

V.E.S. Removal - 440 Edge Pro X/500 XC SP/600 XC SP

1. Remove two mounting bolts. Remove exhaust valve assembly from cylinder.



2. Remove four cover bolts, cover, and return spring.

CAUTION: Valve is spring loaded. Hold cover in position until all bolts are removed.

3. If the spring stays in the cover, hold the cover with spring facing toward you. Rotate spring in a counterclockwise direction while pulling outward on the spring. Do not distort the spring upon removal.



4. Insert V.E.S. in a soft jawed vice. Carefully remove exhaust valve cap.

NOTE: Top nut is secured to valve with adhesive. Removing top nut may damage threads on valve.



Connecting Rod (Big End) Bearing Inspection

1. Measure connecting rod big end side clearance with a feeler gauge. Clearance should be equal on all rods (within .002"). Rotate rod on crankshaft and check for rough spots. Check radial end play in rod by supporting rod against one thrust washer and alternately applying up and down pressure. Replace bearing, pin, and thrust washers if side clearance is excessive or if there is any up and down movement detectable in the big end bearing.

NOTE: Specialized equipment and a sound knowledge of crankshaft repair and straightening is required to perform crankshaft work safely and correctly. Crankshaft repair should be performed by trained Polaris service technicians in a properly equipped shop.



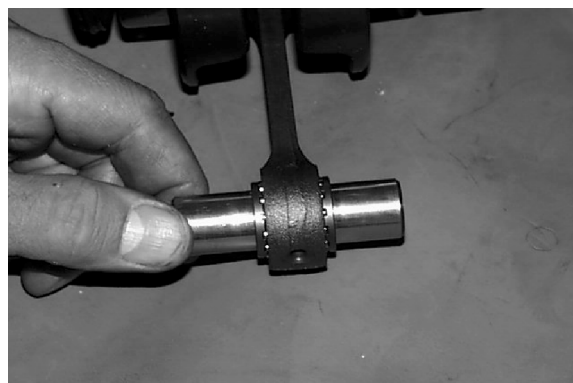
Piston Pin / Needle Bearing Inspection

1. Clean needle bearing in solvent and dry with compressed air.
2. Inspect needle cage carefully for cracks or shiny spots which indicate wear. Replace needle bearings if worn or cracked, and always replace them if piston damage has occurred.
3. Visually inspect piston pin for damage, discoloration, or wear. Run your fingernail along the length of the pin and replace it if any rough spots, galling or wear is detected.



Connecting Rod Small End Inspection

1. Clean small end of connecting rod and inspect inner bore with a magnifying glass. Look for any surface irregularities including pitting, wear, or dents.
2. Run your fingernail around the inside of the rod and check for rough spots, galling, or wear.
3. Oil and install needle bearing and pin in connecting rod. Rotate pin slowly and check for rough spots or any resistance to movement. Slide pin back and forth through bearing while rotating and check for rough spots.
4. With pin and bearing centered in rod, twist ends back and forth in all directions to check for excessive axial play. Pull up and down evenly on both ends of pin to check for radial play. Replace pin *and* bearing if there is any resistance to rotation or excessive axial or radial movement. If play or roughness is evident with a new pin and bearing, replace the connecting rod.



Arvin Shock Maintenance

Procedures for the proper disassembly and assembly of RydeFX gas charged IFP and emulsion mono-tube shock absorbers. Polaris PN 7041990, 7041992

WARNING: Before servicing a gas shock it is important that all the gas pressure be discharged from the unit. Refer to the instructions listed below for the proper procedure of discharging the gas pressure from a shock. Protective eyewear should be worn to avoid risk of injury while servicing RydeFX gas charged mono-tube shocks.

Remove the shock from the vehicle.

- If shock incorporates spring; remove spring and collateral retainers.

NOTE: Before unscrewing pre-load springs, measure the compressed length of the installed spring and mark position for reinstallation. (PICTURE 1)

CAUTION: When removing the spring from a shock that utilizes a fixed lower retainer; the use of a proper spring compressor should be used to avoid risk of bodily injury.

Wash the shock body in parts cleaner; then dry with compressed air to remove sand and dirt.

WARNING: When using compressed air to dry components, protective eyewear should be worn to avoid risk of injury.

Remove bearing, sleeve and/or bushings from lower shock mount eyelet. Secure the lower mount of the shock in a vise. The use of soft jaws is recommend to prevent damage or marks to the shock. (PICTURE 2)

CAUTION: It is important that the gas shock be retained in the vise by the lower mount. Any other method of securing the shock body during these procedures may deform the shock body cylinder.

Remove the small button head screw from the pressure valve assembly. (PICTURE 3)

Depressurizing shock:

A) Internal Floating Piston Shocks (P/N: 7041990): Using a slotted screwdriver, loosen the pressure valve assembly counter-clockwise two full revolutions allowing the gas pressure to fully escape past the pressure valve assembly O-ring.

(PICTURE 4)

