Tools Needed:

• Phillips screwdriver
• Needle nose pliers
• Small flathead screwdriver

Disassembly

1. Remove and discard the all-purpose bag, head float, top cover(s), feed pipe/timer blank assembly, and sweep hose assembly.

2. Remove the four screws that secure the frame to the base. Lift the frame off the base at a 45-degree angle, pull back and lift off. Discard the base. The rebuild kit contains a pre-assembled base unit, so all items still attached to the base can be discarded.

3. Familiarize yourself with the gears, bearings and e-clips, and note their location on the shafts before dismantling the frame (see diagram below). Disengage the front and rear belts by pushing the belt off the pulley while turning the wheel.

4. Remove the hub caps, e-clips, wheels, belts, axle blocks, transfer pulley/drive shaft assembly, gears, bearings, and turbine wheel. These parts can be discarded.

5. If the frame has not already been notched, file the frame to provide proper clearance for the feed pipe/timer blank assembly.

Assembly

1. Install the new axle blocks using lock washers with screws. Tighten screws loosely to keep them in place.
2. Install bearings, shield-side out. Insert compound gear shaft with inner bearing. Install new compound gear. **Note: Gear may seem tight.**

3. Once gear is installed, attach e-clip. Push the compound gear shaft through, secure it to the other side with another e-clip. E-clips should snap into place.

4. Place the longest hub of the new drive gear into the new turbine wheel.

5. Push the drive shaft through the new turbine bearing, turbine wheel, drive gear, and install single-wheel side wheel with bearing. Secure with e-clip.

6. Lay the frame on the single-wheel side and place the drive belts over the axle block shafts. Install new bearing shields.

7. Install the new double-wheel side wheels with bearings, e-clips, and the hub caps. Engage each belt by pushing the belt onto the pulley while turning the wheel. The small belt should be on the inside of the transfer pulley and the large belt on the outside with the belt divider separating them.

8. Place the frame on the double-wheel side. Push the axle blocks toward the outside edge of the Polaris until the belts have 1/4” tension and tighten the axle block screws.

9. Remove two back screws from pre-assembled new body. Lift off back plate. Push in vacuum tube latch to remove top.

10. Place lower turbine housing into base. Place new base weight on rear jet retainer flush against the vacuum tube.

11. Slide frame onto new base. Reinstall three of the 3/4” screws into frame. Place upper turbine house cover on, then screw in the fourth and final 3/4” screw.

12. Install feed pipe and o-ring. Reinstall the three feed pipe screws.

13. From the back, slide top in and over vacuum tube. Align top and base and snap into place. **IMPORTANT: Make sure the top is secured by the vacuum tube latch.**

14. Slide on the back plate and reinstall screws to secure the thrust jet. You may have to create tension on the thrust jet to line up the holes.

15. Attach the new head float and push it forward as close to the Polaris as possible.

16. Attach the new bag.

17. Attach sweep hose using the new attach clamp.

**Replacement of In-line Back-up Valve**

1. Remove the existing in-line back-up valve.

2. Install the new float as shown below. If necessary, trim the end of the hose at an angle and pull hose through the float with needle-nose pliers. Once the float is installed, rettrim the hose square.

3. Attach the back-up valve to the hose with the flow arrow pointing toward the cleaner.

4. Push the new float as close to the back-up valve as possible.