

## **DURACLUTCH INSTALLATION**

### **15-500 DC-RZR800 RANGER800-MS RANGER700**

SVI, LLC REV15 18AUG2022

KIT PART #: 15-500

MODEL: DC-RZR800 RANGER800-MS RANGER700

DESCRIPTION: RZR 800 ALL MODELS, RANGER 800 MIDSIZE, RANGER 700 ALL MODELS  
EXCEPT MY09 RANGER 700 4X4

#### KIT CONTENTS:

1. 10-124 ASM-DCPRIM WT25-114 SPR50-001
2. 25-164 WASHER-SHOULDER
3. 10-209 ASM-DC SECONDARY 9.5 PREM ROLL (supersedes 10-055, 10-166)
4. 35-025 BELT (substitute PII 3211162)

Note: Belt 35-025 gives a low start-out ratio but may be slightly less top speed compared to the stock clutch. You can try the stock belt 3211162 in the DURACLUTCH which may give more top speed, but the starting ratio will be higher.

5. 30-091 TOOL-BELT INSTALL
6. 99-023 LOCTITE 243 0.5ML CAPSULE
7. 97-018 DECALS - CLUTCH HOUSING AND DASH 35-025
8. OWNERS MANUAL SUPPLEMENT
9. WEIGHT CHART
10. DURACLUTCH WARRANTY
11. 98-006 INSTALLATION INSTRUCTIONS DC 15-500 (THESE INSTRUCTIONS)

NOTE REGARDING TORQUE STOP ON MY05 RANGER XP, MY06 RANGER XP 4X4 700, MY07 RANGER 4X4 700EFI, MY08 RANGER 700 ALL OPTIONS, and MY09 RANGER 6X6 700EFI:

These models have an original equipment (factory installed) torque stop. The engine and transmission are mounted independent of each other. The engine is rubber mounted for vibration isolation. When torque is transmitted through the belt the rubber mounts flex and the engine is pulled toward the secondary clutch on the transmission tending to loosen the belt. The purpose of the torque stop is to limit the engine pullback when accelerating (or engine braking). The torque stop maintains belt tension and keeps the belt from slipping.

The RZR 800 and the RANGER 800 MIDSIZE do not have a factory installed torque stop nor is a torque stop supplied with the DURACLUTCH kit. The RZR800 engine and transmission are mounted together. The RANGER 800 MIDSIZE is not designed to carry or pull loads of the full-size RANGER and a torque stop is not required.

#### PROCEDURE TO SET THE ORIGINAL EQUIPMENT TORQUE STOP

The torque stop is an adjustable rubber pad on the motor mount (PN 3021522 shown on the parts catalog diagram ENGINE MOUNTING). In some cases, the torque stop is on a bracket between the engine and transmission.

Before adjusting the torque stop check the motor mounts (4 places) to insure none are broken (separated) or vehicle performance will be adversely affected. The best way to do this is to use a pry bar to move the engine away from the mount. If the mount is broken, it will separate when you move the engine away from the mount.

To adjust the torque stop, tighten the rubber pad against engine so the pad just touches the engine. Back the pad off ½ turn. Hold the rubber pad from turning and lock the nut.

98-006 INSTRUCTIONS

Note: If the pad is tight against the engine when idling or in steady state running, undesirable engine vibration will be felt. When the engine is accelerating or in engine braking mode it should pull back into the rubber pad to keep the belt tight, so it won't slip.

#### DURACLUTCH INSTALLATION

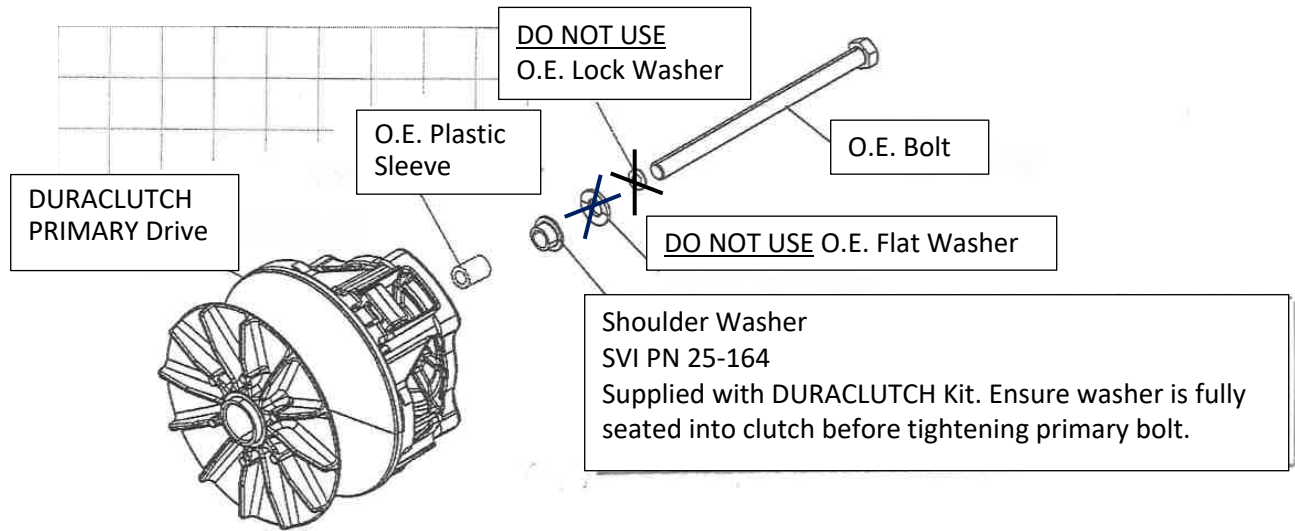
1. Remove the Secondary clutch.
2. Install DURACLUTCH Secondary. Place a drop of BLUE Loctite provided with kit on the secondary bolt threads. Tighten bolt to 20 ft-lbs.
3. Remove Primary clutch bolt. Remove the Primary clutch with puller SVI 25-147. Greasing the end of the puller slightly will aid in removal. Do not get grease on any clutch components.
4. 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 a screwdriver is needed to assist lowering into clutch.



6. Slide belt into primary clutch, then install on post.

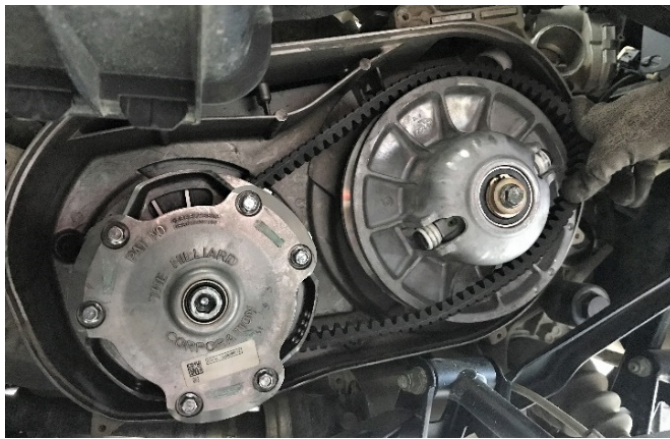


7. Install DURACLUTCH Primary with shoulder washer as shown. DO NOT USE the O.E. flat washer or lock washer. The flat washer will interfere with the primary cover. Tighten bolt to **60 ft-lbs. VERY IMPORTANT-** Over tightening will not allow clutch to operate properly and cause damage and failure of the clutch.



O.E. = Original Equipment

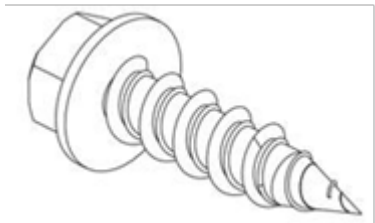
8. How to install the Belt as follows if the Primary and Secondary are already installed. Place Belt in the Primary and open the Secondary sheaves with the Belt Installation Tool provided (see photo). Roll belt into the Secondary sheaves. Sometimes a screwdriver is needed to seat lower into clutch.



9. Once primary is torqued, with transmission in PARK, spin secondary clutch back & forth a few times to allow belt back to top of secondary.
10. Install outer clutch housing.

Note: The clutch cover screws are #14 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 low setting



Ensure seal is good or replace with SVI PN 35-061. The DURACLUTCH primary is slightly larger than the original equipment primary. 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. Then 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. Drive vehicle for 5 miles to break-in DURACLUTCH kit components. During 5-mile drive, stop approximately 10 times and pause for 30 seconds, leave in High gear, and have foot on brake. This allows clutch packs to properly wear-in.

NOTE: If the transmission still 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

12. Apply two decals as shown – one on the clutch 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.

