

Specifications

Lubricants, Fluids, Sealers and Adhesives

	Specifications
Motorcraft® MERCON® LV Automatic Transmission Fluid / XT-10-QLVC	MERCON® LV / WSS-M2C938-A

Capacities

	Liters
Transmission fluid	13 qt (12.3 L)

General Specification

NOTICE: Transmission fluids are not interchangeable. The use of any other fluid or cleaning agents will cause internal transmission damage.

Item	Specification
Transmission fluid	The transmission fluid should be changed every 241,000 km (150,000 mi) regardless of normal or special operating conditions.
-	Transmission fluid should be checked with the vehicle on a level surface and at normal operating temperature. (Normal operating temperature 93Â°C (200Â°F) to 99Â°C (210Â°F)). Coolant bypass valve opening temperature at 96Â°C (205Â°F).
Fluid Filter	Internal to the transmission

General Specification

Item	Specification
Transmission Weight	185.19 lb (84 kg)

Clutch Application Chart

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Gear	Forward A (1, 2, 3, 4)	Direct B (3, 5, R)	Intermediate C (2, 6)	Low / Reverse D (1, R)	Overdrive E (4, 5, 6)	Low - OWC
Park				H		
Reverse		D		H		
Neutral				H		
1st Gear D	D			Ha		H
2nd Gear D	D		H			O/R
3rd Gear D	D	D				O/R
4th Gear D	D				D	O/R
5th Gear D		D			D	O/R
6th Gear D			H		D	O/R
1st Gear Manual	D			H		
Planetary Component	Front planetary carrier-to-No. 3 sun gear	Front carrier-to-No. 2 sun gear	No. 2 sun gear	Rear planetary carrier	Input shaft-to-rear planetary carrier	Rear planetary carrier

- H = Holding
- D = Driven
- O/R = Overrunning
- Clutch released when vehicle speed is above 3 mph.

Solenoid Operation Chart

Base Selector Lever Position	PCM Commanded Gear	SSA NL (1,2,3,4)	SSB NH (3,5,R)	SSC NL (2,6)	SSD NH (L,R/C 4,5,6)	SSE (On/Off) NC	TCC NL
P	P	Off	On	Off	Off	Off	Off
R	R	Off	Off	Off	Off	Off	Off
N	N	Off	On	Off	Off	Off	Off
D	1	On	On	Off	Off ^b	Off	Off
	2	On	On	On	On	Off	Off
	3	On	Off	Off	On	On/Off ^a	On/Off
	4	On	On	Off	Off	On	On/Off
	5	Off	Off	Off	Off	On	On/Off
	6	Off	On	On	Off	On	On/Off
M ^c	â€”	â€”	â€”	â€”	â€”	â€”	â€”

- CB = Clutch brake
- NC = Normally closed
- NH = Normally high
- NL = Normally low
- Solenoid changes from off to on just after the 2-3 upshift and from on to off just before the 3-1 downshift.
- Solenoid is on when vehicle is above 3 mph.
- All gears available upon driver request.

Gear Ratio Chart

Gear	Ratio
1st	4.17:1
2nd	2.34:1
3rd	1.52:1
4th	1.14:1
5th	0.87:1
6th	0.69:1
Reverse	3.40:1

Clutch End Play

NOTE: All friction and steel plates use a wave design plate.

Item	Specifications
Forward Clutch (A)	0.028 $\pm$ 0.043 in (.71 $\pm$ 1.1 mm)
Direct Clutch (B)	0.020 $\pm$ 0.051 in (.5 $\pm$ 1.3 mm)
Intermediate Clutch (C)	0.028 $\pm$ 0.043 in (.71 $\pm$ 1.1 mm)
Low/Reverse Clutch (D)	0.039 $\pm$ 0.063 in (1 $\pm$ 1.6 mm)
Overdrive (O/D) Clutch (E)	0.020 $\pm$ 0.035 in (.5 $\pm$.9 mm)

Forward Clutch, Direct Clutch and Intermediate Clutch Selective Snap Rings

Part Number	Snap Ring Thickness
6L2Z-7D483-BA	0.118 in (3 mm)
6L2Z-7D483-CA	0.126 in (3.2 mm)
6L2Z-7D483-DA	0.134 in (3.4 mm)
6L2Z-7D483-EA	0.142 in (3.6 mm)
6L2Z-7D483-FA	0.150 in (3.8 mm)
6L2Z-7D483-GA	0.157 in (4 mm)
6L2Z-7D483-HA	0.165 in (4.2 mm)

Overdrive Clutch Selective Snap Rings

Part Number	Snap Ring Thickness
6L2Z-7D483-M	0.067 in (1.7 mm)
6L2Z-7D483-N	0.075 in (1.9 mm)
6L2Z-7D483-P	0.083 in (2.1 mm)

6L2Z-7D483-Q	0.091 in (2.3 mm)
6L2Z-7D483-R	0.098 in (2.5 mm)
6L2Z-7D483-S	0.106 in (2.7 mm)

Low/Reverse Clutch Selective Pressure Plates

Part Number	Pressure Plate Thickness
6L2Z-7B066-HA	0.201 in (5.1 mm)
6L2Z-7B066-M	0.209 in (5.3 mm)
6L2Z-7B066-JA	0.213 in (5.4 mm)
6L2Z-7B066-N	0.220 in (5.6 mm)
6L2Z-7B066-KA	0.224 in (5.7 mm)
6L2Z-7B066-P	0.232 in (5.9 mm)
6L2Z-7B066-LA	0.236 in (6 mm)

Clutch Plate Quantity

Component	Number of Frictions	Number of Separator Plates	Separator Plate Thickness	Number of Pressure Plates	Pressure Plate Thickness
Forward Clutch (A)	5	6	0.118 in (3 mm)	-	0.118 in (3 mm)
Direct Clutch (B)	5	5	0.083 in (2.1 mm)	1	0.154 in (3.9 mm)
Intermediate Clutch (C)	5	5	0.118 in (3 mm)	1	0.154 in (3.9 mm)
Low/Reverse Clutch (D)	5	5	0.083 in (2.1 mm)	Selective	Refer to: Low/Reverse Clutch Selective Pressure Plate Chart
Overdrive Clutch (E)	6	6	0.118 in (3 mm)	1	0.122 in (3.1 mm)

Shift Speeds

Throttle Position	Shift	KM/H	MPH
Light Throttle	1-2	13-21	8-13
	2-3	26-34	16-21
	3-4	35-43	22-27
	4-5	56-64	35-40
	5-6	71-79	44-49
Closed Throttle	6-5	56-64	35-40
	5-4	40-48	25-30

	4-3	13-21	8-13
	3-2	3-11	2-7
	2-1	2-6	1-4
Wide Open Throttle	1-2	45-53	28-33
	2-3	87-95	54-59
	3-4	140-148	87-92

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