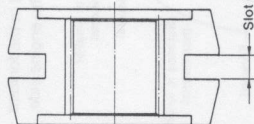


Dimensions <i>l</i>	Standard dimensions		Limited dimensions
	mm (in.)	mm (in.)	
KM2-C	24.4 ~ 24.7 (0.9606 ~ 0.9724)	24.1 (0.9488)	
KM3-A	29.9 ~ 30.2 (1.1772 ~ 1.1890)	29.6 (1.1654)	

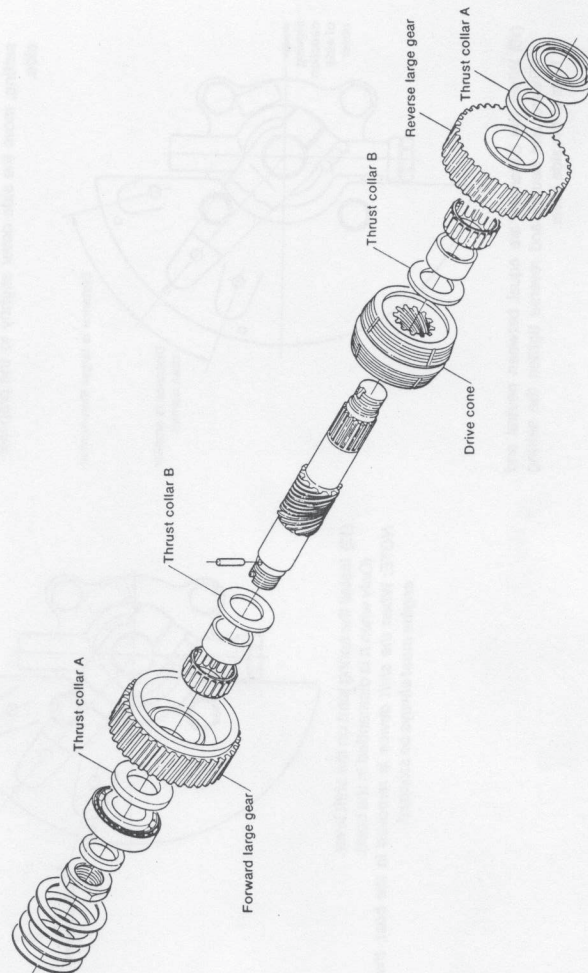
NOTE: When dismantled, the forward or reverse direction of the drive cone must be clearly identified.

(4) Measure the dimension of the slot width of the drive cone, and replace the cone when the dimension is over the specified limit.



	Standard dimensions	Standard clearance	Allowable clearance	Limited clearance
Slot width of drive cone	$8^{+0.1}_{-0}$ (0.3150 ~ 0.3189)	0.15 ~ 0.3 (0.0059 ~ 0.0118)	0.6 (0.0236)	8.3 (0.3288)
Shifter width	$8^{-0.15}_{-0.20}$ (0.3071 ~ 0.3090)			7.7 (0.3031)

3-6 Thrust collar



3. Inspection and Servicing

3-1 Clutch case

- (1) Check the clutch case with a test hammer for cracking. Perform a color check when required. If the case is cracked, replace it.
- (2) Check for staining on the inside surface of the bearing section.



Rollers

Also, measure the inside diameter of the case. Replace the case if it is worn beyond the wear limit.

3-2 Bearing

- (1) Rusting and damage. If the bearing is rusted or the taper roller retainer is damaged, replace the bearing.
- (2) Make sure that the bearings rotate smoothly. If rotation is not smooth, if there is any binding, or if any abnormal sound is evident, replace the bearing.

3-3 Gear

Check the surface, tooth face conditions and backlash of each gear. Replace any defective part.

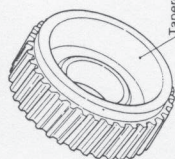
- (1) Tooth surface wear. Check the tooth surface for pitting, abnormal wear, dents, and cracks. Repair lightly damaged gears and replace heavily damaged gears.
- (2) Tooth surface contact. Check the tooth surface contact. The amount of tooth surface contact between the tooth crest and tooth flank must be at least 70% of the tooth width.
- (3) Backlash. Measure the backlash of each gear, and replace the gear when it is worn beyond the wear limit.

	Maintenance standard	Wear limit
Input shaft forward gear and output shaft forward gear	0.06 ~ 0.12 (0.0024 ~ 0.0047)	0.2 (0.0079)
Input shaft reverse gear and intermediate gear	0.06 ~ 0.12 (0.0024 ~ 0.0047)	0.2 (0.0079)
Intermediate gear and output shaft reverse gear	0.06 ~ 0.12 (0.0024 ~ 0.0047)	0.2 (0.0079)

(The same dimensions apply to both KM2-C and KM3-A)

3-4 Forward and reverse large gears

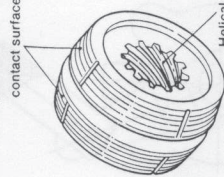
- (1) Contact surface with drive cone. Visually inspect the tapered surface of the forward and reverse large gears where they make contact with the drive cone to check if any abnormal condition or sign of overheating exists. If any defect is found, replace the gear.



Tapered surface

3-5 Drive cone

- (1) Visually inspect that part of the surface that comes into contact with the circumferential triangular slot to check for signs of scoring, overheating or wear. If deep scoring or signs of overheating are found, replace the cone.



Helical involute spline

- (2) Check the helical involute spline for any abnormal condition on the tooth surface, and repair or replace the part should any be found.
- (3) Measure the amount of wear on the tapered contact surface of the drive cone, and replace the cone when the wear exceeds the specified limit.

