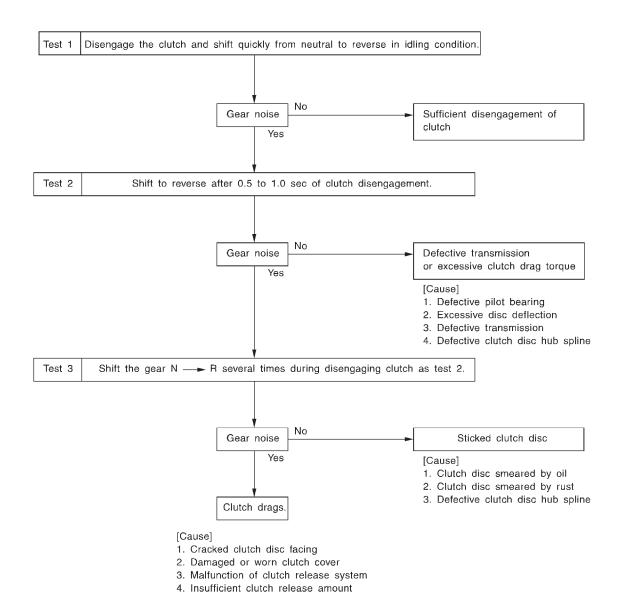
## **DIAGNOSTICS**

## 1. Clutch System

Symptom	Possible cause	Corrective
1. Clutch slippage.	(a) Clutch facing smeared by oil	Replace.
It is hard to perceive clutch slippage in	3	
the early stage, but pay attention to the		
following symptoms		
Engine speed up when shifting.	(b) Worn clutch facing	Replace.
High speed driving is impossible;	(1)	-1
especially rapid acceleration impossible		
and vehicle speed does not increase in		
proportion to an increase in engine	(c) Deteriorated diaphragm spring	Replace.
speed.  • Power falls, particularly when ascend-	(o) Botomoratoa diapriragini opinig	Tropiado.
ing a slope, and there is a smell of burn-		
ing of the clutch facing.		
Method of testing: Put the vehicle in	(d) Distorted pressure plate or flywheel	Correct or replace.
stationary condition with parking brake	(d) Distorted pressure plate of flywheel	Correct or replace.
fully applied. Disengage the clutch and		
shift the transmission gear into the first.		
Gradually allow the clutch to engage	(a) Defective elected release bearing	Correct or replace
while gradually increasing the engine	(e) Defective clutch release bearing holder	Correct or replace.
speed. The clutch function is satisfactory	Holder	
if the engine stalls. However, the clutch		
is slipping if the vehicle does not start off and the engine does not stall.		
2. Clutch drags.	(a) Worn or rusty clutch disc hub spline	Replace clutch disc.
As a symptom of this trouble, a harsh	(a) Worn or rusty clutch disc hub spline	Replace clutch disc.
scratching noise develops and control		
becomes quite difficult when shifting	(b) Excessive deflection of clutch disc	Correct or replace.
gears. The symptom becomes more	facing	
apparent when shifting into the first gear.		
However, because much trouble of this	(c) Seized crankshaft pilot needle bear-	Replace.
sort is due to defective synchronization	ing	
mechanism, carry out the test as		
described after.	(d) Cracked clutch disc facing	Replace.
Method of testing: <ref. 2-10="" [k14.0]="" to=""></ref.>		
[K1A0].> It may be judged as insufficient disen-	(e) Sticked clutch disc (smeared by oil or	Replace.
gagement of clutch if any noise occurs	water)	'
during this test.	,	
3. Clutch chatters.	(a) Adhesion of oil on the facing	Replace clutch disc.
Clutch chattering is an unpleasant vibration to the whole body when the vehicle is just started with clutch partially	(b) Weak or broken torsion spring	Replace clutch disc.
	(c) Defective facing contact or excessive	Replace clutch disc defection.
	disc	Tropiaco diateri also delection.
engaged.	(d) Warped pressure plate or flywheel	Correct or replace.
	(e) Loose disc rivets	Replace clutch disc.
	(f) Loose engine mounting	Retighten or replace mounting.
	(g) Improper adjustment of pitching stop-	Adjustment.
	per	, rajadinoni.
4. Noisy clutch	(a) Broken, worn or unlubricated clutch	Replace clutch release bearing.
Examine whether the noise is generated	release bearing	
when the clutch is disengaged, engaged, or partially engaged.	(b) Insufficient lubrication of pilot bearing	Apply grease.
	(c) Loose clutch disc hub	Replace clutch disc.
	(d) Loose torsion spring retainer	Replace clutch disc.
		-
	(e) Deteriorated or broken torsion spring	Replace clutch disc.

Symptom	Possible cause	Corrective
5. Clutch grabs. When starting the vehicle with the clutch partially engaged, the clutch engages suddenly and the vehicle jumps instead of making a smooth start.	(a) Grease or oil on facing	Replace clutch disc.
	(b) Deteriorated cushioning spring	Replace clutch disc.
	(c) Worn or rusted spline of clutch disc or main shaft	Take off rust, apply grease or replace clutch disc or main shaft.
	(d) Deteriorated or broken torsion spring	Replace clutch disc.
	(e) Loose engine mounting	Retighten or replace mounting.
	(f) Deteriorated diaphragm spring	Replace.

## A: DIAGNOSTIC DIAGRAM OF CLUTCH DRAG



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