

BODY BUILDER INSTRUCTIONS

Mack Trucks



Transmission
MD
Section 4

Transmission

This information provides specifications for Transmissions on MACK vehicles.

Note: We have attempted to cover as much information as possible. However, this information does not cover all the unique variations that a vehicle chassis may present. Note that illustrations are typical but may not reflect all the variations of assembly.

All data provided is based on information that was current at time of release. However, **this information is subject to change without notice.**

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Transmission

Lubrication Capacity

Transmission	Oil Type	Sump Type	Capacity	
			Initial Fill	Refill
Allison 2500 HS / Allison 2500 RDS	TES 295®	Standard Sump	14 liters (14.8 quarts) ¹	10 liters (10.6 quarts) ¹
Allison 3000 RDS	TES 295®	4 Inch	27 liters (29 quarts)	18 liters (19 quarts)
		2 Inch	25 liters (26 quarts)	16 liters (17 quarts)

¹ Approximate quantities, do not include external lines, cooler and hose.

Note: Approximate fluid loss for main filter (Spin- On) = 0.47 liters (1 pint).

Note: Approximate quantities do not include external lines and cooler hose. Fluid fill capacity depends on the vehicle configuration. Final fluid capacity must be determined by dipstick level.

Transmission Cautions



CAUTION

The drive shaft must be removed before towing the vehicle. Failure to remove the drive shaft result in damage to the transmission.

Note: The final stage manufacturer has the responsibility to certify that the completed vehicle conforms to all applicable motor vehicle safety standards, as referenced in the Incomplete Vehicle Document. The following installation precautions must be followed to the extent that they apply to the intended design of the incomplete vehicle.

Note: For more Dangers, Warnings and Cautions refer to the “General Safety Practices, Transmission” bulletin. Failure to adhere to all safety practices can lead to the voiding of all applicable component warranties, component damage, personal injury or death.

- 1 Adequate tool clearance and suitable access openings for transmission adjustments must be provided. Transmission removal provisions must also be considered.
- 2 Transmission oil cooler lines must not be kinked, bent or restricted. All cooler lines must be properly retained with adequate clips.
- 3 Before using transmission bolts, e.g., rear cover bolts or mounting bolts, contact your local MACK dealer for specific bolt length requirements, torque values and other constraints.
- 4 Service identification tags of transmission must not be removed or destroyed. If the transmission is reworked or replaced, tag must be attached to the new transmission.
- 5 When painting the transmission, take special care to avoid getting paint on the breather and transmission output seal.
- 6 Transmission filler plugs should not be obstructed. Easy access for checking of the lube level or filling is necessary.

Notes

Transmission Literature

Printed copies of Allison transmission literature are no longer available from Allison Transmission. Therefore, MACK Trucks is unable to supply this literature to its dealers.

However, service manuals and other literature for Allison transmissions can now be accessed directly from the official internet site of this supplier.

<http://www.allisontransmission.com>

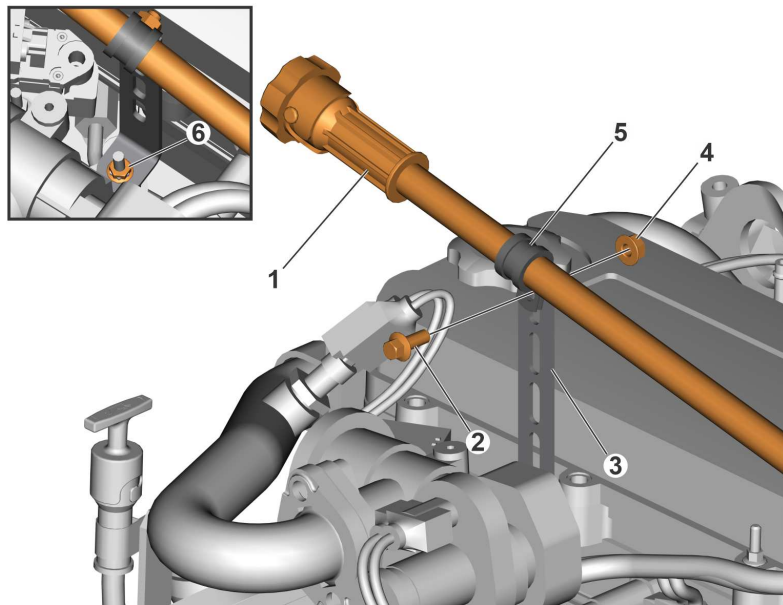
Notes

Transmission Gear Ratios

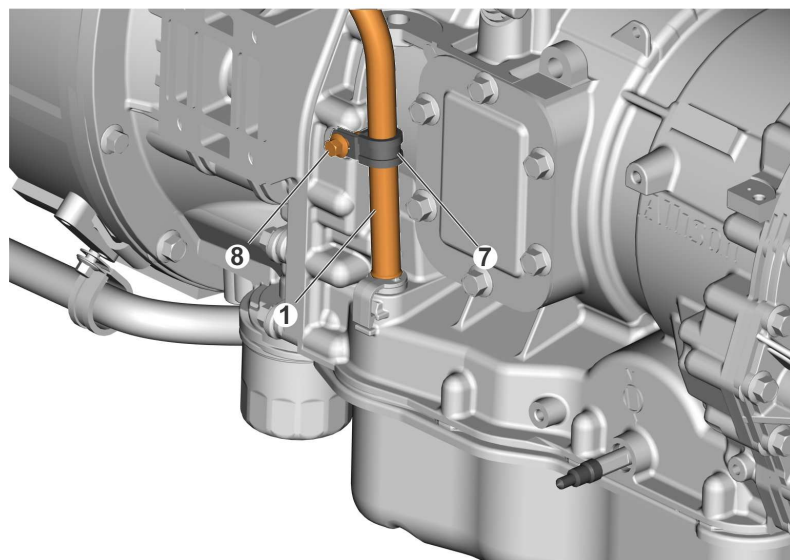
Gear	Transmission Models	
	Allison 2500 HS / Allison 2500 RDS	Allison 3000 RDS
First	3.51:1	3.49:1
Second	1.90:1	1.86:1
Third	1.44:1	1.41:1
Fourth	1.00:1	1.00:1
Fifth	0.74:1	0.75:1
Sixth	0.64:1	0.65:1
Reverse	-5.09:1	-5.03:1

Notes

Allison Transmission Dipstick



T4162811



T4162812

Call-out	Item Description	Part Number	Name	Quantity
Allison 2500 HS / Allison 2500 RDS				
1	Dipstick	23726234	Dipstick (tube + dipstick)	1
2	Dipstick to engine	984734	Flange Screw	1
3		965564	Bracket	1
4		990940	Flange Nut	1
5		25089412	Attaching clamp (P clamp + rubber)	1
6		990939	Flange Nut	1
7	Dipstick to transmission	25089412	Attaching clamp (P clamp + rubber)	1
8		984734	Flange Screw	1

Allison 3000 RDS

1	Dipstick	24190124	Dipstick (tube + dipstick)	1
2	Dipstick to engine	984734	Flange Screw	1
3		965564	Bracket	1
4		990940	Flange Nut	1
5		25089412	Attaching clamp (P clamp + rubber)	1
6		990939	Flange Nut	1
7	Dipstick to transmission	25161716	Attaching clamp (Straight P clamp — Rubber)	1
8		3968658	Hexagon screw, washer head tapping	1