

TRANSMISSION

GROUP IX

SPECIFICATIONS

Gear Ratio, 1st	2.571 to 1
2nd	1.550 to 1
3rd	1 to 1
Reverse	3.489 to 1
Oil Capacity	2-1/2 Pts.
Total Gear Reduction	
Transmission 1st. x Standard Rear Axle	11.69 to 1

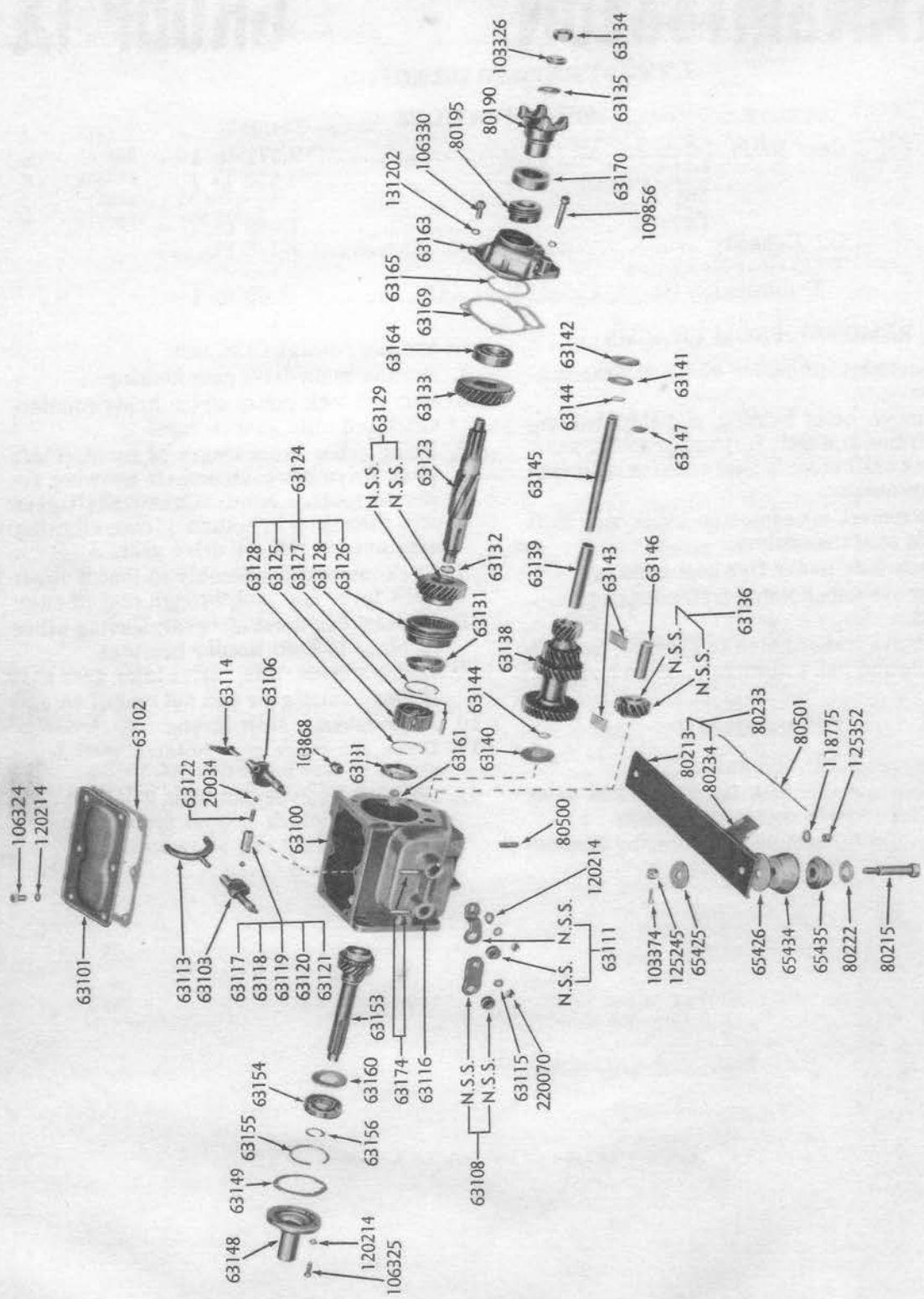
REMOVAL FROM CHASSIS

1. Disconnect propeller shaft at transmission.
2. Remove bolts holding mid-ship bearing to frame and slide forward propeller shaft back until there is clearance for removing transmission.
3. Disconnect speedometer cable and shift rods at transmission.
4. Place jack under flywheel housing.
5. Remove nuts holding transmission to support.
6. Remove transmission to flywheel housing bolts and pull transmission from housing.

DISASSEMBLY

1. Remove cover and gasket.
2. Remove companion flange nut and using puller remove companion flange.
3. Remove bolts from rear bearing housing

- and pry housing from case.
4. Remove main drive gear housing.
5. Remove lock plate, which holds countershaft and idler gear in case.
6. Using arbor exact length of countershaft gear, drive out countershaft allowing arbor to replace same. Countershaft gear will then drop to bottom of case allowing clearance to remove drive gear.
7. Cock mainshaft assembly so that it clears shift forks and pull through rear of case.
8. Lift out countershaft gear, leaving arbor in place to hold needle bearings.
9. Using a brass drift, drive idler gear shaft through idler gear and out rear of case.
10. Remove outer shift levers.
11. Drive out taper pins holding shift lever shafts in case and drive out shafts.
12. Shifting lever poppet balls will then drop out, after which poppet spring, pin and interlock sleeve can be removed.



TRANSMISSION ASSEMBLY

TRANSMISSION

PARTS LIST

No. Req'd.	Part Number	Description
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TRANSMISSION

1	80011	TRANSMISSION ASSEMBLY
1	63100	CASE ASSEMBLY—Transmission
1	63173	PLUG—Trans. Case (Not Shown on Illustration)
2	103868	PLUG—Trans. Case Pipe
1	63101	COVER—Case
1	63102	GASKET—Case Cover
6	106324	BOLT—Case Cover Hex. Hd.
6	120214	WASHER—Case Cover Lock
1	63103	LEVER ASSEMBLY—2nd. & 3rd. Shift
1	63113	FORK—2nd. & 3rd. Shift
1	63106	LEVER ASSEMBLY—1st. & Rev. Shift
1	63114	SHOE—1st. & Rev. Shift
2	63116	SEAL—Shift Lever Shaft Oil
2	63174	PIN—Shift Lever Taper
1	63108	LEVER ASSEMBLY—2nd. & 3rd. Outer Control
1	63111	LEVER ASSEMBLY—1st. & Rev. Outer Control
2	63115	WASHER—Control Lever
2	120214	WASHER—Control Lever Lock
2	220070	NUT—Control Lever Hex.
As Req.	63117	SLEEVE—Interlock
As Req.	63118	SLEEVE—Interlock
As Req.	63119	SLEEVE—Interlock
As Req.	63120	SLEEVE—Interlock
As Req.	63121	SLEEVE—Interlock
1	63122	SPRING—Shift Lever Poppet Interlock
2	20034	BALL—Shift Lever Interlock Steel
1	63123	MAINSHAFT
1	63124	SYNCHRONIZER UNIT ASSEMBLY
1	63125	HUB—2nd. & 3rd. Clutch
1	63126	SLEEVE—2nd. & Direct Speed Clutch
3	63127	PLATE—Shifting
2	63128	SPRING—Synchronizer
1	63129	GEAR & BUSHING ASSEMBLY—Mainshaft 2nd. Speed
2	63131	RING—Synchronizer Blocking
1	63132	RING—Snap
1	63133	GEAR—Mainshaft 1st. & Rev.
1	63164	BEARING—Mainshaft Rear
As Req.	63165	RING—Bearing Snap—Thin
As Req.	63166	RING—Bearing Snap—Medium
As Req.	63167	RING—Bearing Snap—Thick
As Req.	63168	RING—Bearing Snap—Extra Thick
1	63169	GASKET—Rear Retainer
1	63163	RETAINER ASSEMBLY—Rear Bearing
2	80198	BUSHING—Speedometer Drive (Not Shown on Illustration)
3	106330	BOLT—Retainer to Trans. Case Hex. Hd.
1	109856	BOLT—Retainer to Trans. Case Hex. Hd.
4	131202	WASHER—Retainer to Trans. Case Bolt Lock
1	80195	GEAR—Speedometer Drive
1	63170	SEAL ASSEMBLY—Mainshaft Oil
1	80190	FLANGE—Companion
1	63135	WASHER—Mainshaft
1	103326	WASHER—Mainshaft Lock
1	63134	NUT—Mainshaft
1	63145	COUNTERSHAFT
1	63139	SPACER—Countershaft
1	63138	GEAR—Countershaft
44	63143	ROLLERS—Countershaft Bearing
2	63144	WASHER—Countershaft Bearing
1	63140	WASHER—Countershaft Thrust—Front
1	63141	WASHER—Countershaft Thrust—Rear
1	63142	WASHER—Countershaft Thrust—Rear

TRANSMISSION**GROUP 9****PARTS LIST**

No. Req'd.	Part Number	Description
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TRANSMISSION (CONT.)

1	63146	SHAFT—Reverse Idler Gear
1	63136	GEAR ASSEMBLY—Reverse Idler
1	63147	PLATE—Idler and Countershaft Lock
14	63161	ROLLERS—Mainshaft Pilot Bearing
1	63153	GEAR—Main Drive
1	63160	WASHER—Front Oil Retainer
1	63154	BEARING—Main Drive Gear
1	63155	RING—Bearing Snap
As Req.	63156	RING—Main Drive Gear Snap .086 to .088
As Req.	63157	RING—Main Drive Gear Snap .089 to .091
As Req.	63158	RING—Main Drive Gear Snap .092 to .094
As Req.	63159	RING—Main Drive Gear Snap .095 to .097
As Req.	63149	GASKET—Main Drive Gear Bearing Retainer
As Req.	63150	GASKET—Main Drive Gear Bearing Retainer
As Req.	63151	GASKET—Main Drive Gear Bearing Retainer
As Req.	63152	GASKET—Main Drive Gear Bearing Retainer
1	63148	RETAINER—Main Drive Gear Bearing
3	106325	BOLT—Bearing Retainer to Trans. Hex. Hd.
3	120214	WASHER—Bearing Retainer to Trans. Bolt Lock
1	80197	GEAR—Taximeter Driven (Not Shown on Illustration)
1	80196	GEAR—Speedometer Driven (Not Shown on Illustration)
2	80199	SLEEVE—Speedo Drive (Not Shown on Illustration)
1	23261	NUT—Taximeter Drive Cap (Not Shown on Illustration)
2	80500	STUD—Transmission Support
1	80233	SUPPORT ASSEMBLY—Back-up Switch Brkt. & Trans.
1	80213	SUPPORT—Transmission
1	80234	BRACKET—Back-up Switch
2	118775	WASHER—Transmission Support Stud
2	125352	NUT—Transmission Support Stud Hex.
2	80215	BOLT—Transmission Support
2	80222	WASHER—Trans. Support Bolt
2	65435	INSULATOR—Small
2	65434	INSULATOR—Large
2	65426	WASHER—Insulator—Large
2	65425	WASHER—Insulator—Small
2	125245	NUT—Trans. Support Bolt Hex.
2	103374	PIN—Trans. Support Bolt Cotter
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4	122270	BOLT—Transmission to Flywheel Housing Hex.
4	115314	WASHER—Trans. to Flywheel Housing Bolt Lock