

## DURA CLUTCH INSTALLATION

### 15-543 K-DCR RANGER 570 R-SERIES

SVI, LLC 24MAY2023 REV3

KIT PART #: 15-543

MODEL: K-DC RANGER570-B RSERIES

DESCRIPTION:

#### **MY21-23 RANGER 570 MIDSIZE MODELS 2 PASSENGER & CREW**

**INCLUDES ONLY MODELS with these transmission part numbers (12.05 gearing)**

- MY21-23: 1334612

NOTE: If transmission number is 1334588 with 13.58 gearing, order DCR kit 15-553. Also available is DCS kit 15-555.

NOTE: To locate transmission part number look at transmission housing behind rear wheel and it will say either Model # or Part # on decal. See pic below.



#### KIT CONTENTS:

1. 10-235 ASM-DC PRIMARY R-SERIES
2. 10-252 ASM-DC SECONDARY R-SERIES
3. 35-048 BELT
4. 75-094 PRIMARY SCREW
5. 25-164 BUSHING-PRIMARY SCREW
6. 65-033 BUSHING-PRIMARY
7. 75-088 SECONDARY SCREW M8X1.25X75
8. 90-011 SECONDARY SPRING LOCK WASHER
9. 90-059 SECONDARY DOMED WASHER
10. 99-023 LOCTITE 243 0.5ML CAPSULE 1330255
11. 90-062 SECONDARY ALIGNMENT SHIM Qty 3
12. 10-254 CLUTCH COVER
13. 30-091 TOOL-BELT INSTALL
14. 97-054 DECALS - CLUTCH HOUSING AND DASH 35-048
15. DURA CLUTCH WARRANTY
16. 98-070 INSTALLATION INSTRUCTIONS DC 15-543 (THESE INSTRUCTIONS)

To watch a similar R-Series installation video on the 570 Sportsman go to [www.duraclutch.com](http://www.duraclutch.com) or checkout our YouTube channel <https://www.youtube.com/user/SpecialtyVehiclesInt>

## DURACLUTCH INSTALLATION

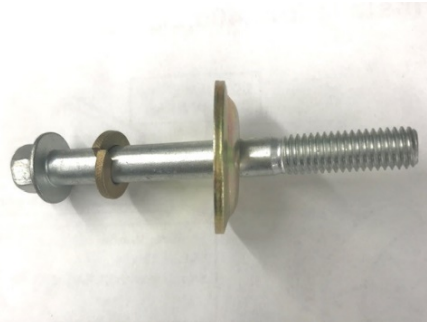
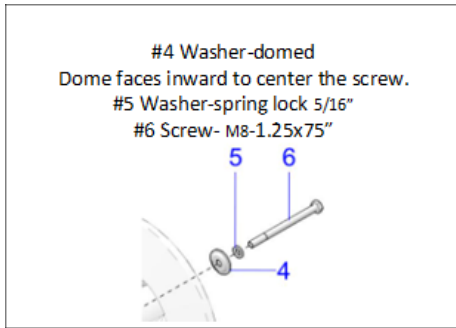
1. Remove clutch cover. Remove the bottom shock bolt on rear drivers' side as well as the nut on top of the torsion bar to gain clearance needed to remove factory cover.
2. Note: on some models it may ease cover removal by removing grease zerk on control arm.



3. Remove stock secondary clutch. Pay attention if there is a snap ring on the shaft and if there are any washers on the shaft with the snap ring. If there is a snap ring or washers remove them. There also may be washers on the spine at the end of the shaft. If there are any remove and discard.
4. Install 2 of the 3 secondary alignment shims on the shaft making sure to slide all the way back to the spline shoulder, then install DCR Secondary.



5. Install the NEW M8X1.25X75mm secondary screw, lock & domed washer provided with kit. Discard any other washers. Place Blue Loctite provided on the secondary screw threads. Tighten screw to 27 ft-lbs.



6. Remove Primary clutch bolt. 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.



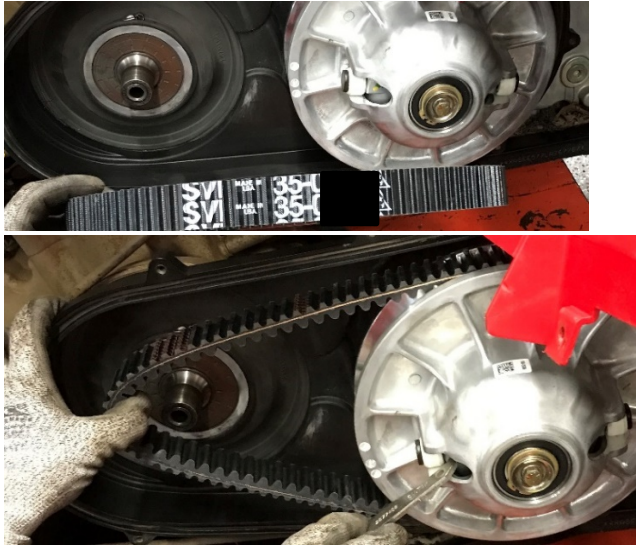
7. Pull the Polaris primary fixed sheave from the engine crankshaft using PN 99-030 puller. Greasing the end of the puller slightly will aid in removal. Do not get grease on any clutch components.



8. Clean the engine tapered shaft and Primary clutch bore with alcohol or degreaser. Do not lubricate.



9. Slip the belt into the Secondary so you can read the part number on the belt and using Belt Install Tool, open secondary so belt will seat down into clutch. Sometimes using a screwdriver to support the tool will help seat the belt lower into clutch.



10. Slide belt into DURACLUTCH DCR Primary clutch then install on post. Use NEW primary screw, steel bushing and plastic bushing. Note: Plastic bushing goes inside of primary post and steel bushing will be on outside of post. Torque primary screw to 47 ft-lbs.



11. Set belt tension. Place transmission in Park and make sure machine is turned off. Rotate secondary by hand to seat belt in secondary clutch until belt tension is tight.
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 is spinning fast, 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. Ideal belt location should be centered with a small gap on each side between the sheaves. Follow steps a. or b. to determine next action.
- If belt is up against fixed sheave (inward), remove belt and secondary screw & secondary and add one shim washer included in kit onto shaft. Install secondary, secondary screw and belt, start machine to reset alignment. If the secondary still rotates fast and rides against fixed sheave, 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 14.
  - If belt is up against moveable sheave (outward), remove belt, secondary screw & secondary and remove one shim washer. Install secondary, secondary screw and belt, start machine to reset alignment. If the secondary still rotates fast and rides against moveable sheave, 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 14.

14. Install NEW outer clutch housing cover that is provided with kit.

Note: The clutch cover screws are hi-lo screws designed for plastic ( $\frac{3}{8}$ " drive). They can be used over and over in the same hole but must not be over-torqued.

Torque spec: 4 ft-lbs/48 in-lbs. This is like a screwdriver torque. Use a hand wrench or a clutch screw gun at a very low setting.



Ensure seal is good or replace with Duraclutch seal part # 35-045. To ensure the primary does not rub against the cover push up and back on the housing while lightly snugging the bottom screws. Then tighten the top rear screw followed by the other top screws. Tighten all remaining screws including the bottom screws evenly. After starting the engine if you hear the primary rubbing, push on the cover while the engine is running in different directions to see which way will eliminate the rubbing. Stop the engine and loosen the housing screws and retighten using the above sequence while pushing on the cover in the direction that eliminated the rubbing. If this does not eliminate the rubbing, try installing a new seal, Duraclutch part # 35-045 and go through the bolt tightening sequence again.

15. Install bottom shock bolt on rear drivers' side as well as the nut on top of the torsion bar and grease zerk in step 1, if removed.
16. Drive vehicle for 5 miles to break-in DURACLUTCH kit components.  
NOTE: If the transmission shifts hard after break-in there are likely issues other than drag in the clutches. See your dealer or call DURACLUTCH service (218-967-8205).
17. Apply two decals as shown – one on the clutch cover housing and one on the dash. Clean surface with alcohol or similar non-harsh solvent. Decal application is important to alert service technicians that the standard Polaris clutches have been replaced.

