1. Hold switch
Inspection ..... page K– 39
2. Inhibitor switch
Inspection ..... page K– 39
Adjustment ..... page K– 40
3. Turbine sensor
Inspection ..... page K– 40
4. Speed sensor
Inspection ..... page K– 41
5. Solenoid valves
Inspection ..... page K– 41
6. Lockup control solenoid valve
Inspection ..... page K– 41
7. EC-AT control unit
Inspection ..... page K– 42
8. Automatic transmission
Removal ..... page K– 47
Disassembly ..... page K– 50
Assembly ..... page K–134
Installation ..... page K–149
9. Oil cooler
Removal, Inspection, and Installation ..... page K–154
10. P range switch
Inspection ..... page K–157
11. Shift-lock actuator
Inspection ..... page K–157
12. Selector lever
Inspection ..... page K–158
Adjustment ..... page K–159
Removal, Inspection, and Installation ..... page K–161
Overhaul ..... page K–165

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OUTLINE

SPECIFICATIONS

Item \ Model			N4A-EL
Torque converter stall torque ratio			1.900 : 1
Gear ratio	1st		2.841
	2nd		1.541
	3rd		1.000
	OD (4th)		0.720
	Reverse		2.400
Number of drive/driven plates	Direct clutch		2/2
	Front clutch		4/5
	Rear clutch		6/6
	Low and reverse brake		5/5
Servo diameter (Piston outer diameter/retainer inner diameter) mm (in)	OD band servo		60/40 (2.362/1.575)
	2nd band servo		80/56 (3.150/2.205)
Automatic transmission fluid (ATF)	Type		Dexron II or M-III
	Capacity liters (US qt, Imp qt)	Total	7.3 (7.7, 6.4)
		Oil pan	4.0 (4.2, 3.5)

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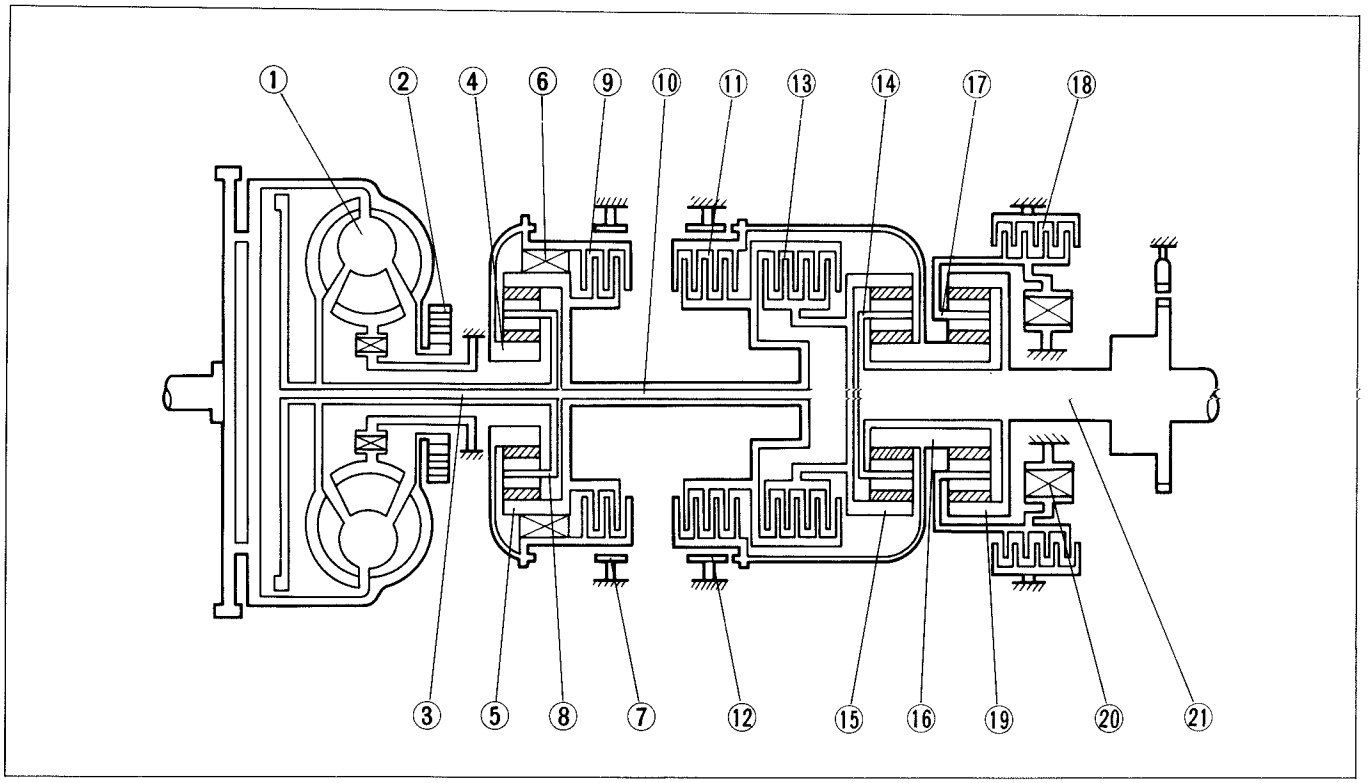
POWERFLOW DIAGRAM



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1. Torque converter
2. Oil pump
3. Input shaft
4. OD sun gear
5. Internal gear
6. OD one-way clutch (OD OWC)
7. OD brake band (OD Brk.)
8. OD planetary pinion carrier
9. Direct clutch (D/C)
10. Intermediate shaft
11. Front clutch (F/C)
12. 2nd brake band (2nd Brk.)
13. Rear clutch (R/C)
14. Front planetary pinion carrier
15. Internal gear
16. Sun gear
17. Rear planetary pinion carrier
18. Low and reverse brake (L&R Brk.)
19. Internal gear
20. One-way clutch (OWC)
21. Output shaft

OPERATION OF COMPONENTS

Range	Gear position	D/C	OD Brk.		OD OWC	R/C	F/C	2nd Brk.		L & R Brk.	OWC	Solenoid valve		
			Apl.	Rel.				Apl.	Rel.			1-2	2-3	3-4
P	—	○	⊗	○						○		○	○	○
R	—	○	⊗	○	○		○		○	○				○
N	Below 15 km/h	○	⊗	○								○	○	○
	Above 17 km/h	○	⊗	○										○
D	1st	○	⊗	○	○	○					○	○	○	○
	2nd	○	⊗	○	○	○		○					○	○
	3rd	○	⊗	○	○	○	○	⊗	○					○
	OD		○			○	○	⊗	○					
S	1st	○	⊗	○	○	○					○	○	○	○
	2nd	○	⊗	○	○	○		○					○	○
													○	
	3rd	○	⊗	○	○	○	○	⊗	○					○
L	1st	○	⊗	○	○	○				○		○	○	○
	2nd	○	⊗	○	○	○		○					○	○
													○	

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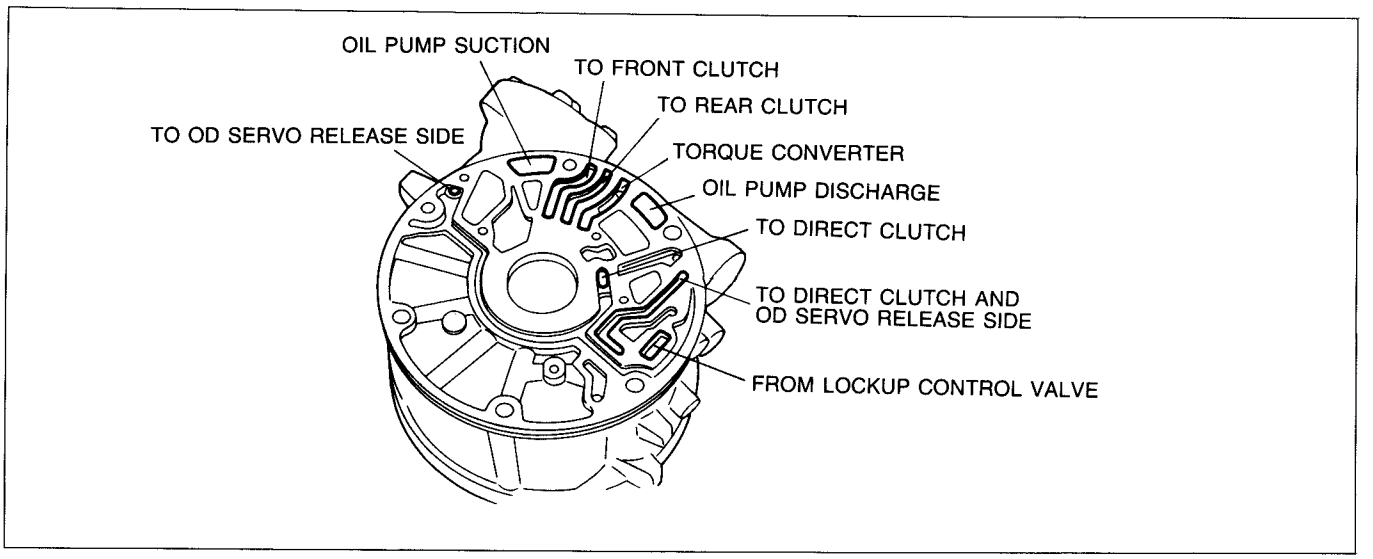
⊗ indicates operation although the band servo remains deactivated due to the large area of the release pressure side.
The lockup control solenoid valve operates only during lockup.
The 3-2 control solenoid valve operates momentarily during 3-2 downshift.
The OD one-way clutch operates momentarily during OD-3 downshift.

OD Case



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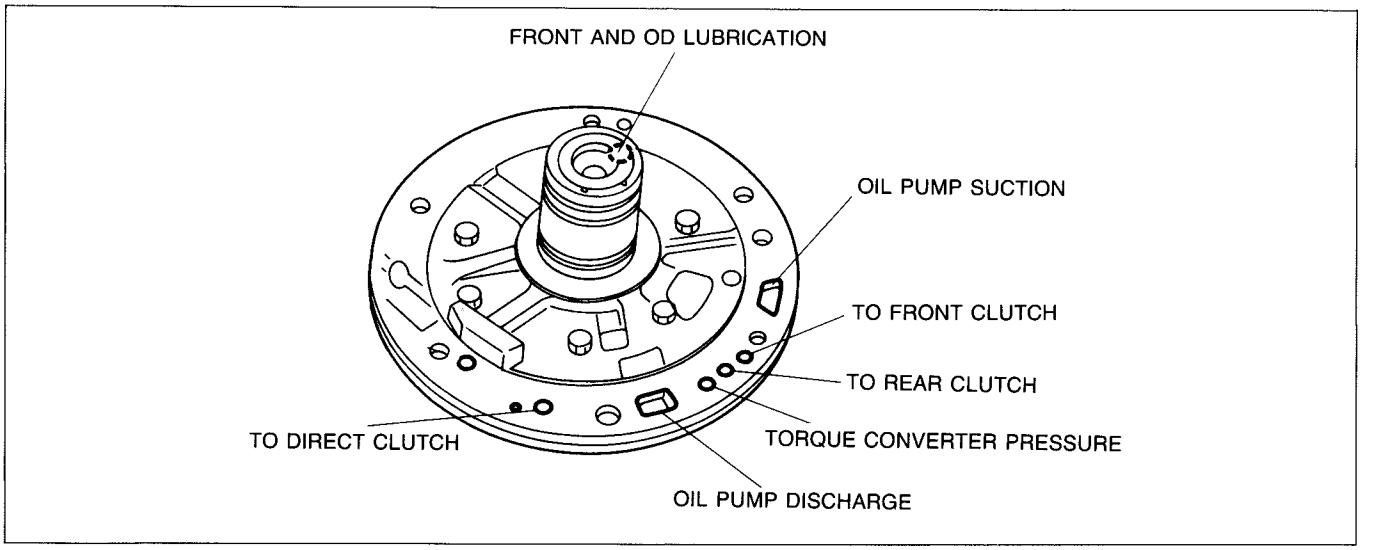
Drum Support



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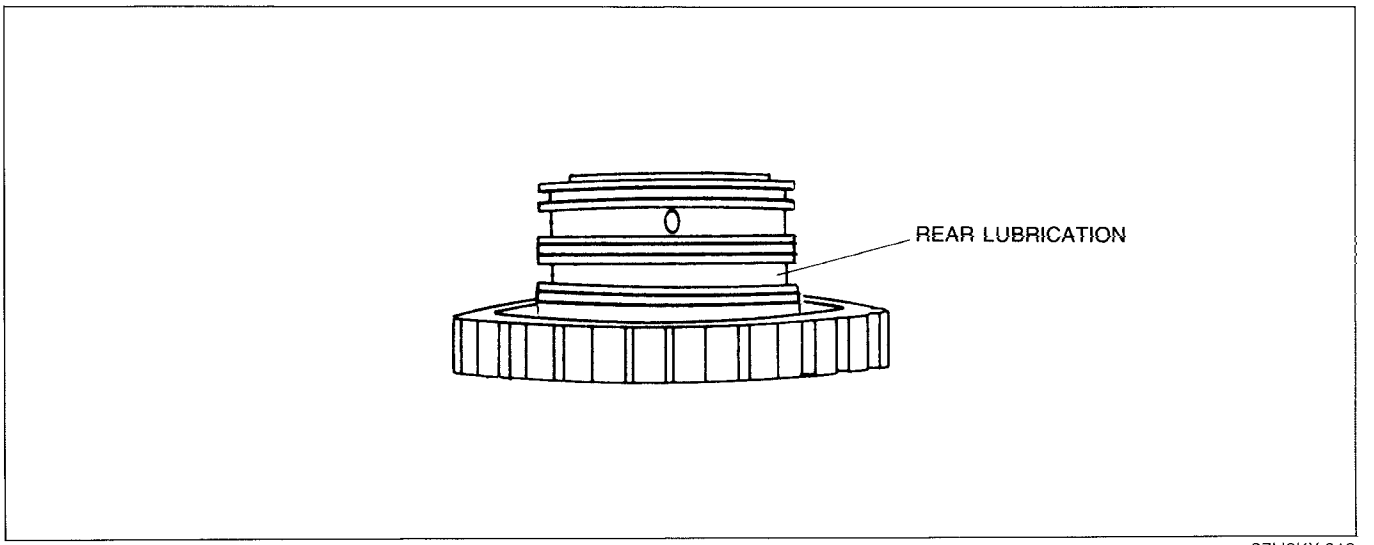
Oil Distributor



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If the 4 steps on page K–8 are followed, the cause of the problem should be located.
Another guide to faster location of the causes of problems, the QUICK DIAGNOSIS CHART, is on page K–10.
In this chart, numbers are used to indicate the components that may be the cause of 22 possible problems. It is necessary to check only those components indicated by numbers during each step of the troubleshooting process to locate the cause of the problem quickly.

QUICK DIAGNOSIS CHART
The QUICK DIAGNOSIS CHART shows different problems and the relationship of components that might be the cause.

1. Components indicated in the "Adjustment" column indicate the possibility that the problem may result from an incorrect adjustment.
   Check the adjustment of each component, and readjust if necessary.
2. Components indicated in the "Self-diagnosis" column are diagnosed by the EC-AT control unit self-diagnostic function.
   The **EC-AT Tester** can be used for easy retrieval of the these signals.
3. Input and output signals of the EC-AT control unit for components indicated in the "EC-AT Tester" column can be easily checked with the **EC-AT Tester**.
4. Components indicated in the "Mechanical System Test" column can be checked for malfunction by the results of the oil pressure test.
5. Components indicated in the "Road Test" column can be checked for malfunction by the results of the road test.
6. The numbers in the chart indicate the order of inspection for detecting malfunctions.
7. Circled numbers indicate that the transmission must be removed from the vehicle.
8. The checking, adjusting, repair, and replacement procedures for components are described in the page(s) shown in the "Reference page" column.

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