



Polaris Calibration Kit
TR-C094

**Fits: 2021 Polaris Ranger XP 1000 & Crew
Stock-29" Tires - Trail
0-3000ft Elevation**

(11/8//2021)

ITEMS INCLUDED:

Drive Spring - Brown
Driven Spring - Red
Driven Spring - Blue
Drive Belt - 1186 Series
Weights - W21XX90A 6-3-2
Limiter Washer - 5438963
FIX2 Shims
Instructions

TOOLS NEEDED:

Drive clutch puller - Trinity# TR-CDCP12
Driven clutch compression tool - Trinity# TR-CDCP21
3/8" metric socket set
7/8" socket 1/2"
16mm Socket
10mm Socket
Torx #60
Allen Wrench Set
Polaris Belt removal Tool
Misc. normal shop tools

*****STOP*****

These Machines are known to suffer from heat soak from engine which raises Clutch and Belt Temperatures. We recommend pairing clutch kit with an added stand-alone (non-inline) CVT Blower Kit to Reduce CVT Temps.

**Make sure that you compare year/model on instruction sheet to the unit you have.
Do Not attempt this install w/o proper tools or damage to clutches & injury could occur.
Do Not attempt this install if you are not qualified. Injury could occur.
Inspect Drive/Driven clutch faces before you install kit. Repair/Replace as necessary.**

Loosen two 5/16" clamps holding air intake tube between air box and Electronic Throttle Control.

Remove Air Box Lid.

Remove clutch cover screws with 8mm socket and remove cover by tipping top out then sliding up, then pulling bottom out and sliding between airbox and lower chassis frame.

Some cases raising the rear of the machine helps with clearance.

Remove drive clutch retaining bolt using long extension and Torx T60 socket

With Drive Clutch bolt removed the clutch post can now be removed by sliding shaft outward, be careful not to lose the two washers on post (an O-ring is on shaft to prevent them from falling off).

Remove entire drive clutch using TR-CDCP12 and 7/8" socket, hand thread to start puller.
OEM Clutch retaining bolt torque spec is 96ft-lbs. so clutch is on there.
Remove driven clutch retaining bolt(10mm). Count Washers and shims for reassembly ours had 3 thin shims under thick washer. Adding or removing the thin shims will affect clutch/belt alignment and shifting.
Remove clutches and belt from machine.
Mark x's on drive clutch cover, and sheaves to match spider X for reassembly.
Install drive clutch on TR-CDCP21 and tighten cage to clutch outer cover.
Remove drive clutch cover bolts (6).
Clean/wipe/blow dust from drive clutch assembly.
Scuff sheaves with scotch-brite pad and wipe with contact cleaner on a rag.
Install supplied weights in drive clutch (magnets preinstalled at GBoost).
Install Clutch Post with factory washers at base then install supplied blue limiter on this shaft.
Install supplied **Brown** spring in drive clutch.
Install cover aligning X on cover to X on clutch spider.
Compress cover/spring and install bolts and torque to 9ft-lbs.
Mark x's on the two driven sheaves prior to separating to aid in reassembly.
Secondary clutch can now be separated by twisting and spreading sheaves.
Clean/wipe/blow dust from driven clutch assembly.
Scuff sheaves with scotch brite pad and wipe with contact cleaner on a rag.
Install driven clutch sheave with helix attached (helix down) on TR-CDCP21 compression tool.
Tighten 1 1/8" Socket onto clutch.
Remove 3 Helix Bolts(16mm).
Release pressure on spring and remove spring.
Single Cab models install helix with supplied **Red** driven spring in clutch. Crew Cab install **BLUE** spring.
Tighten large socket against rear of sheave. Align holes and reinstall 16mm Hex torque to 44ft-lbs.
Install driven clutch assembly on unit.
Install retainer bolt, with washers and finger tighten to hold clutch assembly on shaft.
Install Polaris belt tool & tighten so that belt slides down into driven clutch.
Install Gboost drive belt on driven clutch with part numbers so that you can read them.
Install drive clutch thru belt and onto engine stub shaft, or simply slide outer sheave onto shaft if separated.
Tighten driven clutch bolt to 20ft-lbs. factory spec.
Install drive clutch bolt and torque to 96ft-lbs.

Verify that all items have been properly installed & properly torqued.

POSSIBLE ISSUE: Checking Transmission Alignment: Start unit without cover on. Shift between gears. If it is hard to shift, proceed to alignment procedure.

Engagement should be 2000-2200rpm after initial engagement.

Top operating rpm should be 6500-6800, normal operating conditions. MAX RPM 7000-7300 RPM

NOTE: Please contact Trinity Racing if your machine is not operating the suggested RPM ranges, before adjustments.

Re-torque drive clutch/driven clutch bolts to proper Polaris specs after 100 miles of operation.

Failure to do so could cause future damage to clutches or injury to operator.

If you have any problems/questions on this kit **contact TRINITY RACING.**

TECH TIPS:

1. Contact Trinity Racing if you add larger/heavier tires as this changes the clutch calibration.
2. Drain water out of clutch cover after washing unit or driving thru deep water before operating. as this could cause a flat spot/damage belt and wear the drive clutch causing a clutch face groove/damage.
3. Clean clutches at least once a season for normal maintenance.
4. Under Severe conditions such as MUD BOG riding/racing, clean clutches daily.
5. Do not install partial kit as kit was designed to work correctly using all enclosed items.
6. Do not mix other company's parts with kit as this could cause damage/improper operation.

Torque Specs: Companies change specs so verify any/all bolt tightening specs by checking with your Polaris dealer, service manual, owner's manual or Polaris Industries.



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