

DURA CLUTCH INSTALLATION

15-539 K-DCR SPORTSMAN 450, 500, 570 R-SERIES

SVI, LLC 24MAR2023 REV7

KIT PART #: 15-539

MODEL: DCR-SPORTSMAN 450, 500, 570

DESCRIPTION:

MY14-22 SPORTSMAN 570 ALL MODELS EXCEPT

EXCLUDES Models with these transmission part numbers

- MY16,17: 1333474, 1333475, 1333572, 1333728: See Kit 15-544
- MY21,22: 1334635, 1334636, 1334537: No Kit available

FITS ALL MY06-23 SPORTSMAN 450

FITS ALL MY96-14 SPORTSMAN 500

FITS MY18-23 SPORTSMAN 6X6 BIG BOSS 570

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



KIT CONTENTS:

1. 10-235 ASM-DC PRIMARY R-SERIES
2. 10-236 ASM-DC SECONDARY R-SERIES
3. 35-047 BELT
4. 99-023 LOCTITE 243 0.5ML CAPSULE 1330255
5. 90-051 WASHER-SHIM 0.906 X 1.38 X 0.030 7556454 QTY 4
6. 30-091 TOOL-BELT INSTALL
7. 75-090 SCREW-5/16-18X4.5 HHCS ZP GR5 (Only used when 3 or more of the 90-051 shims are installed)
8. 97-053 DECALS - CLUTCH HOUSING AND DASH 35-047
9. DURA CLUTCH WARRANTY
10. 98-062 INSTALLATION INSTRUCTIONS DC 15-539 (THESE INSTRUCTIONS)

To watch a R-Series installation video go to www.duraclutch.com or checkout our YouTube channel <https://www.youtube.com/user/SpecialtyVehiclesInt>

DURACLUTCH INSTALLATION

1. Remove the following components from the ATV: Seat, LH side panel, LH close off panel, & LH footwell.

Use the notched pliers in the tool kit (MY15 built 11/25/14 and later) for removing the push-pin rivets.



2. Remove the secondary clutch. There is a 3/16" wide spacer and usually additional shim washers on the shaft. Leave all in place.
For SPORTSMAN 450 or 570 models, install the DCR secondary.
When installing on a SPORTSMAN 500 install 3 of the 90-051 shims on shaft then install secondary.

3. For SPORTSMAN 450 or 570 models, install stock hardware removed in step 2 as shown. Place Blue Loctite provided on secondary bolt threads. Tighten screw to 20 ft-lbs.
For SPORTSMAN 500 models, install 5/16" -18x4.5" screw (provided with kit) with #4 & #5 washers

Sportsman 450, 500, 570 w/Polaris or TEAM Tied secondary.

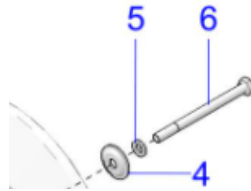
#4 Washer-domed

Dome faces inward to center the screw.

#5 Washer-spring lock 5/16"

#6 Screw- 5/16"-18x4" (stock screw 450 & 570)

#6 Screw – 5/16" -18x4.5" (500 new screw in kit)

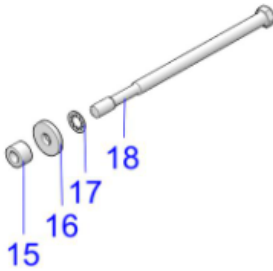


4. Remove Primary clutch bolt. Remove the stock Primary clutch with puller SVI PN# 25-126. Greasing the end of the puller slightly will aid in removal. Do not get grease on any clutch components. Clean the engine tapered shaft and Primary clutch bore with alcohol or degreaser. Do not lubricate.

5. 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.



6. Slide belt into DURACLUTCH DCR Primary clutch then install on post. Use stock primary hardware removed in step 4- spacer, washer and lock washer. Tighten bolt to 47 ft-lbf.



7. 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.
8. Once belt tension is set, start machine and verify that the secondary clutch has no rotation at idle. If no rotation, proceed to step 10. If the secondary has rotation proceed to step 9.

9. If the secondary rotates, 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.
 - a. If belt is up against fixed sheave (inward), remove belt and secondary screw & secondary and add one 90-051 shim washer included in kit onto shaft. Install secondary, secondary screw and belt, start machine to reset alignment. If the secondary still rotates and rides against fixed sheave, add another shim washer. Repeat until there is no rotation, remember to blue Loctite secondary screw when alignment is complete and torque to spec, proceed to step 10. NOTE: If 3 or more of the provided 90-051 shims are installed, use 75-090- 4.5" secondary screw included with kit.
 - b. If belt is up against moveable sheave (outward), remove belt, secondary screw & secondary and remove one factory shim washer or on SPORTMAN 500 one 90-051 shim. NOTE: there is a stock 3/16" thick spacer, DO NOT remove this spacer. Install secondary, secondary screw and belt, start machine to reset alignment. If the secondary still rotates and rides against moveable sheave, remove another shim washer. Repeat until there is no rotation, remember to blue Loctite secondary screw when alignment is complete and torque to spec, proceed to step 10. NOTE: If 2 or less of the provided 90-051 shims are installed, use stock 4" secondary screw.
10. Install outer clutch housing. Ensure seal is good or replace with 35-061. 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 35-061 gasket and go through the bolt tightening sequence again. If you cannot eliminate the rubbing the cover is heat warped and you may have to install a new cover and perhaps a new back plate. You may also try using a heat gun to remove heat sag in the cover.
11. Add clutch cover housing decal below and install the rest of the components removed in step 1.
12. 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).

DECALS

13. Apply two decals as shown – one on the clutch housing and one in the dash area. 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 and a different belt is used.

