NQG - MP1225/1226



MP1225/1226 – GM option code NQG

Item #	Description	Application	Notes	GM Part#	ZBAG Part#
1.	Front output seal			19133157	ZTSEA447316
	· · · · · · · · · · · · · · · · · · ·			19259179	
2.	Front output seal dust shield	2011-16 MP1222/1225/1226		19259182	Call
3.	Vent tube			19133166	ZTMP19133166
4.	Input seal	2007-10	Round mounting pattern – double lip seal	19133155 24299083	ZTSEA13362
		2007-10	Round mounting pattern – single lip seal	19133156 24299084	Use ZTSEA13362
		2011-16	Oval adapter pattern – double lip seal	19299081	ZTSEA19299081
		2011-16	Oval adapter pattern – single lip seal	19299082	Use ZTSEA19299081
5.	Input bearing to shaft snap ring	2011 10	Round mounting pattern on front case half	19133024	Call
	input souring to shart shap ring		Oval adapter pattern on front case half	19257400	ZTMP19257400
6.	Mounting stud			19133005	ZTMP19133005
7.	Indicator switch O-ring			12386154	ZTSEAAS020
8.	Indicator switch			12473227	Call
				19210807	
9.	Front case half	2007-10	Round adapter pattern First design planetary	19133000	Call
			Round adapter pattern	19299078	Call
		2011-12	Second design planetary Oval adapter pattern	19259038	ZTMP19259038
		2011-12	First design planetary	19239038	21111117237030
		2012-16	Oval adapter pattern	19299080	Call
			Second design planetary		
			o oval adapter pattern style case you must nput bearing, input seal and both snap rings		
10.	Dowel pin			19133004	Call
11.	Input bearing	2007-10	Round adapter pattern	19133006	BRG6010N
		2011-16	Oval adapter pattern	19257408	BRG91110
12.	Input bearing to case snap ring	2007-10	Round adapter pattern	19133007	Call
		2011-16	Oval adapter pattern	19257405	ZTMP19257405
13.	Annulus gear			N/A	Call
14.	Annulus gear to case snap ring		First design planetary	19133009	Call
			Second design planetary	14037953	Call
15.	Rear mainshaft bearing case snapring			19168238	Call
16.	Speed sensor			12376520	Call
17.	Speed sensor O-ring Rear case half			19133158 19169067	ZTSEAAS020
18. 19.	Rear case nam Rear case access hole plug				Call ZTSEA40113
20.	Wire loom bracket			19133165 19133154	Call
20.	Case half bolt			19133134	Call
22.	Tail bushing			89059588	ZMBSH18172
23.	Rear seal			19133151	ZTSEA21938
				24226707	
24.	Fill plug		Aluminum	15032997	ZTNP30412
			Steel		ZTNP91340194
25.	Drain plug		Aluminum	19133162	ZTNP30412
			Steel		ZTNP91340194
26.	Detent plug			19133020	Call
27.	Detent plug O-ring			19133022	ZTSEAAS017
28.	Detent spring			19133023	Call
29. 30	Detent plunger Shift shaft needle bearing		Dequires 2	15633556 19133015	Call BRGHK2010
30. 31.	Shift shaft needle bearing Shift shaft seal		Requires 2	19133015	ZTSEA5193
31.	Shift lever			19133014	Call
33.	Shift lever bolt			11515755	Call
34.	Front output shaft rear bearing			19133136	BRGBB1-3321
35.	Planetary snap ring	2007-12	First design planetary	19132997	ZTMP19132997
		2012-16	Second design planetary	15547397	ZTNP83503527
36.	Planetary lock plate	2007-12	1 tab, 3 and 5 pinion planetary	19132996	ZTMP19132996
50.	· ·		First design planetary		
30.			2 tab, w/6 pinion planetary	15664905	ZTNP17483
50.		2012-16	Second design planetary	13004903	2111117405
37.	Front planetary thrust washer	2012-16 2007-12		19132995	ZTMP19132995

MP1225/1226 – GM option code NQG

Item #	Description	Application	Notes	GM Part#	ZBAG Part#
38.	Input shaft	2007-10 MP1225/1226	29 spline -Round adapter pattern	19132979	ZTMP19132979
	•		First design planetary		
		2007-10 MP1225/1226	29 spline - round adapter pattern	19299086	Call
			Second design planetary		
				10057410	ZTD 4D10255 410
		2011-12 MP1225	29 spline - oval adapter w/MYD-6L90 transmission	19257419	ZTMP19257419
			First design planetary		
		2012-16 MP1225	29 spline - oval adapter	19299087	Call
			w/MYD-6L90 transmission	1)_),001	Cuii
			Second design planetary		
		2011-12 MP1226	33 spline - oval adapter	19259039	ZTMP19259039
			w/MW7-Allison transmission		
			First design planetary		
		2012-16 MP1226	33 spline - oval adapter	19299089	ZTMP19299089
			w/MW7-Allison transmission Second design planetary		
39.	Input pocket bearing		29 Spline Input	19132984	BRGDB73167
39.	input pocket bearing		33 Spline Input	19132984	Call
40.	Input pocket bearing retaining ring		55 Spinie input	19239040	Call
41.	Rear planetary thrust washer		no tab, First design planetary	19132983	ZTMP19132995
710	icar planetary in use washer		2 tab, w/6 pinion planetary	15547390	ZTNP16437
			Second design planetary	100 11000	
42.	Planetary gear assembly	2007-12	5 pinion, First design planetary	19132987	ZTMP19132987
	, , , , , , , , , , , , , , , , , , ,	2012-16	6 pinion, Second design planetary	19299091	ZTNP17869
43.	High/low range hub	2007-12	First design planetary	19133055	ZTMP19260067
	5 5			19260067	
		2012-16	Second design planetary	19299093	ZTMP19299093
44.	Mode synchronizer sleeve			19133094	ZTMP19133094
45.	Mainshaft	2007-10	31 spline, 1.516" I.D. on rear bearing snap	19133062	Call
			ring groove, 1.614" O.D. rear bearing surface		
		2011-16	31 spline, 1.516" I.D. on rear bearing snap	19257403	Call
			ring groove, 1.614" O.D. rear bearing		
			surface, uses anti-rotational pin on		
			mainshaft thrust washer		
46.	Thrust washer anti-rotational pin	2011-16		19259037	Call
47.	Synchronizer key			19133095	ZTMP19133095
48.	Mode synchronizer hub			19133093	Call
49.	Outer synchronizer ring		Kit, includes all three pieces (49, 50, & 51)	19133208	ZTMP19133208
50.	Center synchronizer ring			19133097	Use ZTMP19133208
51. 52.	Inner synchronizer ring Drive chain	2007 16 MD1225	1.5" wide – rocker pin – CB pattern	19133096 19133130	Use ZTMP19133208 ZTCHHV502
52.		2007-16 MP1225	1.5" wide – rocker pin – CB pattern	19133130	
		2007-16 MP1226	1.5 wide – found pin – J pattern	17155151	ZTCHHV074
53.	Drive sprocket	2007-16 MP1225/1226	1.5" wide	19133103	ZTMP19133103
54.	Drive sprocket bearing	2007 10 101 1223/1220	46x53x20, requires 2	19133103	BRGF553670
55.	Mainshaft thrust washer	2007-10	Does not use the thrust washer	19133112	ZTMP19133112
			anti-rotational pin		
		2011-16	Uses thrust washer anti-rotational pin	19257402	Call
56.	Drive sprocket snap ring			19133113	Call
57.	Oil pump	2007-10		19133114	ZTMP19133114
		2011-16		19257401	ZTMP19257401
58.	Speed sensor tone wheel			19133124	Call
59.	Speed sensor snap ring		1.516" I.D.	19133126	ZTMP19133126
60.	Rear mainshaft bearing			19133128	BRGB41-6
61.	Rear mainshaft snap ring		1.516" I.D.	19133126	ZTMP19133126
62.	Mode fork return spring			19133054	Call
63.	Mode fork			19209164	Call
64.	Mode fork pads			19133044	ZTMP3023-28A
65.	Range fork	2007-12	Uses 3 piece pads	19169061	Use GM19260065
	2	2012-16	Uses 2 piece pads	19260065	ZTMP19260065
66.	Range fork pads	2007-12	3 Piece pads	19133033	ZTMP3023-28
(=	C1 19	2012-16	2 Piece pads	19260066	ZTMP19260066
67.	Shift cam			19133016	Call
68.	Shift shaft			19133046 19133122	Call ZMSEAAS110
69.	Oil tube O-ring				

MP1225/1226 – GM option code NQG

Item #	Description	Application	Notes	GM Part#	ZBAG Part#
70.	Oil pickup tube assembly			19133120	ZTMP19133120
71.	Driven sprocket wave spring		Use with 19169064 spacer	19169065	Call
72.	Driven sprocket rear spacer	w/step	Use with wave spring 19169065	19169064	ZTMP19169064
		w/o step	Do not use wave spring with this spacer	19133101	ZTMP19133101
73.	Driven sprocket				ZTMP19133135
74.	Front output shaft plug			12473236	Call
75.	Front output shaft	2007-11 First design	Does not use dust shield	19169062	Call
		2011-16 Second design	Must add dust shield when updating to second design	19259181	Call
76.	Front output shaft front bearing			19133136	BRGBB1-3321
	Bearing kit	2007-2010	Round case pattern		ZTBK512
		2011-2016	Oval case pattern		ZTBK512A
	Gasket and seal kit	2007-2010	Round case pattern		ZTTSK1222
		2011-2016	Oval case pattern		ZTTSK1625XHD
	Adapter gasket	2007-2010	Round case pattern		ZTGASTC2030-9
		2011-2016	Oval case pattern		ZTGAS24263164
Not					
Listed	Slip yokes		31 Spline, 1415 U-Joint, 8.34 Long	15897990	ZTY5001683
			2.2" Seal surface	22918658	
			One piece drive shaft	40039583	
			31 Spline, 1415 U-Joint, 8.375" Long	22918660	ZTY5001683
			2.2" Seal surface		
			Two piece drive shaft	22010/57	777375001772
			31 Spline, 1485 U-Joint, 8.34" Long 2.2" Seal surface	22918657 22918659	ZTY5001672
			2.2 Stal Sullate	89058880	
				40039594	
		1		+0037374	1

INTERIM MODEL YEAR DESIGN CHANGE - NQF/NQG/NQH/NPO FRONT OUTPUT SHAFT, DEFLECTOR, SEAL



Interim 2012 model year, a new design front output shaft deflector (3) was implemented into production for second design NQF-HD/SHD and NQG-HD applications. First design 2011 model year NQF and NQG applications can be identified as not having the deflector on the front output shaft.

For service, the new design front output shaft, deflector and new design seal may be installed on current and prior model year Magna NQF-HD/SHD, NQG-LD/HD, NQH-LD/HD and NP0 applications providing the new design front output shaft is also installed. The front output shaft deflector is to be installed using the **J** 8092 driver handle (1) and **DT 50649** seal installer (2).



The new design deflector (1) can be installed onto all current and prior model year Magna RPOs NQF, NQG, NQH and NPO applications providing the new design front output shaft (2) is also installed. Second design front output shafts can be identified by the machined area on the OD output end of the shaft (2). First design front output shafts can be identified by the dust boot clamp groove (3) located at the OD output end of the shaft. The new design slinger will NOT install onto the first design shafts.

INTERIM MODEL YEAR DESIGN CHANGE - NQG HIGH/LOW SHIFT FORK, FORK PAD, AND HIGH/LOW CLUTCH



Interim 2012 model year the High/Low shift fork, fork pad and High/Low clutch design changed. The first design forks (2) can be identified as having three flat un-notched fork pad areas with three separate fork pads (1). The second design forks (4) can be identified as having a half-round shaped pad area with three notches for pad orientation and installation and upper and lower half-round fork pads (3). The second design shift fork (4) and pads (3) are the only design available for service and must be used with the second design High/Low clutch.



Interim 2012 model year the High/Low shift fork, fork pad and High/Low clutch design changed. The first design high/low clutch (1) can be identified by having a 73 mm (2.87 in) OD rear flange (2). The second design high/low clutch (3) can be identified by having a 76 mm (2.99 in) OD rear flange (4).

For service:

- The first design 73 mm (2.87 in) high/low clutch may NOT be used with the second design fork and pad.
- The second design 76 mm (2.99 in) high/low clutch must be used with the second design fork and fork pad.
- The second design 76 mm (2.99 in) high/low clutch may also be used with the first design fork and pad if first design fork replacement is not required.

SERVICE PARTS RELEASE USAGE CHANGE-NQH/NPO CONTROL ACTUATOR LEVERS



Light Duty (LD) 2007-2010 MP3023-NQH and 2010 MP3010-NP0 production transfer cases are built with LD control actuator levers (3 and 6) and are used with 13 mm (0.52 in) diameter control actuator lever balls (5).

Heavy duty (HD) 2007-2010 MP3024-NQH production transfer cases are built with HD control actuator levers (3 and 6) and are used with Heavy 10 mm (0.39 in) control actuator lever balls.

When replacement of one or both of the LD control actuator levers is required, it is necessary to replace both of the levers and all three balls with the HD components as a set. It is also necessary to re-measure and adjust clutch pack clearances as required and to perform the Transfer Case High/Low Clutch Reset. Refer to Measuring/Adjusting Clutch Assembly Height in Transfer Case Assemble, Transfer Case Description and Operation and Transfer Case High/Low Clutch Reset. Heavy duty (HD) components are the only parts available for service.

INTERIM MODEL YEAR DESIGN CHANGE - NQF/NQG/NQH FRONT CASE HALF ASSEMBLY, INPUT SHAFT, PLANETARY CARRIER HIGH/LOW CLUTCH

Interim 2012 model year for Magna light-duty and heavy-duty transfer case RPOs NQF / NQG / NQH, a second-design front case half assembly, planetary internal gear, gear retaining ring, locking plate, thrust washer-front, input shaft, pilot bearing, thrust washer-rear, high/low planetary carrier and high/low clutch were implemented into second-design assemblies.

The second-design light duty (LD), heavy duty (HD), and super-heavy duty (SHD) applications have a reduced OD dimension carrier and the second-design planetary internal gear has a reduced ID dimension. The planetary internal gear is a press-fit non-serviceable component and must be serviced with the front case half assembly. In service it is possible that a new or remanufactured transfer case may contain first or second-design content.

If a second-design transfer case has been installed into a vehicle that originally contained a first-design assembly, TCCM reprogramming is not required.

For production, the following transfer cases variations were produced:

- 2007-12i Magna LD NQG/NQH produced with first-design content. First design service components are available. A second-design assembly may be used for back-service in a first-design application.
- 2007-10 Magna HD NQF produced with only first-design content. Service components are available.
- 2007-10 Magna HD NQG produced with only first-design content. Service assemblies may contain either first or second design content. Both first and second design service components are available.
- 2007-12i Magna HD NQH produced with first-design content. First design service components are available. A second-design assembly may be used for back-service in a first-design application.
- 2011-12i Magna SHD NQF/NQG produced with first design content. First design service components are available. A second-design assembly may be used for back-service in a first-design application.
- 2012i-13 Magna LD NQG/NQH produced with second-design content. Second design service components are available.
- 2012i-13 Magna HD NQH produced with second-design content. Second design service components are available.
- 2012i-13 Magna SHD NQF/NQG produced with second-design content. Second design service components are available.

SERVICE PARTS LIST



Callout	Description	GM PN	Service Usage	
1	Front Case Half Assembly - w/gear (2) and ring 3)	19132998	NQH	
1	Front Case Half Assembly - w/gear (2) and ring (3)	19133000	NQG	
1	Front Case Half Assembly - w/o gear (2) and ring (3)	19255999	NPO	
2	High/Low Internal Gear- Not serviceable-part of case assembly	NO/PN	NQG/NQH	
5370	High/Low Internal Gear Retaining Ring	19133009	NQG/NQH	
4	Iligh/Low Planetary Carrier Retaining Ring	19132997	NQG/NQH	
5	High/Low Locking Plate-Single tab design	19132996	NQG/NQH	
6	Thrust Washer-Front-No tab design	19132995	NQG/NQH	
	Input Shaft Assembly - w/pilot bearing	19132977	NQG/NQH-w/M30	
	Input Shaft Assembly-		NQH-w/M99	
7	w/pilot bearing	19132978	NQG/ NQH-w/MYC	
7	Input Shaft Assembly- w/pilot bearing	19255997	NP0-w/MYC	
8	Pilot Bearing	19132983	NQG/NQH/NP0	
9	Thrust Washer-Rear-No tab design	19132995	NQG/NQH	
10	High/Low Planetary Carrier Assembly- Three pinion design	19132986	NQG/NQH	
11	High/Low Clutch	19260068	NQG/NQH - w/M30	
11	High/Low Clutch	19260067	NQG/NQH w/MYC a NQH w/M99	



Callout	Description	GM PN	Service Usage
1	Front Case Half Assembly - w/gear (2) and ring (3)	19299077	NQH
1	Front Case Half Assembly - w/gear (2) and ring (3)	19299078	NQG
			NPO
	Front Case Half Assembly - w/o gear (2) and ring (3)	19299076	NOTE: The second design NP0 front case half assembly w/o gear (2 and ring (3) is interchangeable with first design
2	High/Low Internal Gear- Not serviceable-part of case assembly	NO/PN	NQG/NQH
11/153 20	High/Low Internal Gear Retaining Ring	14037953	NQG/NQH
4	High/Low Planetary Carrier Retaining Ring	15547397	NQG/NQH
5	High/Low Locking Plate- three tab design	19300745	NQG/NQH
6	Thrust Washer-Front - No tab design	12470959	NQG/NQH
5070	Input Shaft Assembly- w/pilot bearing	19299085	NQG/NQH-w/M30
7	Input Shaft Assembly - w/pilot bearing	19299088	NQH-w/M99 NQG/NQH-w/MYC
7	Input Shaft Assembly- w/pilot bearing	19255997	NP0-w/MYC
8	Pilot Bearing	19132983	NQG/NQH/NP0
9	Thrust Washer-Rear- Three tab design	19300746	NQG/NQH
10	High/Low Planetary Carrier Assembly- Three pinion design	19299090	NQG/NQH
11	High/Low Clutch	19299092	NQG/NQH - w/M30
11	High/Low Clutch	19299093	NQG/NQH w/MYC at NQH w/M99



NOTE:

2007-2010 MY Heavy Duty NQF transfer case assemblies were only produced with first-design content. Service 2007-2010 MY Heavy Duty NQG transfer case service assemblies may contain either first or second design content.

Callout	Description	GM PN	Service Usage
1	Front Case Half Assembly w/gear (2) and ring (3)	19257420	2011-13 NQF
1	Front Case Half Assembly w/gear (2) and ring (3)	19133000	2007-10 NQG
1	Front Case Half Assembly w/gear (2) and ring (3)	19259038	2011-13 NQG
1	Front Case Half Assembly w/gear (2) and ring (3)	19132998	2007-13 NQH
2	High/Low Internal Gear- Not serviceable- part of case assembly	NO/PN	NQF/NQG/NQH
3	High/Low Internal Gear Retaining Ring	19133009	NQF/NQG/NQH
	High/Low Planetary Carrier Retaining Ring	19132997	NQF/NQG/NQH
5	High/Low Locking Plate-Single tab design	19132996	NQF/NQG/NQH
6	Thrust Washer-No tab design - Front	19132995	NQF/NQGF/NQH
7	Input Shaft Assembly w/pilot bearing	19132979	NQH w/MYD 07-10MY NQF/NQG w/MYD and MW7
810	Input Shaft Assembly- w/pilot bearing	19257419	2007-13 NQF/NQG w/MYD
7	Input Shaft Assembly- w/pilot bearing	19259039	2011-13 NQF/NQG w/MW7
8	Pilot Bearing	19259040	2011-13MY NQF/NQG w/MW7
8	Pilot Bearing	19132984	2007-10MY NQF/NQG/NQH - w/ MW7 / MYD 2007-13 NQH w/MYD 2011-13 NQF/NQG w/MYD
9	Thrust Washer-No tab design-Rear	19132995	NQG/NQH 2011-13 NQF
10	High/Low Planetary Carrier Assembly-Five pinion design	19132987	NQG/NQH 2011-13 NQF
11	High/Low Clutch	19260067	NQG/NQH 2011-13 NQF



	Magna Heavy Duty NQF/N		
Callout	Description	GM PN	Service Usage
1	Front Case Half Assembly w/gear (2) and ring (3)	19299079	2011-13 NQF
1	Front Case Half Assembly w/gear (2) and ring (3)	19299078	2007-10 NQG
1	Front Case Half Assembly w/gear (2) and ring (3)	19299080	2011-13 NQG
1	Front Case Half Assembly w/gear (2) and ring (3)	19299077	2007-13 NQH
2	High/Low Internal Gear Not serviceable part of case assembly	NO/PN	NQF/NQG/NQH
3	High/Low Internal Gear Retaining Ring	14037953	NQF/NQG/NQH
4	High/Low Planetary Carrier Retaining Ring	15547397	NQF/NQG/NQH
5	High/Low Locking Plate-Two tab design	15664905	NQF/NQG/NQH
6	Thrust Washer-No tab design - Front	12470959	NQF/NQG/NQH
7	Input Shaft Assembly- w/pilot bearing	19299086	NQH w/MYD 07-10MY NQG w/MYDand MW7
37	Input Shaft Assembly- w/pilot bearing	19299087	2011-13 NQF/NQG w/MYD
7	Input Shaft Assembly- w/pilot bearing	19299089	2011-13 NQF/NQG w/MW7
8	Pilot Bearing	19259040	2011-13MY NQF/NQG w/MW7
8	Pilot Bearing	19132984	2007-10MY NQF/NQG/NQH - w/MW7 / MYI 2007-13 NQH w/MYD 2011-13 NQF/NQG w/MYD
9	Thrust Washer-Two tab design-Rear	15547390	NQG/NQH 2011-13 NQF
10	High/Low Planetary Carrier Assembly-Six pinion design	19299091	NQG/NQH 2011-13 NQF
11	High/Low Clutch	19299093	NQG/NQH 2011-13 NQF

FRONT CASE HALF IDENTIFICATION



The first design front case half assembly can be identified as having an internal gear that is a 94 tooth design with an inside diameter (a) of 148.5 mm (5.85 in).

The second design front case half assembly can be identified as having an internal gear that is a 91 tooth design with an inside diameter (a) of 142 mm (5.59 in).

INPUT SHAFT IDENTIFICATION



The first design input shaft can be identified as a 56 tooth design with an outside diameter (a) of 91.4 mm (3.60 in).

The second design input shaft can be identified as a 53 tooth design with an outside diameter (a) of 87.50 mm (3.44 in).

HIGH/LOW PLANETARY CARRIER ASSEMBLY IDENTIFICATION



The first-design light-duty 3-pinion high/low planetary carrier (1) can be identified as having a 30 tooth design with an inside diameter (a) of 61.3 mm (2.41 in). In addition, the first-design carrier can also be identified by the presence of a recessed washer pocket (3) at the rear thrust washer location.

The second-design light-duty 3-pinion high/low planetary carrier (2) can be identified as having a 29 tooth design with an inside diameter (b) of 60.2 mm (2.37 in). In addition, the second-design carrier can also be identified by the lack of a recessed washer pocket (4) at the rear thrust washer location.



The first-design heavy-duty 5-pinion high/low planetary carrier (1) can be identified as having 5 pinions and a 30 tooth design with an inside diameter (a) of 61.3 mm (2.41 in).

The second-design heavy-duty 6-pinion high/low planetary carrier (2) can be identified as having 6 pinions and a 29 tooth design with an inside diameter (b) of 60.2 mm (2.37 in).

HIGH/LOW CLUTCH



The first design high/low clutch can be identified as having a 30 tooth design with a gear tooth outside diameter (a) of 65.50 mm (2.58 in).

The second design high/low clutch can be identified as having a 29 tooth design with a gear tooth outside diameter (a) of 63.25 mm (2.49 in).

COMPONENT REPLACEMENT - CONVERSION FROM FIRST DESIGN TO SECOND DESIGN



It is possible to repair a first-design assembly using second-design components. Refer to the parts catalog and the tables above for component part number clarification.

First-design LD components are shown in the view above. NOTE:

When servicing a first-design assembly with second-design components, the following components MUST be replaced as a group:

- 1. Front Case Half Assembly with internal gear and retaining ring
- Locking Plate
 Thrust Washer (front)
 Input Shaft
- 5. Pilot Bearing
- 6. Thrust Washer (rear)
- 7. Planetary Carrier Assembly
- 8. High/Low Clutch

PRODUCTION ASSEMBLY BREAKPOINTS

The design level and component content of the transfer case can be determined by referencing the assembly part number located on the identification label.

First Design Assembly PN	Second Design Assembly PN	RPO	Approximate Production Breakpoint	Vehicle/Transmission RPO
24256476	24261560	NP0	March 2012	K100 / MYC
24256475	24261517	NQH	January 2012	K200 / MYD
24256474	24261516	NQH	January 2012	K100 / M99
24256473	24261515	NQH	January 2011	K100 / M30
24256472	24261514	NQH	December 2011	K100 / MYC
24257578	24261513	NQF	December 2011	K200 / MYD
24257577	24261512	NQF	January 2012	K200 / 300 / MW7
24257576	24261511	NQF	December 2011	K200 / 300 / MYD
24257581	24261510	NQG	January 2011	K200 / MYD / +Z49
24257580	24261509	NQG	January 2012	K200 / 300 / MW7
24257579	24261508	NQG	December 2011	K200 / 300 / MYD / - Z49
24252685	24261507	NQG	December 2011	K100 / M30
24252684	24261506	NQG	January 2011	K100 / MYC

PRODUCTION ASSEMBLY BREAKPOINTS

2014 NQH/NPO/NQG-LD Model Year Design Change - Addition of a Tuned Vibration Adapter (dampener) for V-6 Engine RPO LV3 Applications



Beginning in 2014 model year for V-6 engine RPO LV3 applications, a dampener (1) has been added to the exterior of the NQH and NQG-LD transfer cases.

Magna Transfer Case Bar Code Label



Supplier Code

Production Year

Julian Date of the Year

Assembly Line Number

GM Assembly Part Number

Sequential Number

Transfer Case	Identification	(Magna)

3

4

5

6

7

8





MP 1222/1225/1226 Build Variations

The NQG transfer case is available in 7 variations, depending on the year, and transmission configuration. When servicing the transfer case it is important to understand which variation is being serviced because of the different internal components.

Year / Model	Transmission	Input Shaft	Output Shaft	Chain Size	Chain Series	Hi/Low Planetary	Application		
2007-14 MP 1222 (LD) Light Duty	М30 - 4L60-Е	27 Spline	32 Spline	7/16 X 1.25 in	9600 Series Rocker Pin Chain	3 Pinion	K1		
2007-14 MP 1222 (LD) Light Duty	МҮС- 6L80-Е	32 Spline	32 Spline	7/16 X 1.25 in	9600 Series Rocker Pin Chain	3 Pinion	K1		
2007-14 MP 1225 (HD) Heavy Duty	MYD- 6L90-E	29 Spline	31 Spline	7/16 X 1.5 in	9600 Series Rocker Pin Chain	5 Pinion	К2		
2007-10 MP 1225 (HD-Canadian) Heavy Duty	MYD- 6L90-E	29 Spline	31 Spline	7/16 X 1.5 in	2300 Series Round Pin Chain	5 Pinion	K2 - Canadian		
2007-10 MP 1226 Super Heavy Duty (SHD)	MYD- 6L90-E MW7- Allison	29 Spline	31 Spline	7/16 X 1.5 in	2300 Series Round Pin Chain	5 Pinion	K2-W/MW7 K3 - All		
2011 -14 MP 1225 (HD) Heavy Duty	MYD- 6L90-E	29 Spline	31 Spline	7/16 X 1.5 in	2300 Series Round Pin Chain	5 Pinion	K2-Canadian K3 - All		
2011 -14 MP 1226 Super Heavy Duty (SHD)	MW7- Allison	33 Spline	31 Spline	7/16 X 1.5 in	2300 Series Round Pin Chain	5 Pinion	K2, K3		

MP 1222/1225/1226 Variations

Internal Components

MP1222 LD with 27T Input Spline

• The high/low clutch has bias pointing engagement teeth. The leading edges of the teeth are not symmetric.

MP1222 LD with 32T Input Spline

• The high/low clutch has neutral pointing engagement teeth. The leading edges of the teeth are symmetric.

MP1222 LD Common with either 27T or 32T Input Spline

- The rear output shaft seal is smaller, the inner lip diameter measures 46.2 mm (1.819 in).
- The rear output shaft bushing is smaller, the inner diameter measures 48 mm (1.890 in).
- The rear case half has smaller bores to accommodate the rear output shaft seal and the rear output shaft bushing.
- The input shaft pilot bearing assembly is smaller than the MP 1225/1226 to accommodate the smaller rear output shaft. The outer diameter measures 38.1 mm (1.5 in).
- The rear output shaft is smaller.
- The front output shaft drive sprocket is 31.75 mm (1.25 in) wide.
- The front output shaft driven sprocket is 31.75 mm (1.25 in) wide.
- The rear output shaft rear bearing retaining rings are smaller, the outer diameter of the ring groove at the rear output shaft measures 37.5 mm (1.476 in)
- The rear output shaft rear bearing assembly is smaller. The inner diameter measures 40 mm (1.575 in).
- The HI/LO planetary is a 3 pinion design.

MP 1225

The input shaft seal is a single lip seal used only with dry cavity adapters.

MP 1226

The input shaft seal is a dual lip seal used specifically for the MW7 which has a wet cavity adapter, these seals are also used for the MYD in order to retain a common part number for this model.

MP 1225/1226 HD/SHD Common

- The input shaft pilot bearing assembly is larger to accommodate the larger rear output shaft, the outer diameter measures 41.275 mm (1.625 in)
- An input shaft pilot bearing retaining ring is used.
- The high/low planetary is a 5 pinion design.
- The high/low clutch has neutral pointing engagement teeth. The leading edges of the teeth are symmetric.
- The front output shaft drive sprocket is 38.1 mm (1.5 in) wide.
- The front output shaft driven sprocket is 38.1 mm (1.5 in) wide.
- The thrust washer with internal notched area and anti-rotational pin are a new design for 2011-up 1225HD and 1226SHD applications only.
- The rear output shaft is larger diameter.
- The rear output shaft rear bearing retaining rings are larger, the outer diameter of the ring groove at the rear output shaft measures 38.5 mm (1.516 in).
- The rear output shaft rear bearing assembly is larger, the inner diameter measures 41 mm (1.614 in).
- The rear output shaft seal is larger, the inner lip diameter measures 54.2 mm (2.134 in).
- The rear output shaft bushing is larger, the inner diameter measures 56.08 mm (2.208 in).
- The rear case half has larger bores to accommodate the larger rear output shaft seal and the rear output shaft bushing.

All Applications

- Double lip input shaft oil seals are used on applications with a WET adapter cavity and with 4 speed transmission RPOs M30/M70/MW7/ML9 only.
- Single lip input shaft oil seals are used on applications with a DRY adapter cavity and with 6 speed transmission RPOs MYC/MYD only.

Front Output Shaft Slinger

Interim 2011 model year, a new design front output shaft slinger was implemented into production for second design NQF and NQG applications. First design 2011 model year NQF and NQG applications can be identified as not having the slinger on the front output shaft.

For service, the new design front output shaft slinger may be installed on current and prior model year NQF, NQG, NQH, and NP0 providing the new design front output shaft is also installed. The front output shaft slinger is to be installed using front output shaft seal installer.

Second design front output shafts can be identified by the machined area on the OD of the shaft.

MP 1625/1626 Variations

Year / Model	Transmission	Input Shaft	Output Shaft	Chain Size	Chain Series	Hi/Low Planetary	Application	
2007-14 MP 1625 (HD) Heavy Duty	MYD- 6L90-E	29 Spline	31 Spline	7/16 X 1.5 in	9600 Series Rocker Pin Chain	5 Pinion	К2	
2007-10 MP 1625 (HD-Canadian) Heavy Duty	MYD- 6L90-E	29 Spline	31 Spline	7/16 X 1.5 in	2300 Series Round Pin Chain	5 Pinion	K2 - Canadian	
2007-10 MP 1626 Super Heavy Duty (SHD)	MYD- 6L90-E MW7-Allison	29 Spline	31 Spline	7/16 X 1.5 in	2300 Series Round Pin Chain	5 Pinion	K2-W/MW7 K3 - All	
2011 -14 MP 1625 (HD) Heavy Duty	MYD- 6L90-E	29 Spline	31 Spline	7/16 X 1.5 in	2300 Series Round Pin Chain	5 Pinion	K2-Canadian K3 - All	
2011 -14 MP 1626 Super Heavy Duty (SHD)	MW7-Allison	33 Spline	31 Spline	7/16 X 1.5 in	2300 Series Round Pin Chain	5 Pinion	K2, K3	

Additional differences in these models are listed below:

All Applications

- Double lip input shaft oil seals are used on applications with a WET adapter cavity and with 4 speed transmission RPOs M30/M70/MW7/M99/ML9 only.
- Single lip input shaft oil seals are used on applications with a DRY adapter cavity and with 6 speed transmission RPOs MYC/MYD only.

MP 3023/3024 Build Variations

The NQH transfer case is available in 4 variations, depending on the engine and transmission configurations. The variations allow the transfer case to handle different torque loads. When servicing the transfer case, it is important to understand which variation is being serviced because of the different internal components.

Model	Transmission	Input Shaft	Output Shaft	Chain Size	Chain Series	Hi/Low Planetary	Rear mainshaft bearing	Application
MP 3023 ATC Light Duty (LD)	М30 - 4L60-Е	27T Spline	32T Spline	7/16 x 1.25 in	9600 Series Rocker Pin Chain	3 Pinion	1.575" I.D.	K1
MP 3023 ATC Light Duty (LD)	MYC-6L80-E	32T Spline	32T Spline	7/16 x 1.25 in	9600 Series Rocker Pin Chain	3 Pinion	1.575" I.D.	K1
MP 3023 ATC Light Duty (LD)	M99 - Hybrid	32T Spline	32T Spline	7/16 x 1.25 in	9600 Series Rocker Pin Chain	3 Pinion	1.378" I.D.	K1
MP 3024 ATC Heavy Duty (HD)	MYD - 6L90	29T Spline	31T Spline	7/16 x 1.5 in	9600 Series Rocker Pin Chain	5 Pinion	1.614'' I.D.	К2

MP 3023/3024 ATC Variations

MP3023 LD ATC with M30-4L60E/M70-4L70E (27 spline input)

- The high/low clutch has bias pointing engagement teeth. The leading edges of the teeth are not symmetrical.
- The rear output shaft rear bearing retaining rings are larger ID than the MP 3023 ATC/M99 Hybrid with 32T input splines but smaller than the MP 3024. The inner diameter of the ring groove at the rear output shaft measures 37.5 mm (1.476 in).
- The rear output shaft bearing assembly inner diameter measures 40 mm (1.575 in). The width measures 18 mm (0.709 in).
- The rear output shaft bearing assembly surface on the rear output shaft measures 40 mm (1.575 in).

MP3023 LD ATC with MYC-6L80E (32 spline input)

- The high/low clutch has neutral pointing engagement teeth. The leading edges of the teeth are symmetrical.
- The rear output shaft rear bearing retaining rings are larger ID than the MP 3023 ATC/M99 Hybrid with 32T input splines but smaller than the MP 3024. The inner diameter of the ring groove at the rear output shaft measures 37.5 mm (1.476 in).
- The rear output shaft bearing assembly inner diameter measures 40 mm (1.575 in). The width measures 18 mm (0.709 in).
- The rear output shaft bearing assembly surface on the rear output shaft measures 40 mm (1.575 in).

MP3023 LD ATC with M99-Hybrid (32 spline input)

- The high/low clutch has neutral pointing engagement teeth. The leading edges of the teeth are symmetrical.
- The speed reluctor wheel profile thickness is thinner than the MP 3023 ATC with 27T input spline and the MP 3024, measuring 25.8 mm (1.016 in) thick.
- There is no snap ring between the speed reluctor wheel and the rear output shaft rear bearing assembly.
- The rear output shaft rear bearing retaining ring is smaller than the MP 3023 ATC with 27T input spline and the MP 3024. The inner diameter of the ring groove at the rear output shaft measures 33 mm (1.299 in).
- The rear output shaft bearing assembly inner diameter measures 35 mm (1.378 in). The width measures 23 mm (0.906 in).
- The rear output shaft bearing assembly surface on the rear output shaft measures 35 mm (1.378 in).

MP3023 LD ATC (with either 27T and 32T input shaft splines)

- The rear output shaft seal is smaller than the MP 3024 ATC. The inner lip diameter measures 46.1 mm (1.815 in).
- The rear output shaft bushing is smaller than the MP 3024 ATC. The inner diameter measures 48 mm (1.890 in).
- The rear case half has smaller bores than the MP 3024 ATC in order to accommodate the smaller rear output shaft seal and the rear output shaft bushing.
- There is an additional external wire harness bracket for the 32T application.
- The input shaft pilot bearing assembly is smaller than the MP 3024 ATC in order to accommodate the smaller rear output shaft. The bearing outer diameter measures 38.1 mm (1.5 in).
- The rear output shaft is smaller than the MP 3024 ATC.
- The front output shaft drive sprocket is 27.2 mm (1.071 in) wide.
- The front output shaft driven sprocket is 29.4 mm (1.157 in) wide.
- The control lever is thinner than the MP 3024 ATC, measuring 9.5 mm (0.374 in) between the bearing surfaces.
- The control actuator lever is thinner than the MP 3024 ATC, measuring 9.5 mm (0.374 in) between the bearing surfaces.
- The control actuator lever balls are larger than the MP 3024 ATC, measuring 13 mm (0.512 in) in diameter.
- The control actuator lever washer is thinner than the MP 3024 ATC, measuring 1 mm (0.039 in).

MP3024 HD ATC with MYD-6L90E (29 spline input)

- The rear output shaft seal is larger than the MP 3023 ATC. The inner lip diameter measures 53.8 mm (2.118 in).
- The rear output shaft bushing is larger than the MP 3023 ATC. The inner diameter measures 56.08 mm (2.208 in).
- The rear case half has larger bores than the MP 3023 ATC in order to accommodate the larger rear output shaft seal and the rear output shaft bushing.
- The input shaft pilot bearing assembly is larger than the MP 3023 ATC in order to accommodate the larger rear output shaft. The bearing outer diameter measures 41.275 mm (1.625 in).
- An input shaft pilot bearing retaining ring is used.
- The high/low clutch has neutral pointing engagement teeth. The leading edges of the teeth are symmetric.
- The rear output shaft is larger than the MP 3023 ATC.
- The front output shaft drive sprocket is 33.5 mm (1.319 in) wide.
- The front output shaft driven sprocket is 35.5 mm (1.398 in) wide.
- The rear output shaft rear bearing retaining rings are larger than the MP 3023 ATC. The inner diameter of the ring groove at the rear output shaft measures 38.5 mm (1.516 in).
- The rear output shaft rear bearing assembly inner diameter measures 41 mm (1.614 in). The width measures 18 mm (0.709 in).
- The rear output shaft bearing assembly surface on the rear output shaft measures 41 mm (1.614 in).
- The control lever is thicker than the MP 3023 ATC, measuring 10.5 mm (0.413 in) between the bearing surfaces.
- The control actuator lever is thicker than the MP 3023 ATC, measuring 10.5 mm (0.413 in) between the bearing surfaces.
- The control actuator lever balls are smaller than the MP 3023 ATC, measuring 10 mm (0.394 in) in diameter.
- The control actuator lever washer is thicker than the MP 3023 ATC, measuring 2.5 mm (0.098 in).

ALL

- Double lip input shaft oil seals are used on applications with a WET adapter cavity and with 4 speed transmission RPOs M30/M70/MW7/M99/ML9.
- Single lip input shaft oil seals are used on applications with a DRY adapter cavity and with 6 speed transmission RPOs MYC/MYD.

Model	Transmission	Input Shaft	Output Shaft	Chain Size	Chain Series	Hi/Low Planetary	Application
MP 3010 ATC	MYC - 6L80	32T Spline	32T Spline	7/16 x 1.25 in	9600 Series Rocker Pin Chain	N/A	K1

MP 3010 ATC Variations

All Applications

- Double lip input shaft oil seals are used on applications with a WET adapter cavity and with 4 speed transmission RPOs M30/M70/MW7/M99/ML9 only.
- Single lip input shaft oil seals are used on applications with a DRY adapter cavity and with 6 speed transmission RPOs MYC/MYD only.



