PRECISION PERFORMANCE

INSTALLATION
15-647-648-649-650 DC-RANGER1000-ZNSC & ZNSD RXL

SVI, LLC 20NOV2026

KIT PART #: 15-647-648-649-650

MODEL: DC-RANGER1000-ZNSC & ZNSD RXL

DESCRIPTION: MY26-27 ALL NORTHSTAR RANGER XP1000 AND XP1000 CREW MODELS. These models have the Polaris P90X with a 6:1 crankshaft taper.

Does not fit: MY22-Current RANGER 1000 SOHC(Non-XP) these models have a Polaris P190X clutch SEE R SERIES KIT 15-585

MY22-Current RANGER XP1000 & XP1000 CREW (NON NORTHSTAR), MY21 ALL RANGER XP1000 MODELS. These models have the Polaris P90X Clutch with a 10:1 crankshaft taper. Order RXL kits 15-600 thru 15-604 or 15-611 thru 15-615 for these models.

KIT CONTENTS:

1. 10-437 ASM-DCRL PRIM 39G (15-647 & 15-649)
   10-400 ASM-DCRL PRIM 37G (15-648 & 15-650)
2. 35-080 BELT
3. 10-331 SECONDARY (***Only included in kits 15-647, 648***)
4. 99-036 BLUE THREADLOCKER
5. 25-262 BUSHING- PRIMARY CLUTCH
6. 99-028 TOOL-T60 BIT SOCKET 3/8”
7. 90-081 QTY 3 SECONDARY SHIM-RING 23.25X32.25X0.5
8. 97-087 DECAL-DC CLUTCH HOUSING DASH 35-080 RXL
9. 98-066 DURACLUTCH R SERIES WARRANTY
10. 98-141 INSTRUCTION- INSTALLATION (THESE INSTRUCTIONS)

NOTE: BEFORE CLUTCH INSTALLATION ensure clutch box is clean, no loose debris, no belt debris and no signs of oil residue or moisture. Check to ensure clutch cover seal is in place and in good shape.

DURACLUTCH INSTALLATION

1. Remove airbox to plenum hose clamps and move hose out of the way, remove airbox cover.





2. Place transmission into Park and remove the clutch housing cover. Recommended tool: 8mm socket with flex drive extension.

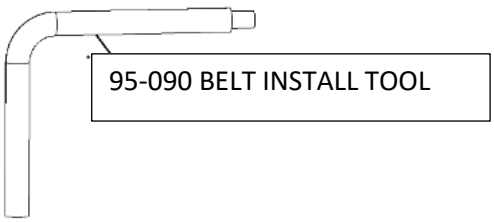
3. Remove Primary clutch bolt with T60 bit socket. Remove the cover screws. Remove the outer clutch post.




4. Pull the Polaris primary from the engine crankshaft using PN 99-012 puller. Greasing the end of the puller slightly will aid in removal. Do not get grease on any clutch components. Remove belt.

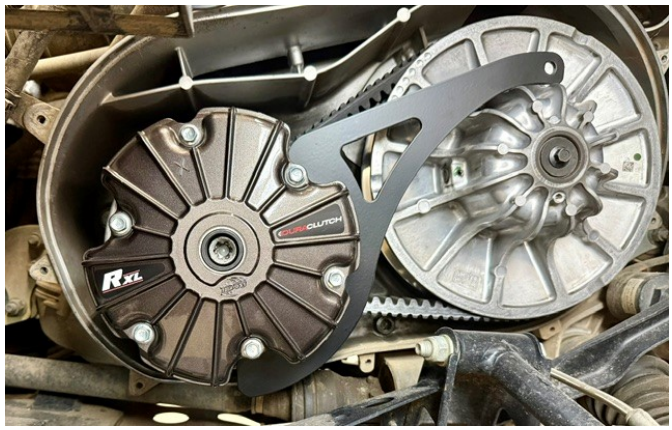


5. Clean the engine tapered shaft and the RXL primary clutch bore with alcohol or degreaser. Do not lubricate.
6. If installing a new secondary proceed to step 7, If installing primary only, skip to step 9.
7. Remove the secondary clutch, keep all hardware and shims removed.
8. Install the new secondary. Install shims removed in #6, place blue threadlocker on secondary screw threads and tighten screw to **27 ft-lbs**.
9. Open secondary sheaves using belt install tool provided with the vehicle in the tool bag. Screw tool into secondary to open the sheaves, this will allow the new belt to seat into sheaves.

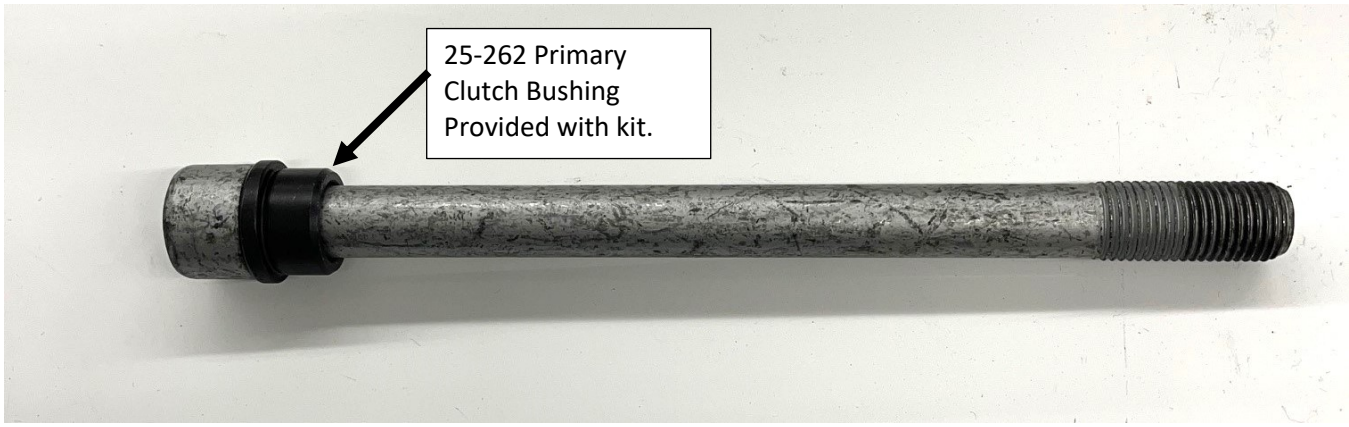
10. Seat the belt into the secondary so you can read the writing on the belt and then into the RXL Primary sheaves and install primary on the post. Install 25-262 bushing onto stock primary screw, make sure it gets

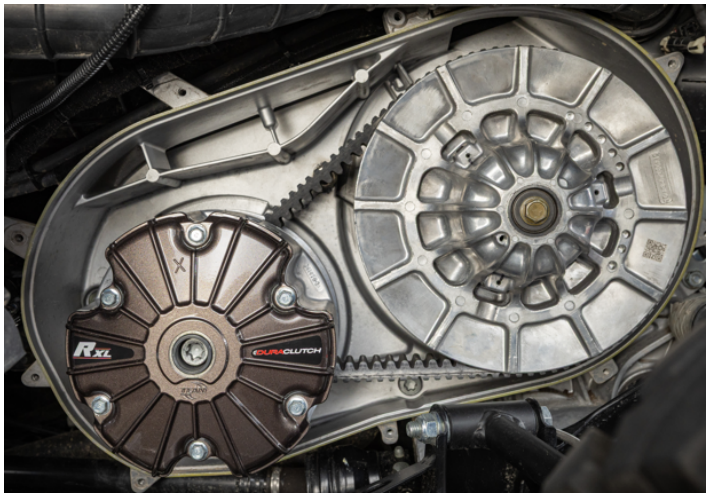
seated all the way to the screw head as shown, if tight remove burr on shoulder of primary screw. Tighten screw to **60 ft-lbs**. SVI PN 99-033 Torque Tool (Sold Separately) shown below works great to hold the primary clutch when torquing the primary screw.





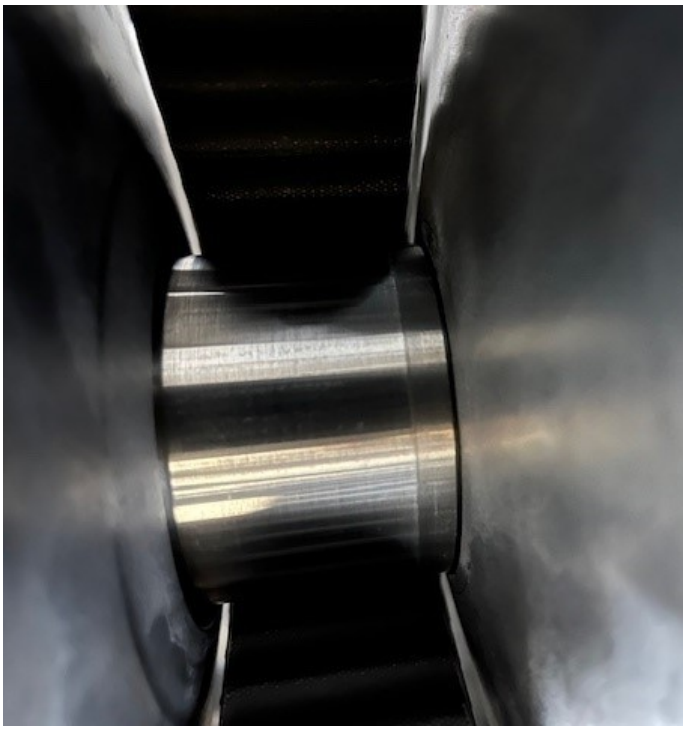
11. **UNSCREW & REMOVE THE BELT INSTALL TOOL FROM THE SECONDARY.** Spin the secondary back and forth a few times by hand to allow belt back to top of secondary.







12. Once belt tension is set, start machine and verify that the secondary clutch has slight to no rotation at idle (If slight rotation this will go away after belt break-in). If slight to no rotation, proceed to step 14. If the secondary has fast rotation proceed to step 13.
13. If the secondary rotates fast, turn machine off and check to see where the belt is riding in between the primary sheaves. The ideal belt location should be centered with a small gap on each side between the sheaves, a cell phone picture may help see where belt is riding. Follow steps A. or B. to determine next action. Check out our YouTube channel for an alignment video. https://www.youtube.com/user/SpecialtyVehiclesInt .



A. If the belt is up against the primary fixed sheave (inward), remove belt with belt install tool used in step 9. Then remove secondary screw and one shim washer. Install secondary screw and belt. **UNSCREW & REMOVE THE BELT INSTALL TOOL FROM THE SECONDARY.** Spin the secondary back and forth a few times by hand to allow belt back to top of secondary. Start machine to reset alignment. If the secondary still rotates fast and rides against fixed sheave, repeat process and remove another shim washer. Repeat until there is slight to no rotation, remember to blue threadlocker secondary screw when alignment is complete and torque to spec, proceed to step 14.
B. If the belt is up against the primary moveable sheave (outward), remove belt with belt install tool used in step 9. Then remove secondary screw and add one shim washer provided with kit. Install secondary screw and belt. **UNSCREW & REMOVE THE BELT INSTALL TOOL FROM THE SECONDARY.** Spin the secondary back and forth a few times by hand to allow belt back to top of secondary. Start machine to reset alignment. If the secondary still rotates fast and rides against the moveable sheave, repeat process and add another shim washer. Repeat until there is slight to no rotation, remember to blue threadlocker secondary screw when alignment is complete and torque to spec, proceed to step 14.

14. Install outer clutch housing. Ensure seal is good or replace with SVI PN 35-109.
15. Note: The clutch cover screws are 6mm screws (8mm hex head) that are easy to cross thread. They screw into an aluminum back cover.



Torque spec: 100 in-lbs (8 ft-lbs). This is like a screwdriver torque. Use a hand wrench or a clutch screw gun at a very low setting.

16. Install airbox cover and airbox to plenum hose removed in step 1.
17. **Recommended Belt Break-In Procedure**

Do NOT immediately run wide open throttle. Do NOT immediately pull heavy loads.

Drive the vehicle in a "normal" operating mode for 10-15 minutes and let the vehicle cool down to ambient temperatures. A few normal drive cycles, heating the belt up and cooling it down will help season the belt and remove any mold release from the belt manufacturing process. The clutch system will be ready for full function after about 10 miles of running.

DECALS

18. Apply two decals as shown – on the clutch housing and on the dash. Clean surface with alcohol or similar solvent. Decal application is important to alert service technicians that the stock Polaris clutches have been replaced.





DURACLUTCH R-SERIES WARRANTY

The DURACLUTCH warranty is separate from the Polaris vehicle warranty. SVI, LLC provides a limited warranty on the DURACLUTCH for defects in materials and workmanship for general consumer use. This includes the primary, secondary and belt. It does not cover claims of defective design. SVI, LLC is responsible for DURACLUTCH warranty.

The warranty term of coverage is as follows:

- Belt: One (1) Year.
- Primary and Secondary: One (1) Year.

The term begins on the date of purchase by the original purchaser. This warranty is transferable to a subsequent owner but does not extend the original term of the warranty.

This limited warranty does not cover acts of God, accidental damage, normal wear and tear, abuse, or improper handling.

The following conditions void the warranty:

1. Improper installation.
2. Installation of tires with a diameter greater than the O.E.M. tire diameter without compensating gear reduction such as portals, transmission gearing or both.
3. Not performing prescribed routine maintenance by removing the clutch housing every 500 miles to 1) blow the dust out of the primary and secondary clutch, 2) examine the belt, and other components for abnormal wear indicating a problem needing corrective action.
4. Not insuring adequate and continuous cooling air through the clutch housing. This includes intake vents and outlets plugged with snow, dust, or debris. SVI offers an Engine and Clutch Intake Kit for certain models that prevent vehicle intakes from plugging with snow and dust.
5. Use of an improper belt. *Appropriate DURACLUTCH belt must be used*.
6. Modifying calibration, such as primary spring and roller, or secondary spring and cam.
7. Water in the clutch housing. Water damage or rust on clutches, this includes if you have gotten clutches wet while riding, washing the machine or wet when clutches are removed.
8. Abnormal dust conditions such as abrasive dust or running in very dusty conditions without filters or particle separators.
9. Driver abuse such as continuing to operate in HI gear when LO gear is the proper gear.

This warranty replaces all previous warranties expressed or implied.

www.duraclutch.com SVI Sales, 5112 Northstar Lane Suite 2, Nisswa, MN 56468 USA

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