



Dual Full System Exhaust Instructions

For Models: Scrambler® XP 1000 S (2020-2023), Sportsman® XP 1000 S (2020-2022)

Removal

!!! WARNING !!! Before working on your machine, make sure it is parked on a level surface with the transmission in park and/or the parking brake engaged.

Do not work on any machine with a hot engine or exhaust. Allow time for all parts to cool in order to reduce the risk of burns.

Blackout Exhausts: Take care not to get grease or oils on the exhaust. Cleaning our Blackout exhaust with harsh solvents, abrasives, or pressure washers will remove the coating and is not covered under warranty.

1. Using a spring puller, rope, or wire remove the (2) springs between the stock silencer and headpipe.
2. Carefully pull the silencer rearward and remove it from the vehicle.
3. Remove the (2) bolts securing the rear silencer mount and remove the mount. *(See Figure #1)*
4. Remove the drip tray that sits between the frame below the seat and rear storage compartment. *(See Figure #2)*
5. Remove the RH side panels from the machine to access the engine and headpipe.
6. Remove the (4) nuts and washers securing the headpipe to the cylinder head and remove the original headpipe. Save the nuts and washers, they will be reused to install the HMF headpipe.

Tip: The rear cylinder's inner nut can be difficult to access: use a long 1/4" extension with a universal joint as shown to gain access and loosen the nut. *(See Figure #3)*

7. Inspect the gaskets in the cylinder head, if worn or damaged replace with new OEM gaskets. These are not provided with the HMF full exhaust.

Installation

Important: It is imperative that all hardware be left loose during the install process. This will allow for adjustment and alignment of all parts after everything is installed. Failure to follow these instructions will lead to exhaust leaks

1. Begin installing the **Exhaust Mount Bracket** by placing the provided **(2) 1-1/4" U-Bolts** over the frame tubes just behind the rear shock mounts. *(See Figure #4)*
2. Loosely secure the bracket to the U-Bolts using the provided **(4) #10 Flat Washers, and (4) 1/4"-20 Nylock Nuts**. Do not tighten.
3. Loosely secure the front of the bracket using the provided **(2) M6-1.0x40 Hex Bolts, (4) #10 Flat Washers, (2) 1/2" Aluminum Spacers, and (2) M6-1.0 Nylock Nuts**. Place the aluminum spacers between the bracket and the vehicle

frame as shown. Do not tighten. (See Figure #5)

4. Using the original nuts and washers loosely install the HMF head pipe to the cylinder head. Do not tighten.

(See Figure #6)

5. Install the provided **Ball Gasket** onto the HMF headpipe. Take care not to damage this gasket during the rest of this installation or the system may leak.

6. Fit the HMF Y-pipe to the RH silencer roughly aligning the spring tabs as shown. Ensure the pipes are fully seated.

(See Figure #7)

7. Carefully install the assembled pipes lining up the flared end of the Y-pipe to the HMF headpipe and ball gasket.

Loosely mount the silencer to the bracket using the provided **(2) M8-1.25x40 Hex Bolts, (2) M8-1.25 Nylock Nuts, (2) 1/4" Flat Washers, and (2) 5/16" Fender Washers**. Place the larger fender washers on the outside of the silencer against the rubber grommet as shown. (See Figure #8)

Note: As the silencers are installed it may be necessary to continually adjust the rotation of the pipes to achieve proper alignment and spacing. Take the time to fine-tune the alignment of all parts to achieve the best results.

8. Place the provided **Clamp** over the inlet of the LH silencer and slip this over the remaining open port of the HMF Y-pipe. It may be necessary to push and twist until the pipe is fully seated and aligns with the mounting bracket.

9. Loosely secure the LH silencer with the remaining provided **(2) M8-1.25x40 Hex Bolts, (2) M8-1.25 Nylock Nuts, (2) 1/4" Flat Washers, and (2) 5/16" Fender Washers**.

10. Adjust the alignment of the silencers so that they are parallel with an even gap between them then tighten down the (4) bolts securing the silencers to the mounting bracket.

11. Slide the previously installed **Clamp** on the LH silencer over the slip joint and tighten the clamp.

12. Install the provided **(1) Short Spring** between the Y-pipe and RH silencer.

13. Install the provided **(2) Long Springs** between the Y-pipe and HMF headpipe. (See Figure #9)

14. Inspect down the length of the headpipe and verify clearance between the headpipe and transmission case. If there is contact between the two parts pull up on the headpipe after gently tightening the headpipe nuts. The headpipe has been designed to flex to account for differences in the engine/transmission mounting in the frame of the vehicle.

15. After verifying clearance of all parts tightens the nuts securing the headpipe to the engine.

16. Ensure the Y-pipe is aligned on the ball gasket and centered. Push back on the silencers and bracket to ensure the pipes have seated properly.

17. Evenly tighten the hardware securing the exhaust bracket to the frame.




18. Briefly start the engine to check for any exhaust leaks being careful not to touch any hot exhaust components. Stop the engine, allow the exhaust to cool and adjust as necessary but loosening components and realigning. A minor leak at the ball gasket is common and typically goes away after a short time of riding the vehicle and letting the gasket seat into the pipes.

19. Apply the provided **Heat Shield Square** on the side of the CVT cover where the exhaust is closest. Before application makes sure the plastic surface is free of any dirt or oils.

- Wipe off any fingerprints or markings using a soft cloth and mild detergents such as soap and water or glass cleaner without ammonia. Once the exhaust heat cycles any oils left on the exhaust may permanently imprint.
- If you received a stainless steel exhaust without the Blackout coating it is normal for the pipes to change color as the heat cycle.
- The HMF Blackout exhaust will smoke and put out an odor for the first full heat cycle as the coating goes through its final curing process. It is recommended to allow this process to happen in a well-ventilated area.
- All systems will produce a smoke out the end cap after a short initial heat cycle, this is the packing material bedding in and is completely normal.

Until the exhaust has been heat cycled a few times small exhaust leaks may be noted at any of the connection points or from the rivets on the silencer. This is normal and usually goes away after a few hours of run time. (See Figure #10)



Hardware

-  (2) 400108 - Bolt - Hex - M6-1.0 X 40
-  (4) 400023 - Bolt - Hex - M8-1.25 X 40
-  (1) 400352 - Bracket - Scrambler XP 1000 S

Exhaust Mount Bracket

-  (1) 400244 - Hardware | 2in ID gasket walker

31378

-  (1) 400087 - Heat Shield - Square
-  (4) 400072 - Nut - Nylock - 1/4" X 20
-  (2) 400037 - Nut - Nylock - M6-1.0
-  (4) 400015 - Nut - Nylock - M8-1.25
-  (2) 200060 - Spacer - 1/2 in Aluminum
-  (2) 400077 - Spring(s) - Long
-  (1) 400078 - Spring(s) - Short
-  (1) 400007 - TB194SSC
-  (2) 400351 - U-Bolt - 1-1/4"
-  (4) 400057 - Washer - Fender - 5/16"
-  (8) 400069 - Washer - Flat - #10
-  (4) 400073 - Washer - Flat - 1/4"

* Click thumbnails to enlarge

Figure #1



Figure #2

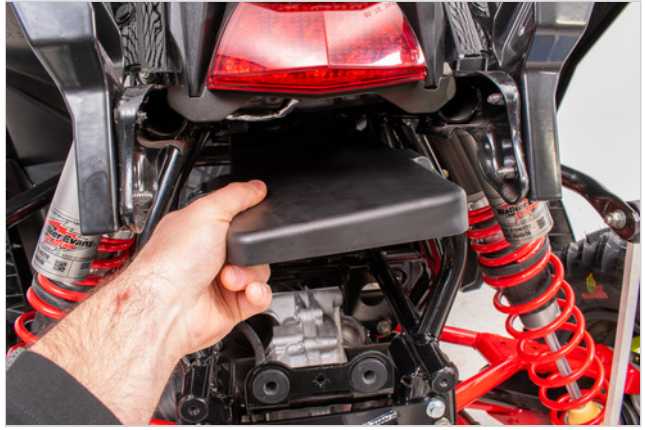


Figure #3

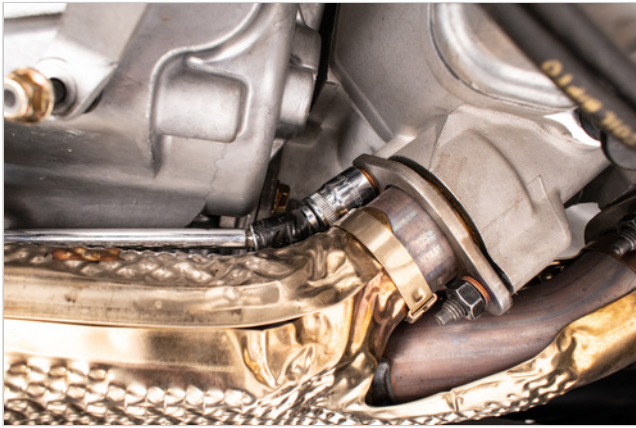


Figure #4

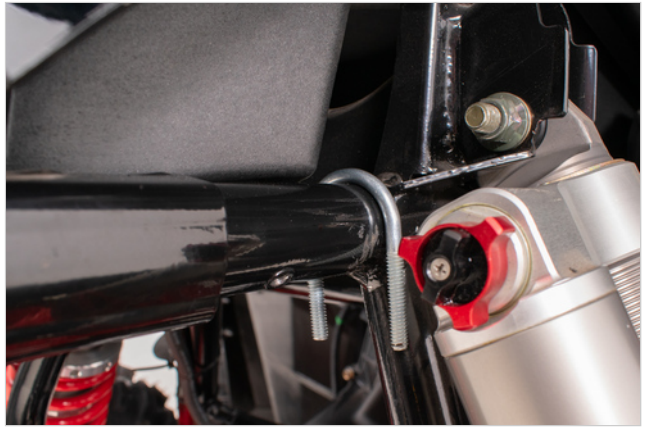


Figure #5



Figure #6



Figure #7

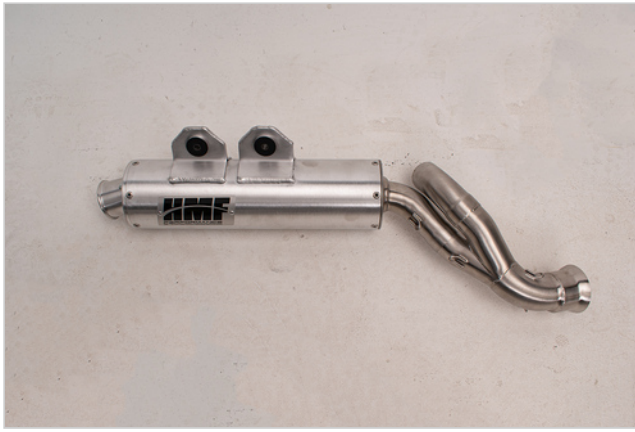


Figure #8

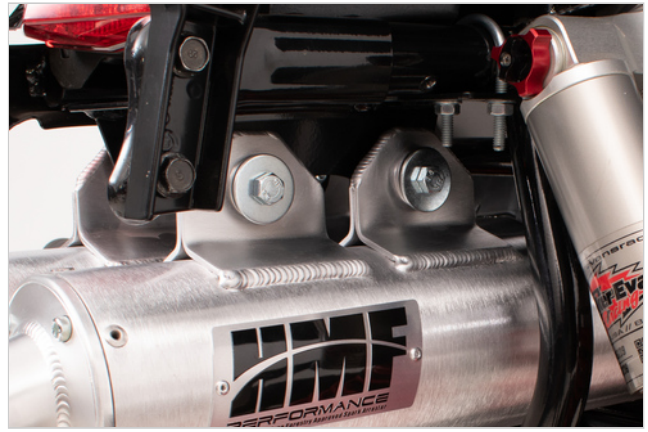
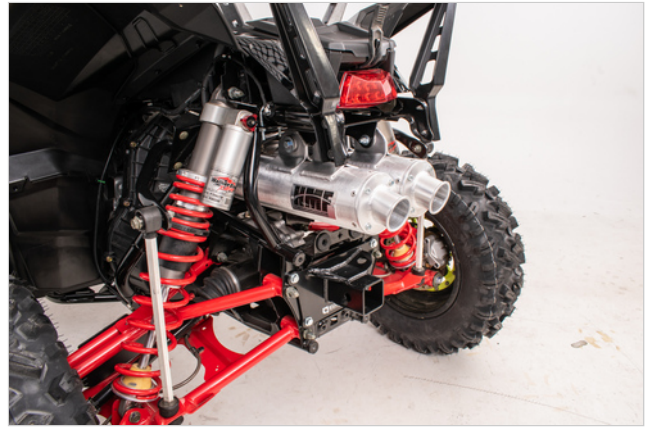


Figure #9



Figure #10



(2) Bolt - Hex - M6-1.0 X 40



(4) Bolt - Hex - M8-1.25 X 40



(1) Bracket - Scrambler XP 1000 S Exhaust Mount Bracket



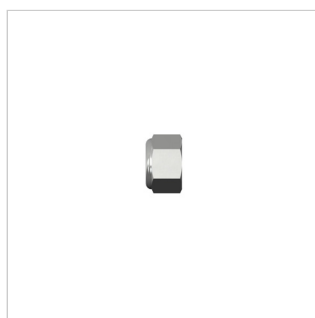
(1) Hardware | 2in ID gasket walker 31378



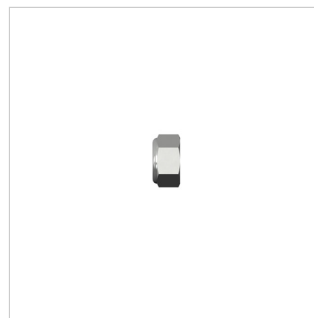
(1) Heat Shield - Square



(4) Nut - Nylock - 1/4" X 20



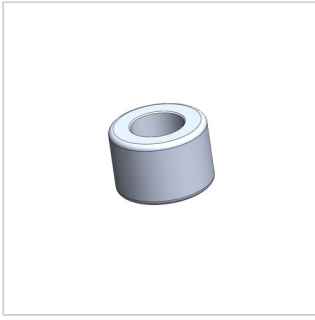
(2) Nut - Nylock - M6-1.0



(4) Nut - Nylock - M8-1.25



(2) Spacer - 1/2 in Aluminum



(2) Spring(s) - Long



(1) Spring(s) - Short



(1) TB194SSC



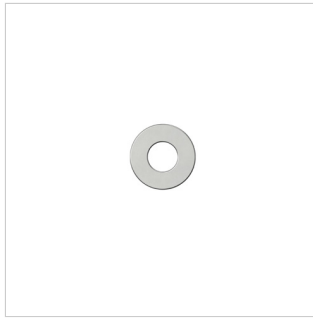
(2) U-Bolt - 1-1/4"



(4) Washer - Fender - 5/16"



(8) Washer - Flat - #10



(4) Washer - Flat - 1/4"

