



Mack Trucks, Inc.
Greensboro, NC USA

Field Service Bulletin Trucks

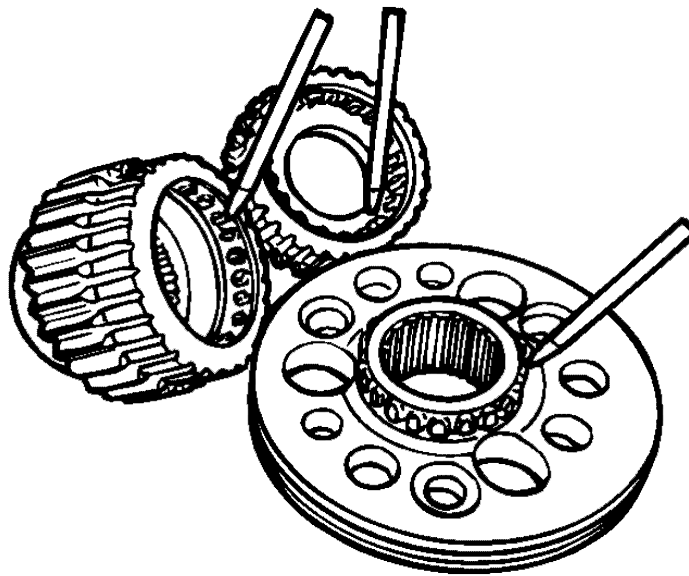
	Date	Group	No.	Release	Page
This FSB replaces Field Service Bulletin "PV729-FSB431-003_M, Revised Range Clutch Synchronizer Components", (USA53636) dated (5.2012).	1.2013	431	003	03	1(4)

Revised Range Clutch Synchronizer
Components
T200, T300
CHU, CXU, GU, TD, CHP, CTP, CX, CH,
CXN, CHN, CL, CV, CT, MR, DM, RD

FSB 431-003, Range Clutch Synchronizer Components

(January 2013)

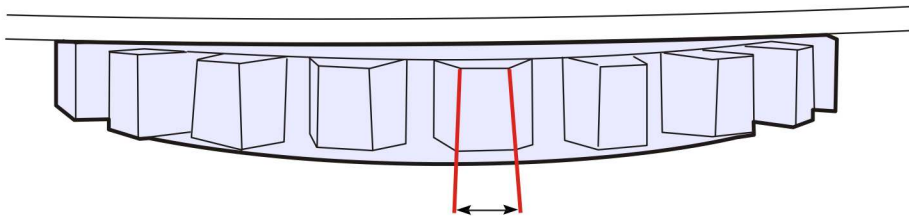
Note: This bulletin does not apply to MACK Trucks Australia.



W4065554

The T200/T300 range synchronizer clutch material and tooth design have been changed to improve durability and resist disengagement. A more robust material is now used. Also there is an increase in the dove-tail cut of the clutching teeth in both the synchronizer clutch and mating hi range gear and lo range hub. The new range synchronizer clutch and mating gears were incorporated into production on 05/23/2011, beginning with transmission serial number 3772. The part number for the new range synchronizer clutch is 21636360.

Because of the increase in the dove-tail cut of the clutch teeth between the previous style range clutch and the current production range clutch, the range clutch, the mating high gear and the low gear hubs must be replaced as a set. If any one of the three previous style components is damaged, or when converting from the previous style to the new style range clutch/synchronizer, all three items must be replaced with the current components. For replacement information for these components refer to the appropriate transmission model's service manual or Service Manual "In-Chassis Synchronizer Removal Manual", 10-701.



W4065550

Clutch Teeth with Dove-tail Cut

Note: Information is subject to change without notice.
 Illustrations are used for reference only and may differ slightly from the actual vehicle being serviced. However, key components addressed in this information are represented as accurately as possible.

Range Clutch/Synchronizer Components

The rear compound main drive gear utilizing the thrust washer support system is no longer available for T2080B, T2080D, T2130, T2130B, T2180 and T2180B transmissions (refer to service bulletin "New Rear Compound Mainshaft and Main Drive Gear", SB-322-011). When installing the new range clutch/synchronizer assembly on one of these transmissions, it will be necessary to change the existing main drive gear to the new gear utilizing the ball bearing support. This also requires changing the Lo-range gear hub and mainshaft assembly. Refer to the following charts for a list of required parts.

Synchronizer Service Kit

New Part Number	Description	Replaced Part Number
85136667	Synchronizer Service Kit	85115910

Synchronizer Clutch Assembly Kit

New Part Number	Description	Replaced Part Number (World ID Part Number)
22074116	Synchronizer clutch assembly	320KB3147 (25121135)
22074116	Synchronizer clutch assembly	320KB3150 (25123077)

Range Clutch/Synchronizer Individual Components

New Part Number	Description	Replaced Part Number
21636360/320KB463	Range clutch/synchronizer	320KB461A (25121661)
21636360/320KB463	Range clutch/synchronizer	320KB459A (25132811)

When installing the new range clutch/synchronizer assembly on a transmission, the following high range gear and low range hub are required:

T2180A, T313LR21, T318LR21, T313-21, T318-21 Transmissions

New Part Number	Description	Replaced Part Number
21631781/84KC411	Low Range Hub	84KC47 (25502560)
21649209/751KB4177	High Range Gear	751KB4130 (25503690)

T2080B, T2080D, T2130, T2180, T2180B, T2110BL, T2130B, T310M, T310MLR, T313LR, T318LR, T318, T313 Transmissions

New Part Number	Description	Replaced Part Number
21631781/84KC411	Low Range Hub	84KC47 (25502560)
21649207/751KB4176	High Range Gear	751KB4123 (25502562)

T2110B, T310ME, T310ME21 Transmissions

New Part Number	Description	Replaced Part Number
21631781/84KC411	Low Range Hub	84KC47 (25502560)
21649204/751KB4175	High Range Gear	751KB4128A (25502561)

T2080, T2090, T2090LR, T2090L, T2090R, T2090B, T2100, T309LR, T310 Transmissions

New Part Number	Description	Replaced Part Number
21631765/84KC410	Low Range Hub	84KC46 (25136107)
21633318/764KB4278	High Range Gear	764KB4270 (25135436)

T309 Transmissions

New Part Number	Description	Replaced Part Number
21631765/84KC410	Low Range Hub	84KC46 (25136107)
21633320/764KB4279	High Range Gear	764KB4277 (25503710)

MACK Trucks, Inc. engages in a comprehensive program of testing and evaluating to provide the best possible product. MACK Trucks, Inc. however, is not committed to, or liable for updating existing vehicles.