

# DURACLUTCH

PRECISION PERFORMANCE

## INSTALLATION

### 15-595-596-597-598-599 DC-RANGER1000-Z RXL

SVI, LLC 11MAR2025 REV3

KIT PART #: 15-595-596-597-598-599

MODEL: DC-RANGER1000-Z DCRXL

DESCRIPTION: MY18-20 RANGER XP1000, MY19-20 RANGER CREW XP1000. These models have the Polaris P90X Clutch.

Does not fit MY20 RANGER 1000 (Non XP). These models have the Polaris P190X clutch. SEE DCR KIT 15-585.

#### KIT CONTENTS:

1. 10-348 ASM-DCRL PRIM 49G (15-595)  
10-337 ASM-DCRL PRIM 51.5G (15-599)  
10-338 ASM-DCRL PRIM 44G (15-596)  
10-339 ASM-DCRL PRIM 39G (15-597)  
10-340 ASM-DCRL PRIM 35G (15-598)
2. 35-080 BELT
3. 10-329 SECONDARY
4. 25-262 BUSHING- PRIMARY CLUTCH
5. 99-023 LOCTITE 243 0.5 ML
6. 99-028 TOOL-T60 BIT SOCKET 3/8"
7. 90-081 QTY 3 SECONDARY SHIM-RING 23.25X32.25X0.5
8. 97-071 DECAL-DC CLUTCH HOUSING DASH 35-080
9. 98-066 DURACLUTCH R SERIES WARRANTY
10. 98-139 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

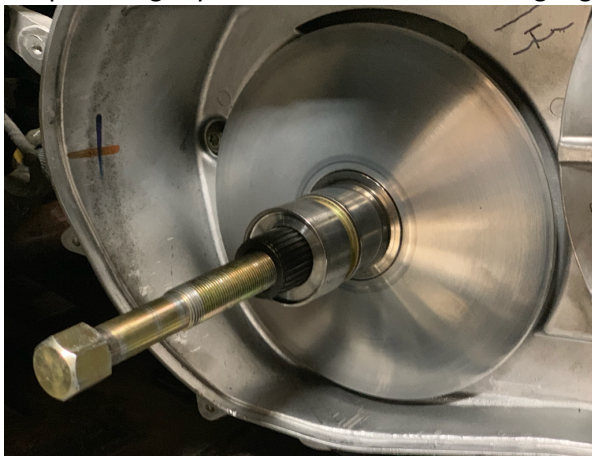
1. Remove airbox to plenum hose clamps and move hose out of the way.



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 Polaris primary outer movable sheave assembly. Pull off by hand holding the central shaft in place with your thumb. Move around the clutch, with a pulling and rocking motion.



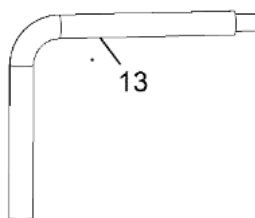
4. Pull the Polaris primary fixed sheave from the engine crankshaft using PN 99-012 puller. Greasing the end of the puller slightly will aid in removal. Do not get grease on any clutch components.



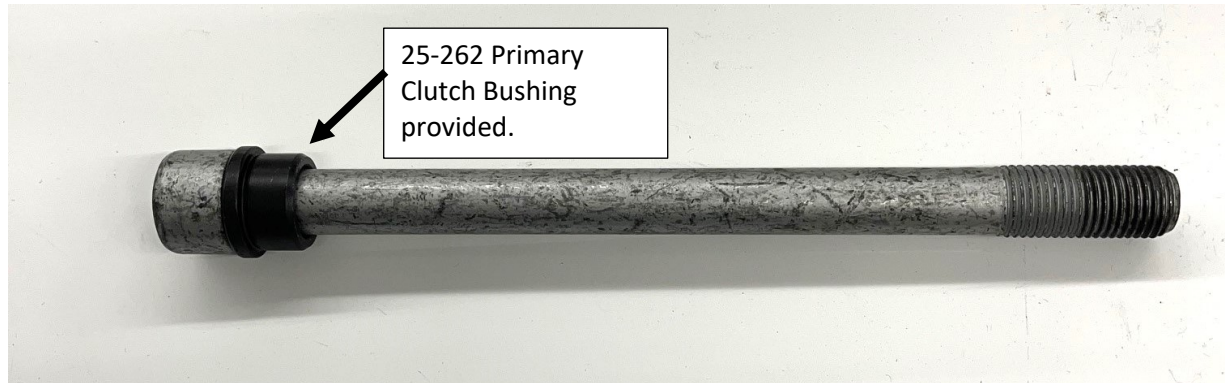
5. Clean the engine tapered shaft and the RXL Primary clutch bore with alcohol or degreaser. Do not lubricate.
6. Remove the Secondary clutch, keep all hardware and shims removed.
7. Install the new secondary. Install shims removed in #6, place blue Loctite on secondary screw threads and tighten screw to **45 ft-lbs.**
8. 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 belt to seat into sheaves.



95-090 BELT INSTALL TOOL



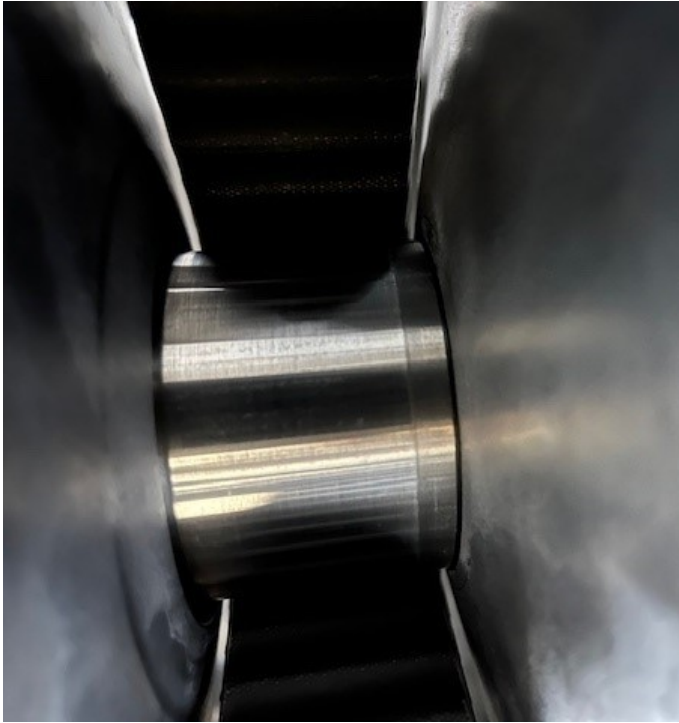
9. Seat the belt into the secondary so you can read the writing on the belt and then into the RXL Primary sheaves and install primary on the post. Install 25-262 bushing onto stock primary screw, make sure it gets seated all the way to the screw head as shown, if tight remove burr on shoulder of primary screw. Tighten screw to **60 ft-lbs**. **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.



10. 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 12. If the secondary has fast rotation proceed to step 11.

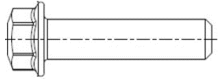
11. If the secondary rotates fast, turn machine off and check to see where the belt is riding in between the primary sheaves. The ideal belt location should be centered with a small gap on each side between the sheaves, a cell phone picture may help see where belt is riding. Follow steps a. or b. to determine next action. Check out our YouTube channel for an alignment video - Coming soon

<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 8. 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 Loctite secondary screw when alignment is complete and torque to spec, proceed to step 12.
- B. If the belt is up against the primary moveable sheave (outward), remove belt with belt install tool used in step 8. 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 Loctite secondary screw when alignment is complete and torque to spec, proceed to step 12.

12. Install outer clutch housing. Ensure seal is good or replace.
13. 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.

14. Install airbox to plenum hose removed in step 1.

#### DECALS

15. 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.

