

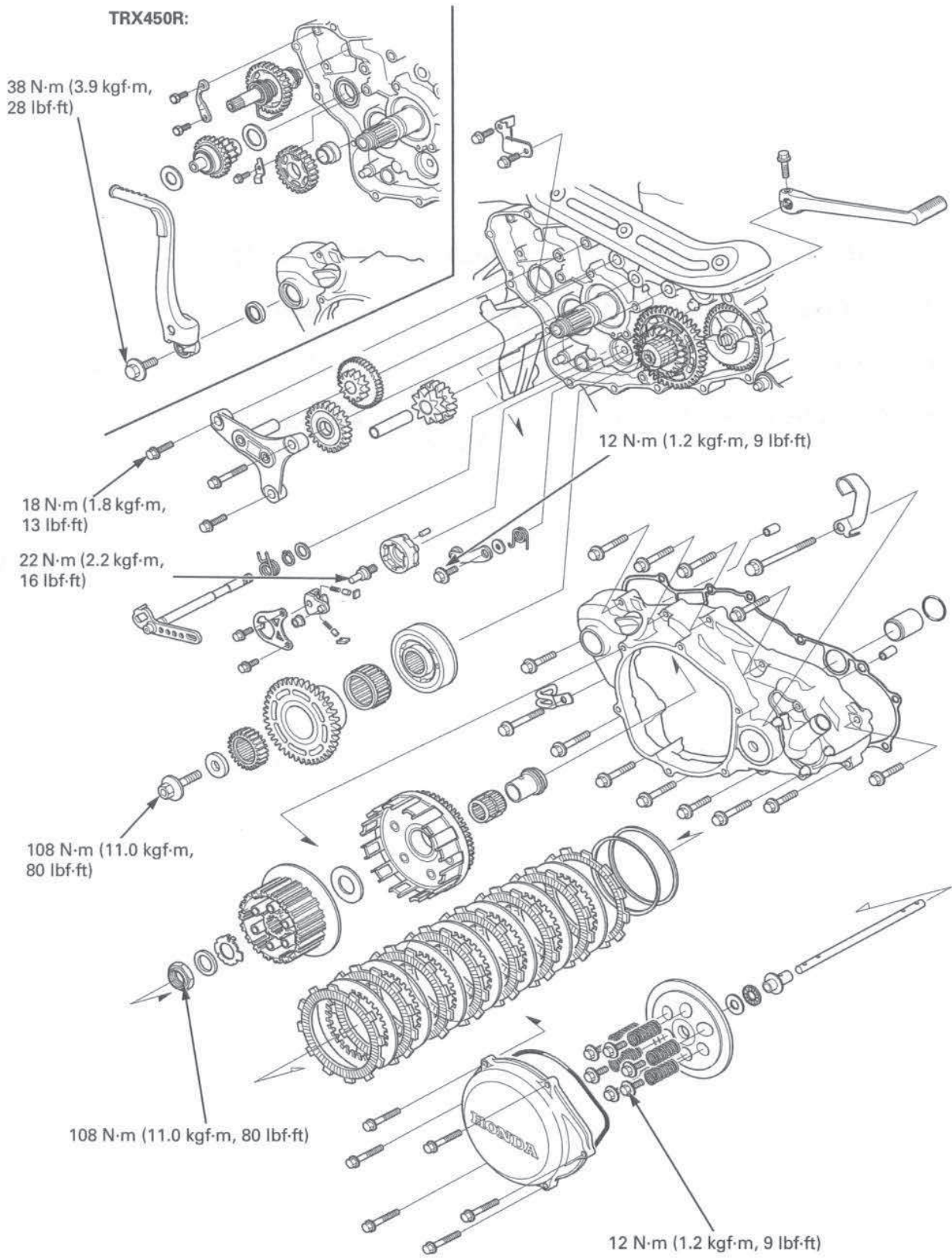
## **14. CLUTCH/STARTER CLUTCH/KICK STARTER/GEARSHIFT LINKAGE (After '05)**

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**CLUTCH/STARTER CLUTCH/KICK STARTER/GEARSHIFT LINKAGE (After '05)**

**SYSTEM COMPONENTS**



**CLUTCH/STARTER CLUTCH/KICK STARTER/GEARSHIFT LINKAGE (After '05)****SERVICE INFORMATION****GENERAL**

- This section covers service of the clutch, starter clutch, kickstarter and gearshift linkage. These services can be performed with the engine installed in the frame.
- Transmission oil viscosity and level and the use of oil additives have an effect on clutch disengagement. Oil additives of any kind are specifically not recommended. When the clutch does not disengage or the vehicle creeps with the clutch disengaged, inspect the transmission oil viscosity and level before servicing the clutch system.

**SPECIFICATIONS**

Unit: mm (in)

ITEM		STANDARD	SERVICE LIMIT	
Clutch	Lever free play	10 – 20 (3/8 – 3/4)	–	
	Spring free length	45.7 (1.80)	44.7 (1.76)	
	Disc A thickness	2.92 – 3.08 (0.115 – 0.121)	2.85 (0.112)	
	Disc B thickness	3.22 – 3.38 (0.127 – 0.133)	3.15 (0.124)	
	Plate warpage	–	0.15 (0.006)	
Driven gear boss (TRX450ER)	I.D.	36.009 – 36.034 (1.4177 – 1.4189)	36.034 (1.4189)	
	O.D.	45.660 – 45.673 (1.7976 – 1.7981)	45.660 (1.7976)	
Reduction gear A I.D. (TRX450ER)		12.010 – 12.050 (0.4728 – 0.4744)	12.050 (0.4744)	
Reduction gear B I.D. (TRX450ER)		10.045 – 10.085 (0.3955 – 0.3970)	10.085 (0.3970)	
Idle gear I.D. (TRX450ER)		12.010 – 12.050 (0.4728 – 0.4744)	12.050 (0.4744)	
Gear holder shafts O.D. (TRX450ER)		11.989 – 12.000 (0.4720 – 0.4724)	11.989 (0.4720)	
Reduction gear shaft O.D. (TRX450ER)		9.980 – 9.995 (0.3929 – 0.3935)	9.980 (0.3929)	
Kickstarter (TRX450R)	Pinion gear I.D.	22.007 – 22.028 (0.8664 – 0.8672)	22.05 (0.868)	
	Spindle O.D.	21.959 – 21.980 (0.8645 – 0.8654)	21.95 (0.864)	
	Idle gear I.D.	21.020 – 21.041 (0.8276 – 0.8284)	21.07 (0.830)	
	Idle gear bushing	I.D.	17.000 – 17.018 (0.6693 – 0.6700)	17.04 (0.671)
		O.D.	20.979 – 21.000 (0.8259 – 0.8268)	20.96 (0.825)
Countershaft O.D. at kickstarter idle gear (TRX450R)		16.966 – 16.984 (0.6680 – 0.6687)	16.95 (0.667)	

**TORQUE VALUES**

Clutch spring bolt	12 N·m (1.2 kgf·m, 9 lbf·ft)	
Clutch center lock nut	108 N·m (11.0 kgf·m, 80 lbf·ft)	Apply oil to the threads and seating surface.
Shift drum center pin bolt	22 N·m (2.2 kgf·m, 16 lbf·ft)	Apply locking agent to the threads.
Shift drum stopper arm bolt	12 N·m (1.2 kgf·m, 9 lbf·ft)	
Start gear holder bolt (TRX450ER)	18 N·m (1.8 kgf·m, 13 lbf·ft)	Apply oil to the threads and seating surface.
Start gear holder bolt (TRX450ER)	18 N·m (1.8 kgf·m, 13 lbf·ft)	Apply locking agent to the threads.
Primary drive gear bolt (TRX450ER)	108 N·m (11.0 kgf·m, 80 lbf·ft)	Apply oil to the threads and seating surface.
Start gear holder hole plug bolt (TRX450R)	18 N·m (1.8 kgf·m, 13 lbf·ft)	Apply oil to the threads and seating surface.
Kickstarter pedal bolt (TRX450R)	38 N·m (3.9 kgf·m, 28 lbf·ft)	
Gearshift return spring pin	22 N·m (2.2 kgf·m, 16 lbf·ft)	