

DURACLUTCH INSTALLATION

15-512 DC-RANGER DSL-K

SVI, LLC REV9

KIT PART #: 15-512

MODEL: DC-RANGERDSL-K

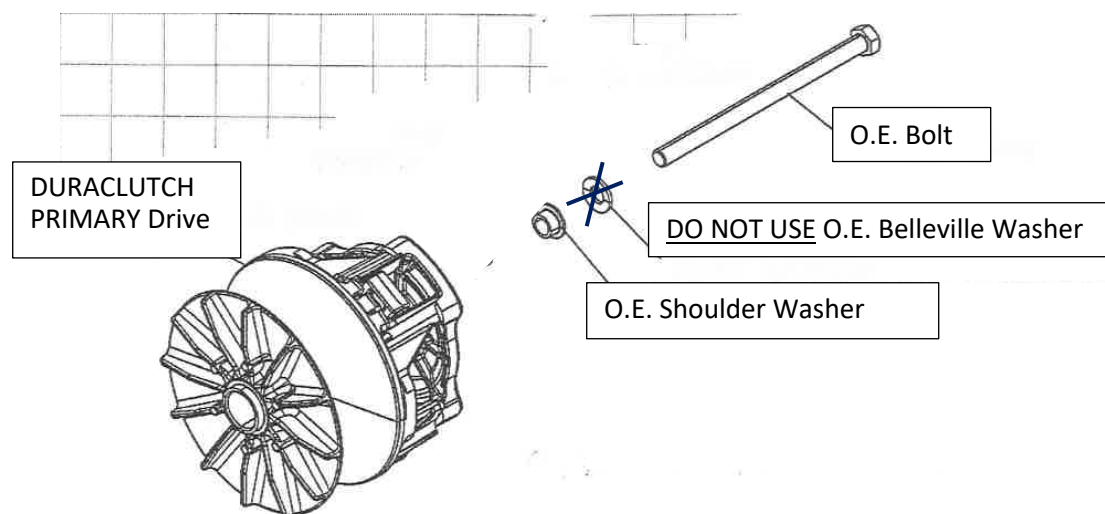
DESCRIPTION: MY15-18 RANGER 1000 DIESEL ALL MODELS, BOBCAT AND GRAVELY DIESEL (KOHLER)

KIT CONTENTS:

1. 10-130 ASM-DCPRIM WT25-150 SPR50-001
2. 10-194 ASM-DC SECONDARY 9.5 PREM ROLL (supersedes 10-115 and 10-168)
3. 35-027 BELT
4. 30-091 TOOL-BELT INSTALL
5. 97-019 DECAL-DC CLUTCH HOUSING DASH 35-027
6. OWNERS MANUAL SUPPLEMENT
7. DURACLUTCH WARRANTY
8. INSTALL INSTRUCTIONS 15-512 (THESE INSTRUCTIONS)

DURACLUTCH INSTALLATION

1. Remove the Secondary clutch.
2. Install DURACLUTCH Secondary. If there is a snap ring on the transmission shaft behind the Secondary remove it. Tighten bolt to 45 ft-lbf.
3. Remove Primary clutch bolt. Remove the Primary clutch with puller SVI 25-126 (PII 28772085). 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 Primary and over the Secondary.
6. Install DURACLUTCH Primary with shoulder washer as shown. DO NOT USE the O.E. Belleville (cupped) washer. It will interfere with the primary cover. Tighten bolt to 60 ft-lbf.



O.E. = Original Equipment

7. If the Primary and Secondary are already installed, install the Belt as follows. Place Belt in the Primary and open the Secondary sheaves with the Belt Installation Tool provided (see photo). Roll belt into the Secondary sheaves.



8. Set belt tension. Place transmission in Park. APPLY FOOT BRAKE TO INSURE VEHICLE REMAINS STATIONARY. Apply slight throttle to turn Secondary.
9. Install outer clutch housing. Insure seal is good or replace. The DURACLUTCH primary is slightly larger than the original equipment primary. To insure 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 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.

DECALS

10. Apply two decals as shown – one on the clutch housing and one on the dash. Clean surface with alcohol or similar solvent. Decal application is important to alert service technicians that the standard Polaris clutches have been replaced.



DURACLUTCH INSTALLATION SUPPLEMENT

IT IS VERY IMPORTANT TO COMPLETE THESE INSTRUCTIONS OR THE VEHICLE WILL NOT PERFORM SATISFACTORILY

On 2015 models the throttle foot pedal must be modified so the foot pedal will open the throttle fully. Remove and modify per diagram and re-install.

If the engine idle speed is above 1250 RPM it must be lowered to 1200-1250 RPM. This is to insure the heavy diesel flyweights in the Primary do not put thrust load on the clutch packs before the clutch packs engage. This thrust load will cause drag at idle resulting in hard shifting and creeping at idle.

WARNING: WHEN MAKING ADJUSTMENTS MAKE SURE THE SHIFT LEVER IS IN PARK!

1. Before lowering the idle RPM there must be free play in the cable or it will not be possible to make the adjustment. Adjust cable free play per photo instructions.
2. Adjust the idle per photo instructions. The engine must be warm.
3. With the idle RPM lowered the box may resonate when empty causing an objectionable rattle. If so, adjust the box latches per photo instructions.

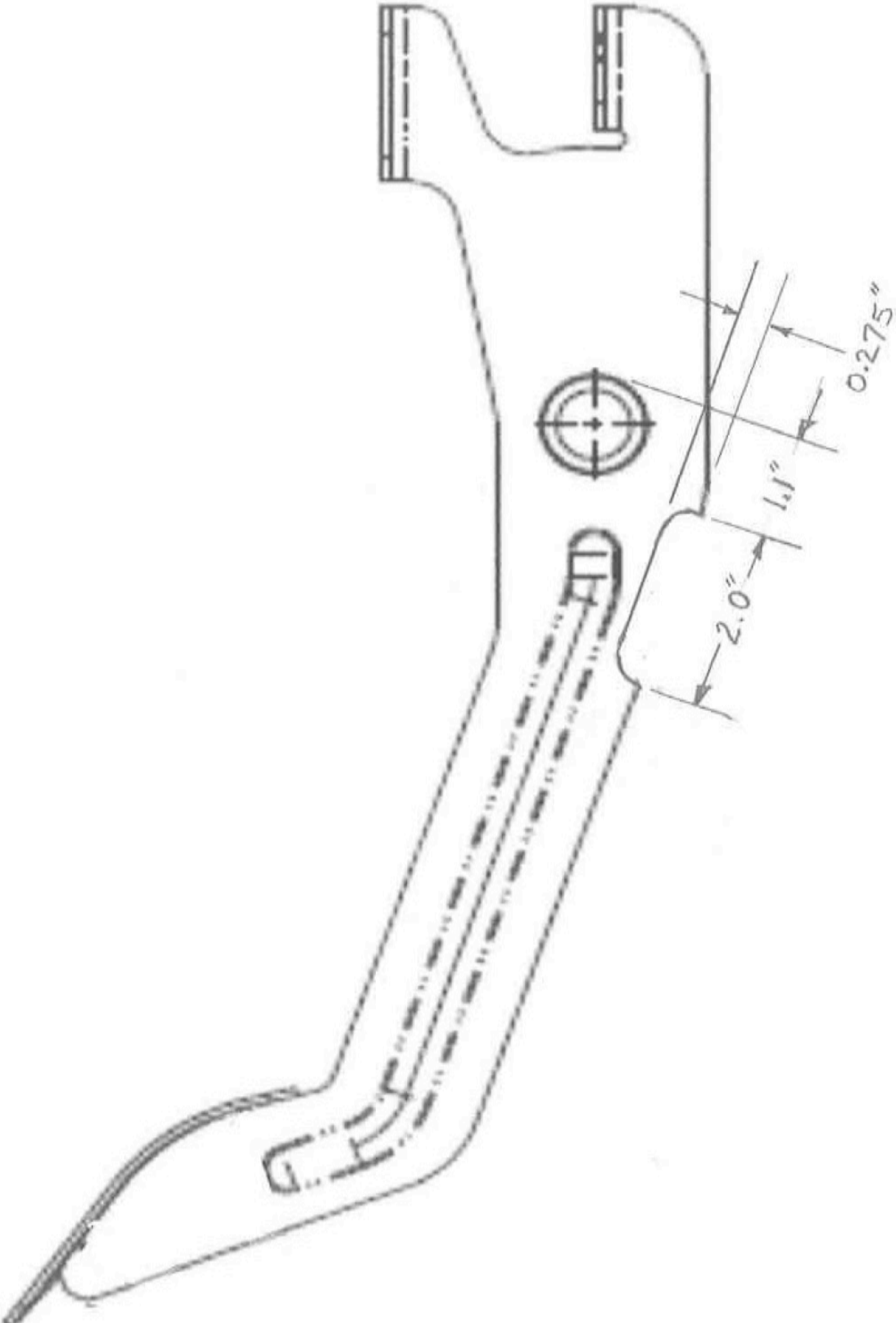
Optional: you can increase full throttle performance if the engine runs less than 3600-3650 RPM under load. Proceed as follows.

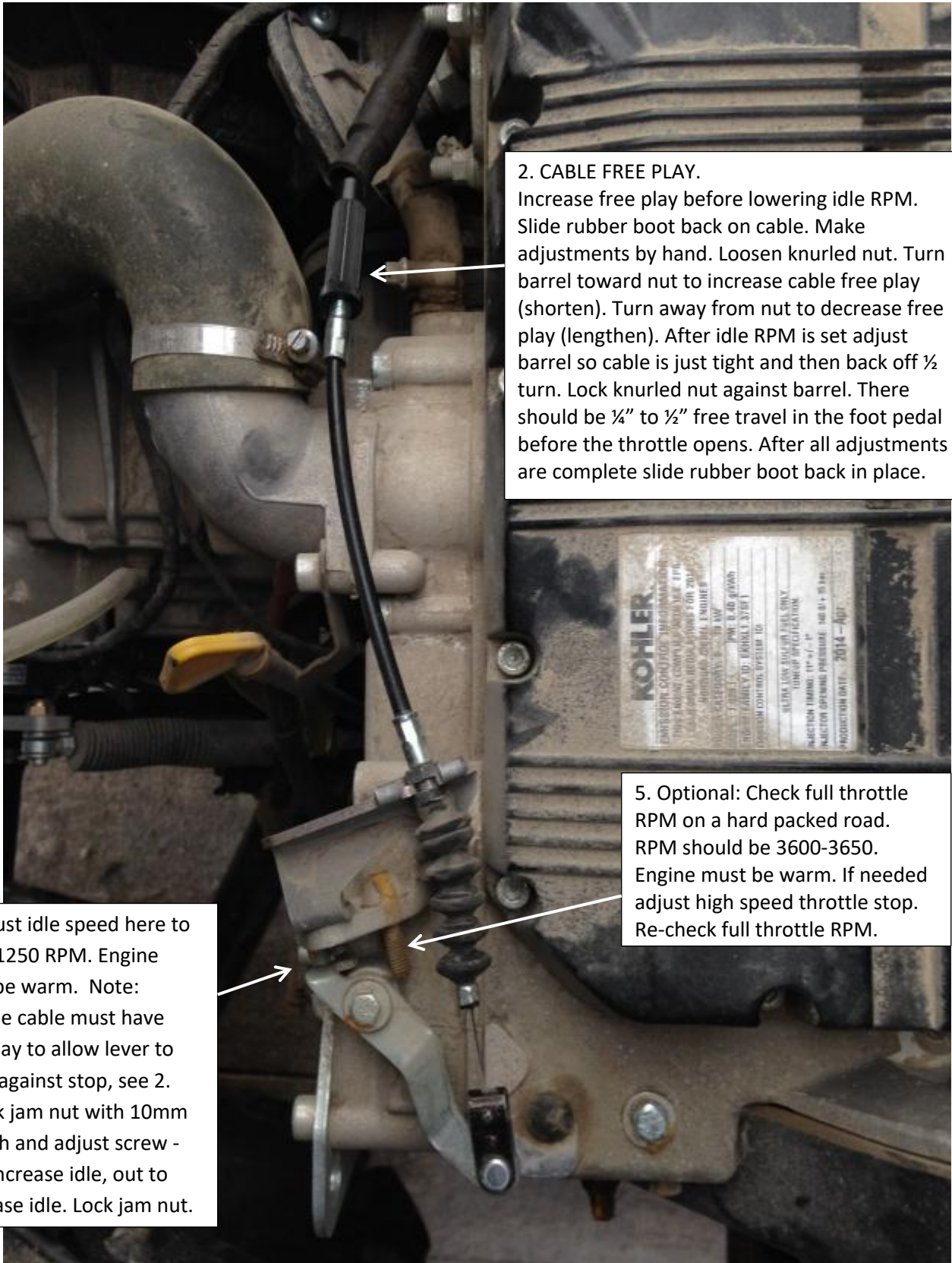
4. Check Engine RPM under load. Run the vehicle full throttle on a level hard packed road and check to see if the engine RPM reaches 3600-3650. If not, adjust the high speed throttle stop to increase the full throttle RPM and check again on the road. If necessary re-adjust until the RPM is 3600-3650 on the road at full throttle. See photo instructions.

Note: The full throttle engine RPM without load should be 3750-3800. You can shortcut the process and adjust as follows.

- Make sure the clutch housing cover is installed
- Place the gear selector in Park
- Check full throttle RPM in Park
- Adjust the full throttle stop to get 3750-3800 RPM
- Check to see if RPM is 3600-3650 under load on the road
- Readjust if necessary

1. 2015 models throttle foot pedal modification





2. CABLE FREE PLAY.
Increase free play before lowering idle RPM. Slide rubber boot back on cable. Make adjustments by hand. Loosen knurled nut. Turn barrel toward nut to increase cable free play (shorten). Turn away from nut to decrease free play (lengthen). After idle RPM is set adjust barrel so cable is just tight and then back off ½ turn. Lock knurled nut against barrel. There should be ¼" to ½" free travel in the foot pedal before the throttle opens. After all adjustments are complete slide rubber boot back in place.

3. Adjust idle speed here to 1200-1250 RPM. Engine must be warm. Note: throttle cable must have free play to allow lever to move against stop, see 2. Unlock jam nut with 10mm wrench and adjust screw - in to increase idle, out to decrease idle. Lock jam nut.

5. Optional: Check full throttle RPM on a hard packed road. RPM should be 3600-3650. Engine must be warm. If needed adjust high speed throttle stop. Re-check full throttle RPM.



4. If box resonates after idle is lowered to 1200-1250 RPM bend tabs down to tighten latches. Adjust both sides. Check to see that latches are fully engaged and locked when box is pushed down firmly.