

Technical BULLETIN

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ALL SRX/SXViper MODELS

Yamaha Power Valve System (YPVS) Scheduled Maintenance/Adjustments



INTRODUCTION

YPVS power valves should be removed and decarbonized (see illustrations below) when the system is inspected and adjusted. The service interval is **every 2000 miles or once every season**, whichever comes first. Excess carbon build-up on YPVS components can cause sticking, poor performance, and damage to valves, cables and other parts.

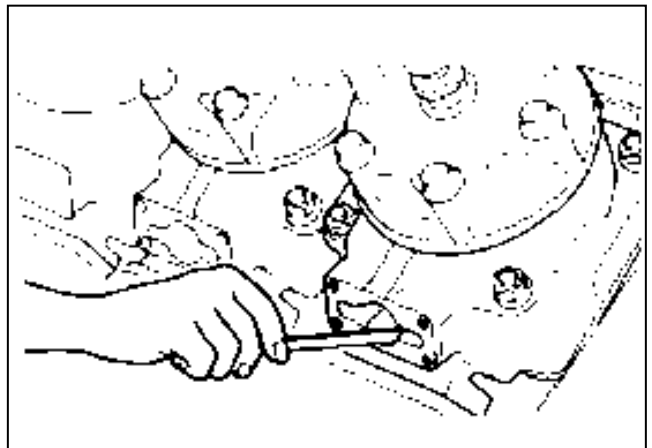
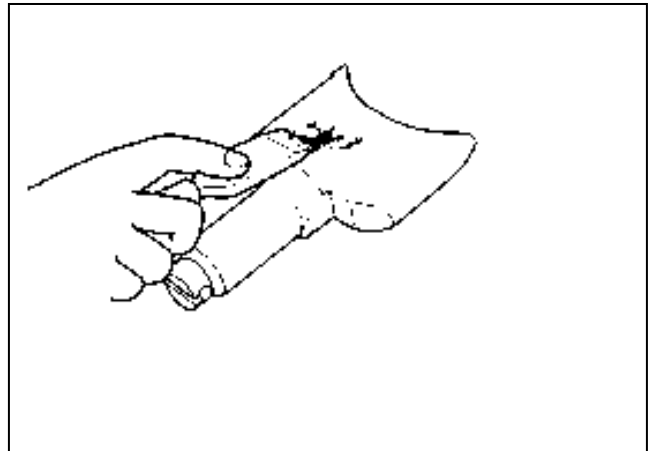


SERVICE PROCEDURES

Decarbonization

NOTE: Refer to the appropriate Service Manual to perform the following service procedures:

1. Remove the valve and holder assembly and disassemble to remove the valve.
2. Use a scraper to remove carbon deposits from the valve and the cylinder (see adjacent illustrations). Use Yamaha Combustion Chamber Cleaner (P/N: ACC-CMBSN-CL-NR) to help remove heavy deposits. Avoid damaging or scratching the surfaces. Be careful to keep the removed carbon from falling into the cylinder.
3. Inspect the valves for excessive wear around the cable connecting area. Replace as necessary.



4. Re-assemble the valve and holder assembly, being careful to align the projections on the two pieces of the valve housing (see adjacent illustrations).
5. Reinstall the valve assembly and adjust the YPVS according to the following procedure.

YPVS Adjustment Procedures

NOTE: The 2000 ~ 2002 SRX700D/SD Service Manual (LIT-12618-02-090) is incorrect regarding the Yamaha Power Valve System (YPVS) adjustment in the following two areas on page 2-15:

- Step 1 says to remove the power valves, which is not necessary if decarbonization has been done.
- It also does not state to turn the ignition key on after connecting the YPVS coupler special tool. The key must be turned on to actuate the YPVS servo motor on 2000 and newer models.

The correct procedure is:

1. Locate the YPVS coupler connector on the snowmobile and remove the cap (see last two adjacent illustrations).

SRX700:

The coupler connector is easily accessed next to the YPVS servo motor.

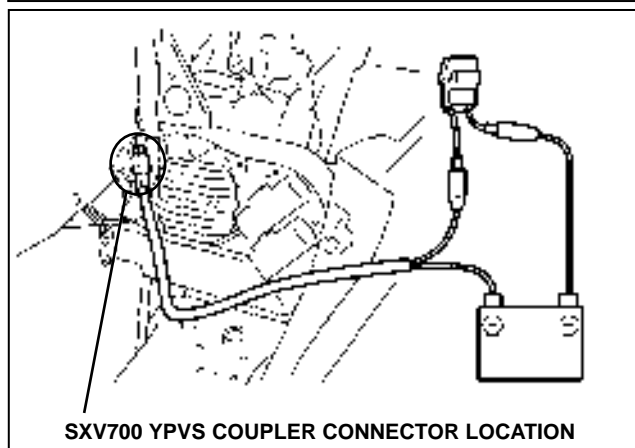
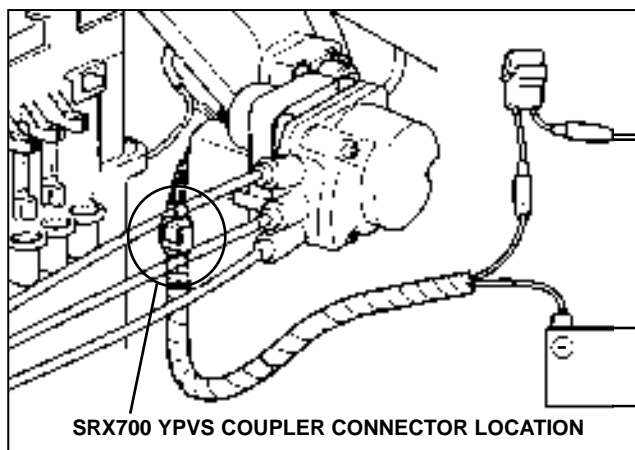
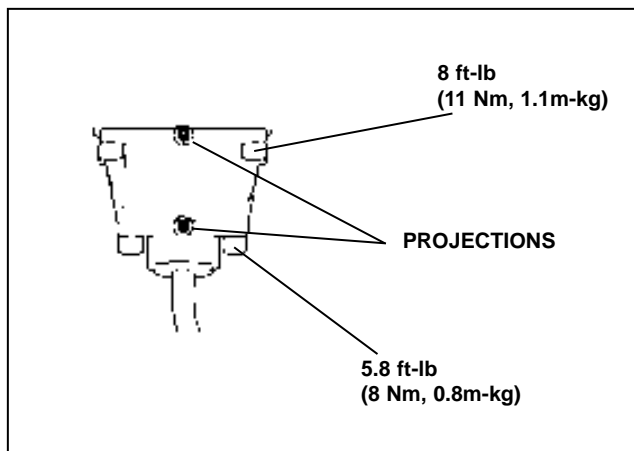
SXV700 (non-electric start):

Remove the three screws that fasten the right side of the instrument panel to gain access to the coupler connector.

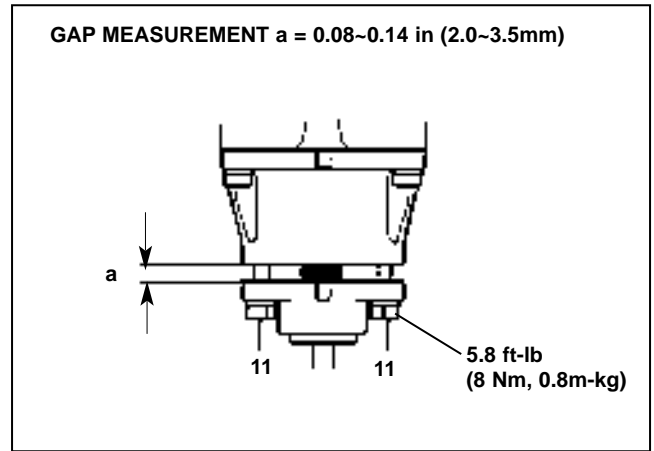
SXV700ER:

The YPVS coupler is not used.

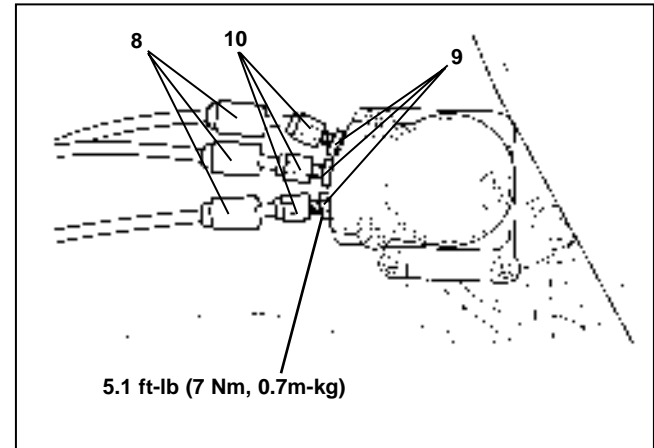
2. Connect the YPVS Coupler (P/N: YS-43092-1), except for SXV700ER models.
3. Connect the coupler leads to a battery and turn the key to the ON position (SXV700ER models, just turn the key to the ON position). The servo motor should activate and the YPVS valves should fully open.



4. Confirm the correct YPVS valve clearance by loosening the holder screws **(11)** and measuring the gap **(a)** as shown in the adjacent illustration.



5. If adjustment is required, slide back the adjuster covers **(8)**, loosen the locknuts **(9)**, and turn the adjusting nuts **(10)** in or out until the specified clearance [0.08 ~ 0.14 in (2.0 ~ 3.5mm)] is obtained.
6. When completed, tighten the locknuts to 5.1 ft-lb (7 Nm, 0.7m-kg), slide the adjuster covers back to their original position, and re-install the YPVS coupler connector cap.
7. Tighten the YPVS holder screws **(11)** to 5.8 ft-lb (8 Nm, 0.8m-kg); see adjacent top illustration.



NOTE: Yamaha recommends the use of Yamalube 2-S Two-Cycle Engine Oil in all Yamaha 2-Stroke Snowmobiles, including models with the YPVS (Yamaha Power Valve System). Use of other oils may cause excessive carbon deposits and can lead to damage to the YPVS valves, cables and other components. Additionally, regular use of Yamaha Ring Free (P/N: ACC-RNGFR-EE-12) will help to keep deposits from forming in the engine.