

**TENF8046MCD****F8X M3/M4 TEST PIPES (REMOVES SECONDARY CATS)****\*\*NOT FOR USE ON ROAD VEHICLES / FOR OFF-ROAD AND RACING USE ONLY\*\***

Thank you for purchasing the Turner Motorsport test pipes exhaust! These install guidelines will assist you with the removal of your stock mid pipes exhaust and installation of the new mid pipes. We recommend that the installation of this system be performed by a qualified service center or professional muffler installer who has the necessary equipment, tools, and experienced personnel. However, if you decide to perform this install, the use of a lift and an additional person is advised.

**CAUTION:** Never work on a hot exhaust system. Allow time for the vehicle to cool. Always wear eye protection when working under a vehicle.

**Please take time to read and understand these installation instructions.**

**Please confirm that all parts and tools are present before beginning any work!**

**Included with your Axle-Back Exhaust:**

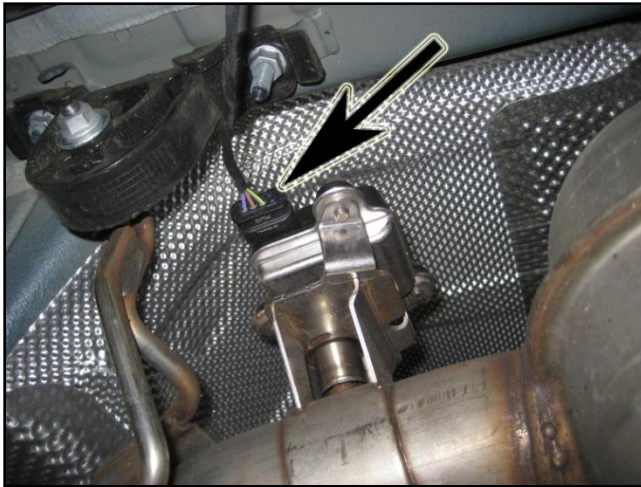
- (1) Test Pipes
- (2) 2 Muffler clamps

**Recommended Tools:**

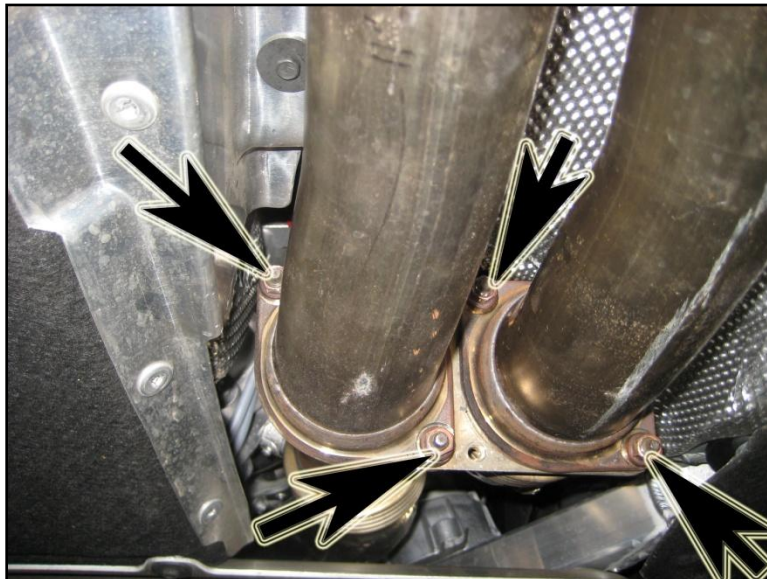
- 1/4" drive 8mm socket
- 1/4" drive nut driver
- 3/8" drive ratchet
- 3/8" drive extensions
- 3/8" ball drive extensions or swivel
- 3/8" drive 11mm socket
- 3/8" drive 13mm deep socket
- 3/8" drive 15mm deep socket
- 3/8" drive E10 female Torx socket
- 3/8" drive 6mm male hex socket
- Torque Wrench
- Metal File or other deburring tool
- Safety glasses
- Tubing cutter of your choice – chain-style tubing cutter, reciprocating saw, handheld band saw, chop saw with carbon disc, or a hand held grinder.
- Exhaust grommet pliers for removing exhaust hangers
- Permanent marker or paint pen
- Tape measure
- Exhaust sealing compound (Acousti-Seal) recommended but not a must.
- Penetrating oil such as Zep-45 or Liquid Wrench
- Soap and water solution or tire mounting compound

### Instructions

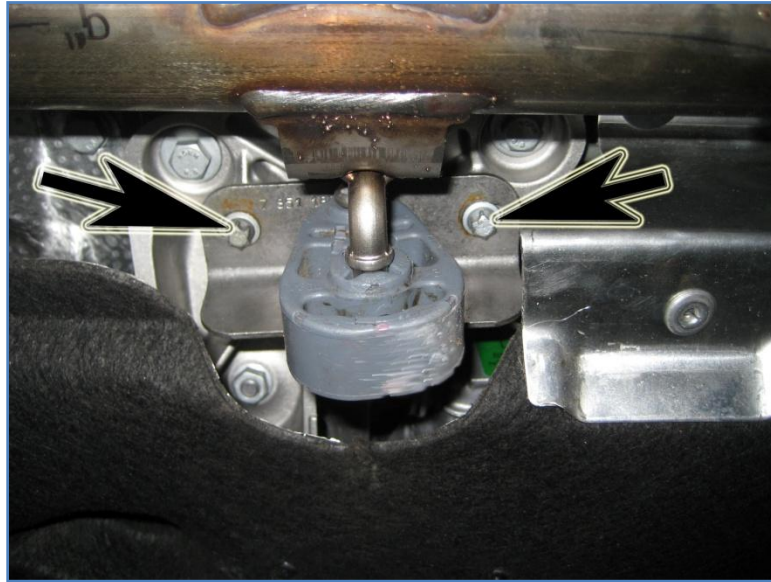
1. Raise and properly support car
2. Disconnect wiring from both exhaust valve/ flapper motors near exhaust tips. Note the wiring plug lock is facing upward and can be hard to see.



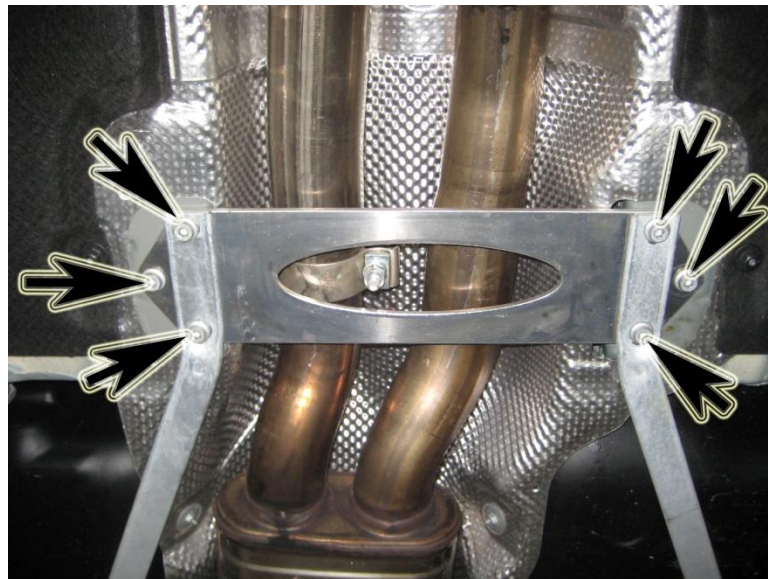
3. Support exhaust system
4. Spray copper locking nuts with penetrating oil. Unbolt down pipes from exhaust by removing the 4 locking copper nuts with an 11mm socket. Note a long 6" to 12" extension is needed.



5. Unbolt exhaust hangers next to the transmission by removing the two Torx bolts with the E10 female Torx socket. Note the hanger and bracket will stay on the exhaust for now.

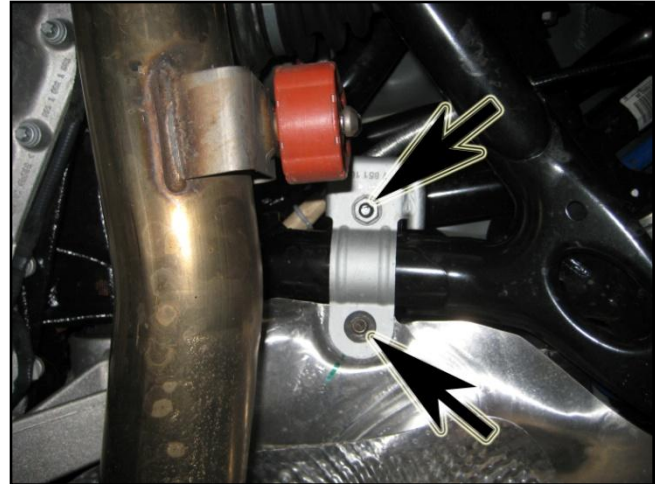


6. Remove chassis brace at center of car
  - a. Remove the 6 socket head bolts with a 6mm male hex socket. Then slide the flat brace forward to remove.

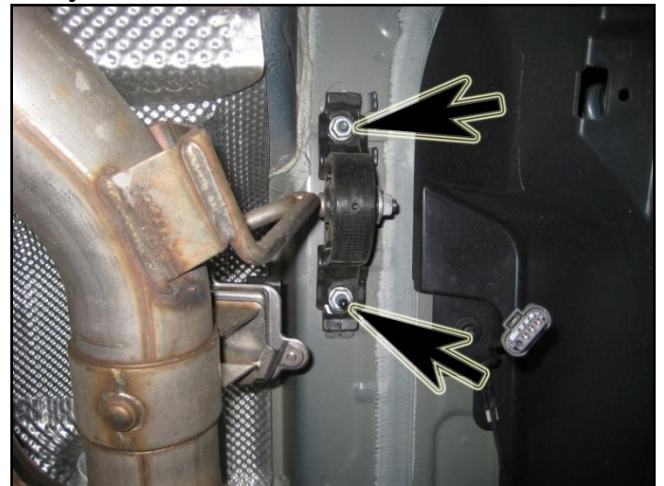
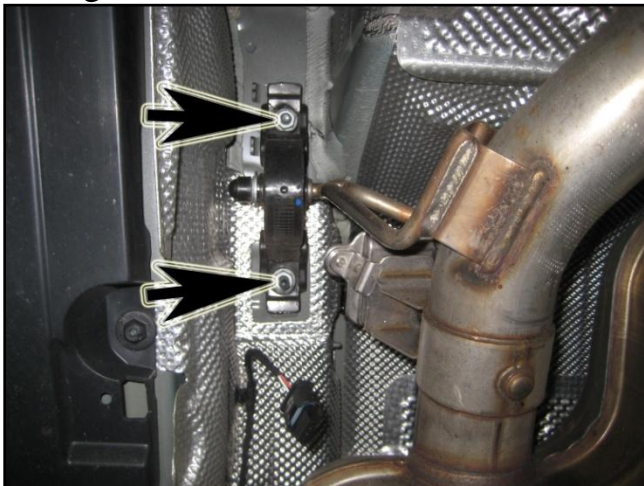




7. Unbolt exhaust hangers on both sides of differential. Start by removing the screw on the right side exhaust hanger mount that attaches to the heat shield with the 8mm socket. Next remove the nut on each exhaust hanger bracket with a 13mm socket. Note the hangers and brackets will stay on the exhaust.



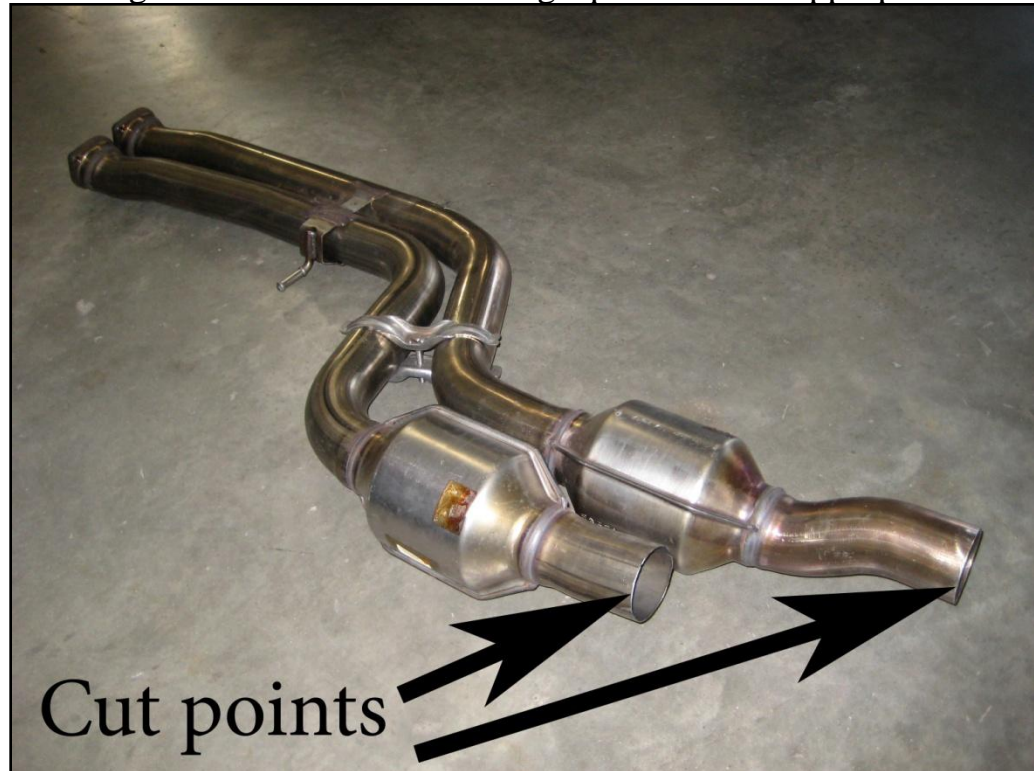
8. Unbolt the exhaust hangers at the rear bumper. Remove the two nuts on each exhaust hanger with a 13mm socket. Note the hangers stay on the exhaust.



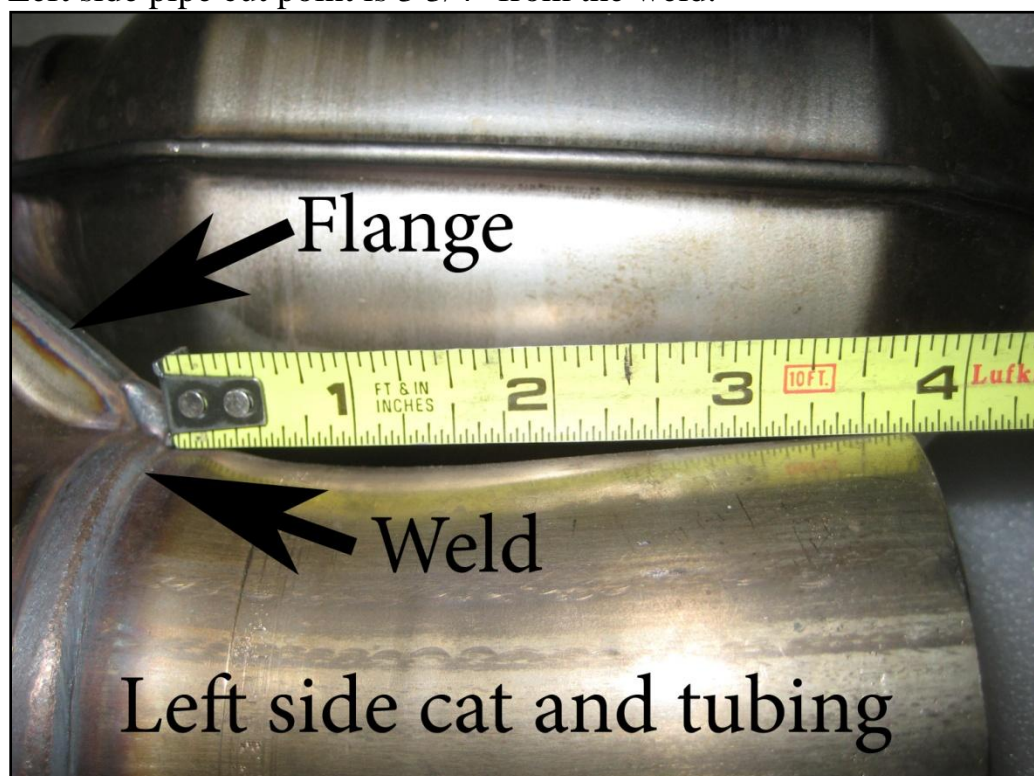
9. Carefully remove the exhaust system from car. This is a two person job.

## 10. Cut Stock Exhaust

- a. Mark the exhaust with a permanent marker or paint pen for cut points
  - i. Measure from the catalytic converter rear welds where they meet the welds and flange meet. Then cut the tubing square with an appropriate cutting tool.

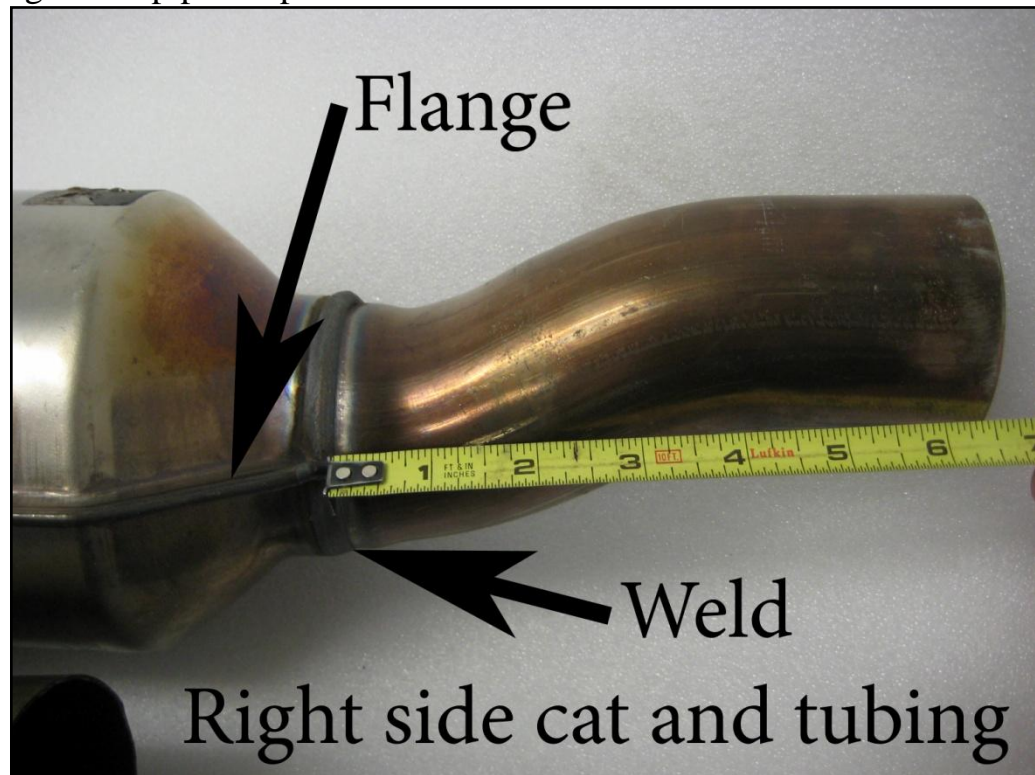


- ii. Left side pipe cut point is 3 3/4" from the weld.





- iii. Right side pipe cut point is 6 3/8" from the weld.

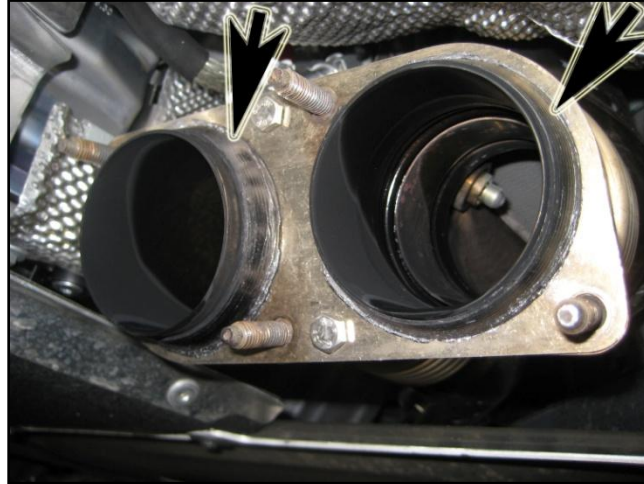


- iv. Debar tubing on rear exhaust with a metal file or other deburring tool.

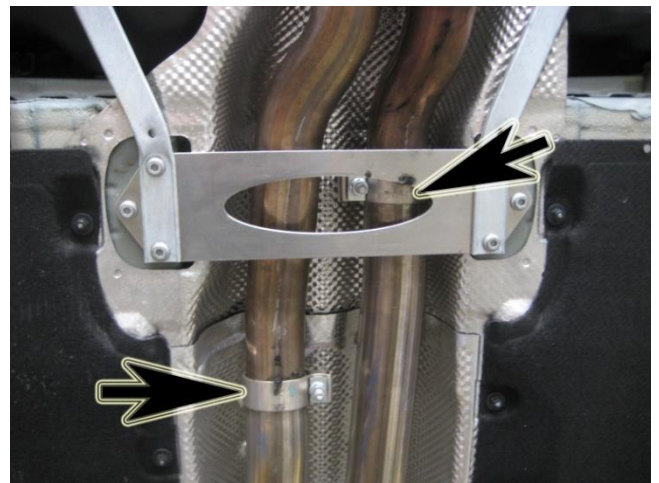
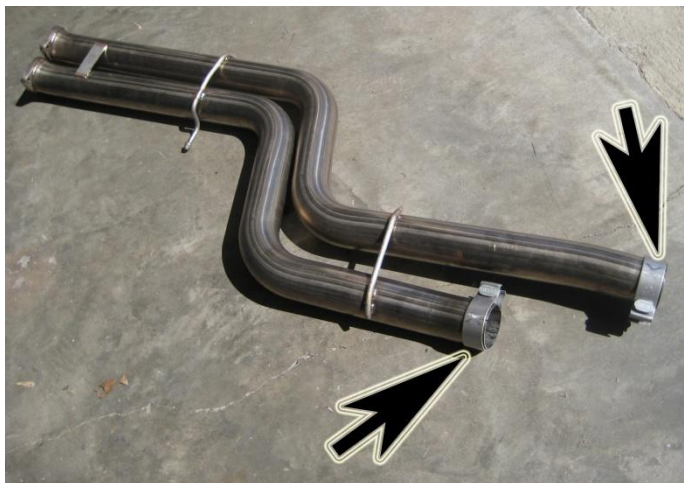
11. Remove exhaust hanger and bracket from stock midsection using grommet pliers or other appropriate tool or means. This is where the soapy water is used to coax the rubber hanger from the metal rod. The hangers and grommets will be re-used with the new exhaust component. Install hanger onto the new midsection in the same orientation as stock.



12. Inspect gaskets on down pipes and replace if needed.



13. Place the 2 supplied exhaust clamps onto the test pipes. Clamp studs facing down and to center of exhaust as seen in photos when installed on car. Note: loosen the 15mm nut on the clamp and stretch the clamp open to fit over the pipes.
- a. NOTE: Apply anti-seize lubricant **ONLY** to the threads of the clamps. Failure to follow this procedure can cause nuts to seize on clamps and potentially destroy threads. After applying anti-seize, be sure to thoroughly clean your hands, as lubricant will tarnish stainless steel. All clamps should be tightened using a properly calibrated torque wrench. Using an air impact gun will damage the clamp and reduce its ability to effectively seal the joint. It may also cause the joint to separate, thereby causing damage to your exhaust system and to your vehicle.



14. Apply a moderate coating of Acousti-Seal sealant to the end of the pipes.



15. Install new test pipes onto rear exhaust and snug clamps to the point where the two section will stay together when installed onto car.
16. Install full exhaust on to car. This is a two person job. Install and snug all hanger hardware and copper nuts at flanges. Check alignment of exhaust system and make any adjustments if needed.
17. Install chassis brace at center of car and torque 6 socket head bolts to 24 Nm.
18. Torque 6 copper lock nuts at down pipe flanges to 19 Nm
19. Torque 2 Torx bolts for exhaust hanger bracket to 28 Nm
20. Torque nuts for the 2 exhaust hanger bracket to subframe near differential to 19 Nm and tight small screw for right side hanger bracket to heat shield.
21. Torque nuts for the 2 rear exhaust hangers to 19 Nm
22. Torque the two exhaust clamps nuts to 45ft-lbs
23. Plug in exhaust flapper motors
24. Check alignment of exhaust system and make any final adjustments if needed

### **Final Install Notes:**

Immediately following the installation of your exhaust system, you may experience a trace of smoke after initial start-up. DO NOT be alarmed. The smoke is caused by the burning of a small amount of forming oil residue used in the manufacturing process.

Test drive car and enjoy.