

Heavy Duty Clutches Made in the U.S.A.

## Technical Hot Sheet

## **CLUTCH TROUBLESHOOTING**



Clutch Condition •

- Probable Cause
  - Corrections •

For Immediate Assistance **1-800-325-6138** 

24/7 TECHNICAL SUPPORT

## **CLUTCH TROUBLESHOOTING**

	Step One:	Visually Inspect Clutch System				
1.	Is there any kind of	contamination on the clutch?		Yes	No	
2.	Are there any missing or broken pieces?			Yes	No	
3.	Are the mounting b	olts tight?		Yes	No	
4.	Is there anything ca	using the linkage or fork to bind or drag?		Yes	No	
	Step Two:	Clutch Operation				
1.	Is the clutch slipping?			Yes	No	
2.	Does the clutch rele	ease?		Yes	No	
3.	Does the clutch eng	gage and disengage smoothly?		Yes	No	
4.	Does the clutch ma	ke noise while engaged?		Yes	No	
5.	Does the clutch ma	ke noise while disengaged?		Yes	No	
	Step Three:	<u>Clutch Adjustment</u>			Current Setting	Adjust. Made
1.	Is the clutch adjuste	ed properly?			Ŭ	
	a) $\frac{1}{2} - \frac{5}{8}$ inch un	der bearing to clutch	Yes	No		
	b) <sup>1</sup> / <sub>2</sub> - <sup>9</sup> / <sub>16</sub> inch to	clutch brake	Yes	No		. <u> </u>
	c) $\gamma_8$ inch free tra	vel (mechanical linkage)	Yes	No		
2.	Is the clutch brake	in the truck?	Yes	No		
	a) Are tabs broke	en off?	Yes	No		
3.	Is a torque limiting	brake installed?	Yes	No		
	a) Can it be turne	ed using channel locks or hands?	Yes	No		
4.	Does the linkage pu	Ill the bearing a minimum of ${\cal V}_2$ inch?	Yes	No		
5.	Is the clutch brake	squeezed properly?	Yes	No		
	a) Will a .010 fee with the clutch	ler gauge between bearing and brake stay n depressed?	Yes	No		

## **CLUTCH TROUBLESHOOTING**

	CLUTCH	<b>SLIPPING</b>	
Probable Cau	lse:	Correction:	
1.	Incorrect clutch adjustment	1.	Re-adjust per installation instructions
2.	Release mechanism binding	2.	Check release mechanism and linkage. Lube if
3.	Grease or oil on clutch facing	3.	necessary. Replace with new clutch assembly. Find and repair
4.	Worn clutch facings	4.	cause of grease or oil contamination. Replace with new clutch assembly
5.	Overloaded clutch – wrong application	5.	Review application to ensure that proper clutch was installed.
6.	Flywheel out of spec	6.	Check flywheel for proper dimensions.
7.	Driver foot resting on clutch pedal	7.	Avoid using clutch pedal as a foot rest.
	NOISY	CLUTCH	
Probable Cau	ise:	Correction:	
1.	Incorrect clutch adjustment	1.	Re-adjust per instructions.
2.	Clutch lacks lubricant or is damaged	2.	Lubricate if a zerk fitting or replace clutch assembly.
3.	Flywheel pilot bearing lacks lubricant or is damaged	3.	Replace with new bearings.
4.	Release yoke hitting cover assembly at full release	4.	Check yoke and linkage for wear. Ensure proper
	position		adjustment of yoke and linkage.
5.	Worn linkage system	5.	Check linkage, cross shaft, cross shaft bushings, and yoke.
6.	Flywheel out of spec	6.	Check flywheel for proper dimensions.
	POOR CLU	TCH RELEASE	
Probable Cau		Correction:	
1.	Clutch adjustment no correct	1.	Re-check adjustment per installation instructions.
2.	Flywheel pilot bearing bound in flywheel or on input	2.	Replace pilot bearing and insure proper seating in
	shaft		flywheel and tolerance to input shaft.
3.	Damaged clutch release bearing	3.	Replace with new clutch assembly.
4.	Clutch release shaft projecting through release yoke	4.	Reposition release shaft so it does not project. Check
			bell housing bushings, cross shafts and release yoke for wear.
5.	Release yoke hitting cover assembly at full release	5.	Check yoke and linkage for wear. Ensure proper
	position		adjustment of yoke and linkage.
6.	Clutch brake worn, damaged, missing, or not fully	6.	Replace worn, damaged, or missing clutch brake.
	squeezed		Ensure proper clutch brake squeeze. Verify .010" using
			feeler gauge.
	Intermediate plate sticking on drive lugs. (14" angle	7.	Check drive pins are 90° to flywheel surface and
7.			minimum .006" clearance between drive pins and
7.	spring 2 plate pot style assemblies only)		
7.	spring 2 plate pot style assemblies only)		center plate slots.
7.	Pressure plate not retracting fully	8.	center plate slots. Verify release bearing is being pulled a minimum of ½".
		<u>8.</u> 9.	-

