refer to page #4 for more information regarding ECU Tuning.



If you have any questions please contact us at [Sales@Agency-Power.com](mailto:Sales@Agency-Power.com)

