



## MVG 1600 Series Parts Manual

Pro Gear's Harmon-Herrington MVG 1600 Series parts manual to assist in identifying the parts for your Harmon-Herrington transfer case unit.

If you need any assistance identifying the correct transfer case unit for your truck and equipment, contact your Harmon-Herrington replacement part specialists at Pro Gear and Transmission.

Pro Gear Transmission has same day shipping and 1000's of products in stock and ready to ship internationally for your next project.

For parts or service contact the Harmon-Herrington specialists at Pro Gear & Transmission, Inc.

1 (877) 776-4600  
(407) 872-1901  
parts@eprogear.com



**PARTS MANUAL**  
**FOR**  
**MVG 1600PDL**

**MARMON-HERRINGTON ALL-WHEEL DRIVE**

13001 Magisterial Drive • Louisville, KY 40223  
(502) 253-0277 • (800) 227-0727 • Fax (502) 253-0317  
E-mail: [info@marmon-herrington.com](mailto:info@marmon-herrington.com)

# TABLE OF CONTENTS

REPLACEMENT PARTS & WARRANTY CLAIM PROCEDURE .....	3
HOUSING MVG 1600PDL .....	4-5
INPUT SHAFT, COVER MVG 1600PDL .....	6-7
OIL PUMP MVG 1600PDL .....	8-9
DOUBLE GEAR, BEARING COVER MVG 1600PDL .....	10-11
OUTPUT SHAFT, BEARING COVER MVG 1600PDL .....	12-13
FLANGES MVG 1600PDL .....	14-15
GEAR SHIFT MVG 1600PDL .....	16-17



**MARMON-HERRINGTON ALL-WHEEL DRIVE**  
13001 Magisterial Drive • Louisville, KY 40223  
(502) 253-0277 • (800) 227-0727 • Fax (502) 253-0317  
E-mail: [info@marmon-herrington.com](mailto:info@marmon-herrington.com)

PM04/04

## REPLACEMENT PARTS

When ordering replacement parts for **MARMON-HERRINGTON LOW FLOOR** conversions, the following information should be given:

1. **FACTORY ORDER NUMBER** (found on I.D. Plate or small plate affixed to axle housing). This will be a six (6) digit number. (See illustrations this page.)
2. Component for which parts are required, i.e. front drive axle or transfer case/drop box.
3. Model of axle and/or transfer case/drop box, i.e. MT10, MVG 750, MDB500.
4. Give quantity and part number required.  
**NOTE:** Drivelines, shift linkage, etc., can be found on the computer printout of Bill of Material, which is included in the Service Manual.
5. Give complete billing and shipping address.

## WARRANTY CLAIM PROCEDURE

Before proceeding with repairs or ordering parts that you feel may be covered under warranty, you must first contact Marmon-Herrington Customer Service Department and obtain a Repair Authorization Number.


Please be prepared to supply all of the following information:

- **Factory Order Number** – This is located on an ID plate fixed to either the driver's door panel or the component (axle or transfer case) itself.
- **Model and Serial Number** (required) – Again located on the ID plate fixed to either the driver's door panel or the component itself.
- **Vehicle Year, Make and Model**
- **Vehicle Identification Number**
- **Mileage**
- **In Service Date**

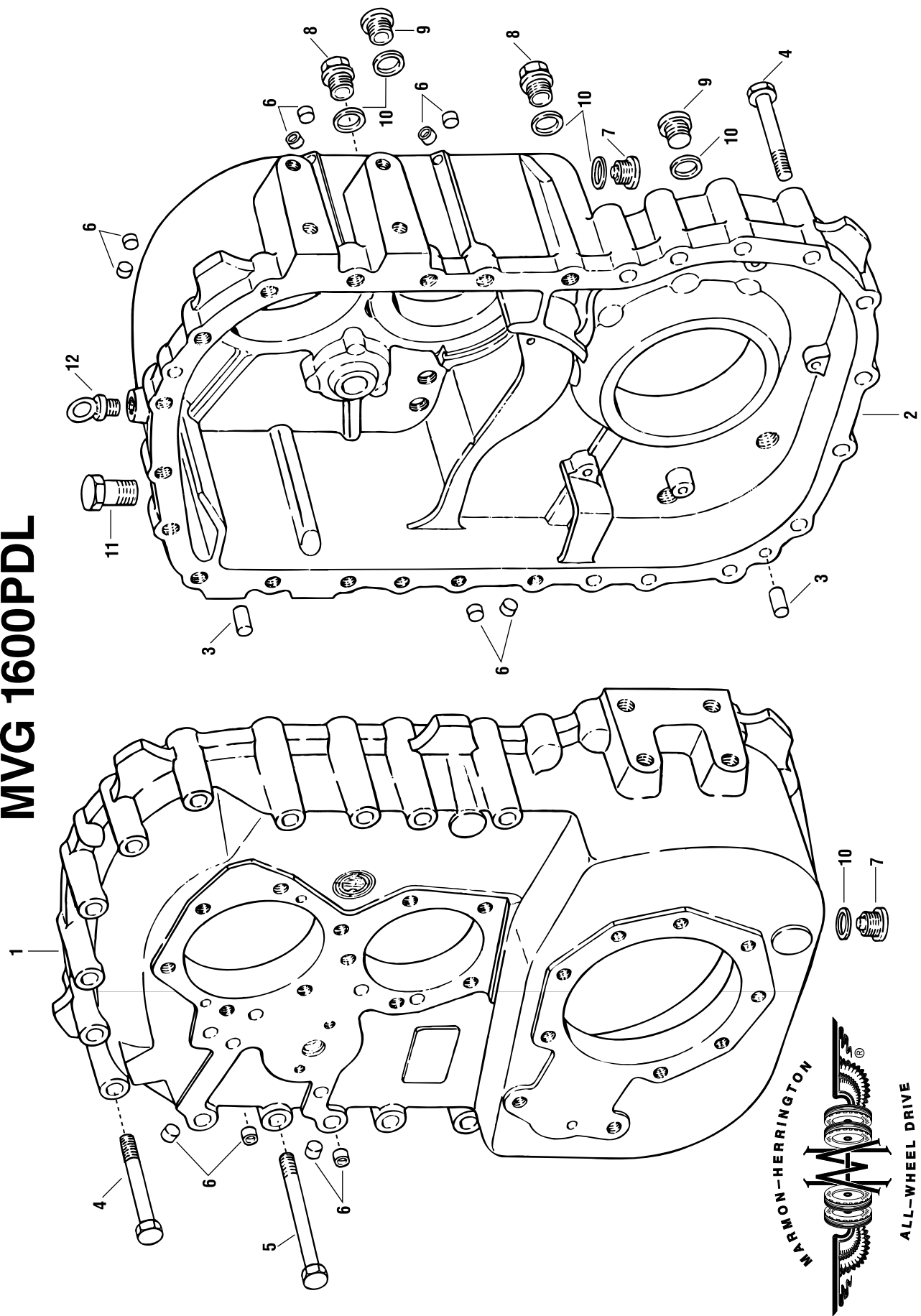
The information necessary for replacement parts and/or warranty claim procedures will be found on either plate design.

<b>MARMON-HERRINGTON</b>			
SALES ORDER	0000-00	RATIO	
S/N		TYPE	
CUST P/N			

<b>MARMON-HERRINGTON</b>			
SALES ORDER	0000-00		
S/N		TYPE	
CUST P/N			
COVERED BY ONE OR MORE OF THE FOLLOWING PATENTS: U.S. PATENTS 4,878,691; 4,934,733; 5,016,912; 5,275,430; 5,839,750; AND 6,398,251; AND CA PATENT 1,316,185. OTHER U.S. AND FOREIGN PATENTS PENDING.			

 <p><b>MARMON-HERRINGTON</b> ALL-WHEEL DRIVE LOUISVILLE, KENTUCKY U.S.A.</p>	
FACTORY ORDER NO.	0000-00
INSTALLED BY	
FRONT DRIVING AXLE	
MODEL	
CAPACITY	
SERIAL NO.	
RATIO	
TRANSFER CASE	
MODEL	
SERIAL NO.	

# HOUSING MVG 1600PDL



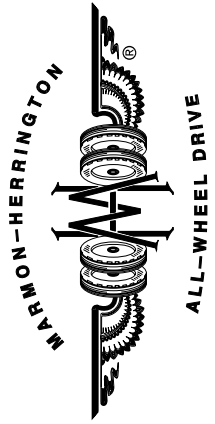
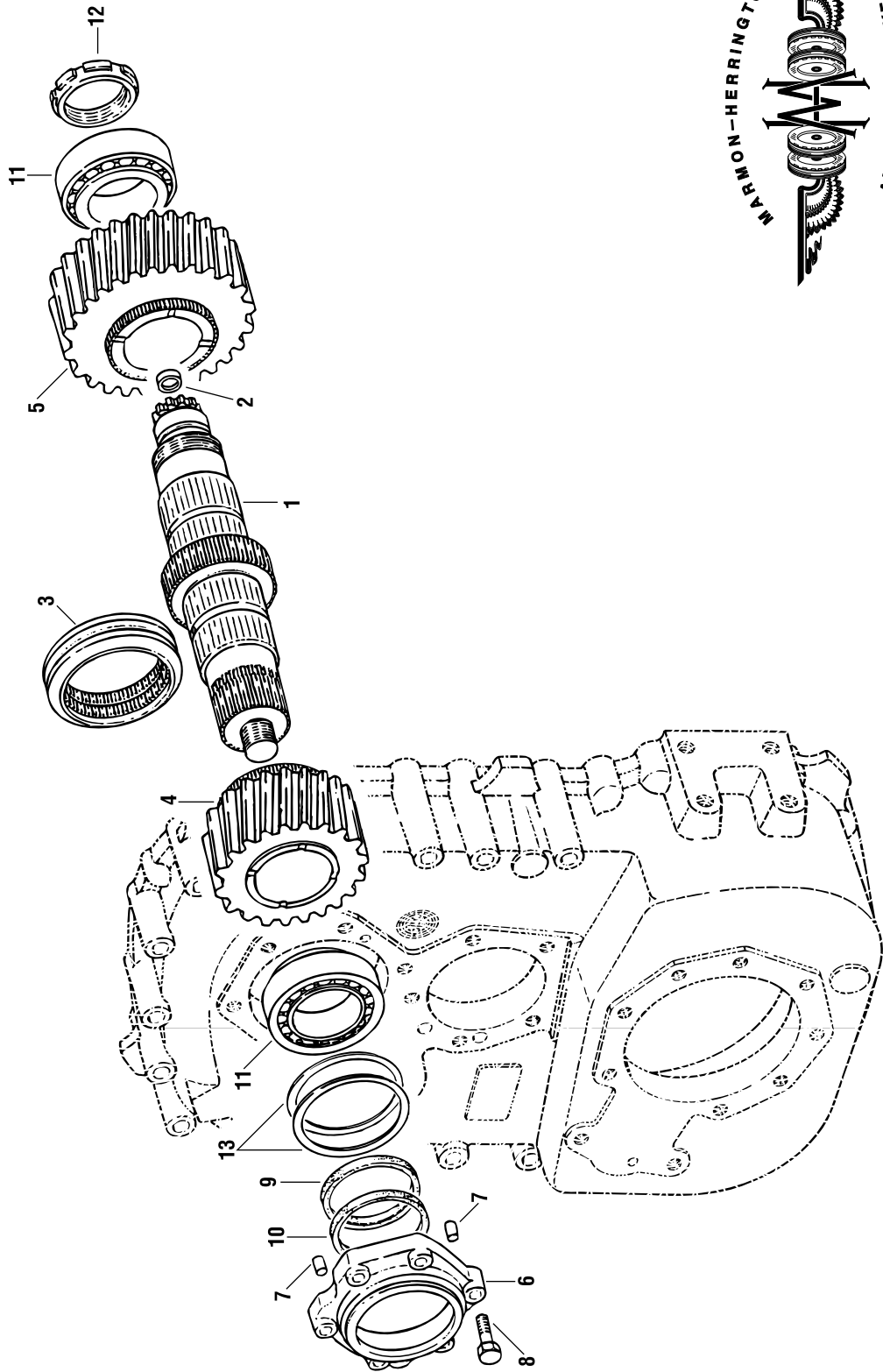
ITEM NO.	MH PART NO.	DESCRIPTION	QTY. REQ.	ITEM NO.	MH PART NO.	DESCRIPTION	QTY. REQ.
1	MVG16-1101	Housing Front	1				
2	MVG16-1102	Housing Rear	1				
3	MVG20-1016	Dowel Pin	2				
4	11501712	Hex Bolt, M14x100	17				
5	11501715	Hex Bolt, M14x130	9				
6	MVG16-1003	Core Plug	12				
7	MVG75-1005	Drain Plug	2				
8	MVG12-1009	Fill Plug	2				
9	MVG75-1012	Fill Plug	3				
10	MVG12-1010	Gasket	6				
11	MVG20-1018	Vent	1				
12	MVG16-1006	Eye Bolt	1				



**HOUSING  
MVG 1600PDL**

**MARMON-HERRINGTON ALL-WHEEL DRIVE**  
 13001 Magisterial Drive • Louisville, KY 40223  
 (502) 253-0277 • (800) 227-0727 • Fax (502) 253-0317  
 E-mail: info@marmon-herrington.com

# INPUT SHAFT, COVER MVG 1600PDL



ITEM NO.	MH PART NO.	DESCRIPTION	QTY. REQ.	ITEM NO.	MH PART NO.	DESCRIPTION	QTY. REQ.
1	MVG16-1007	Input Shaft	1				
2	MVG20-1064	Baffle Washer	1				
3	MVG20-1110	Shifting Sleeve	1				
4	MVG16-1008	Drive Gear, Low	1				
5	MVG16-1009	Drive Gear, High	1				
6	MVG16-1010	Bearing Cover	1				
7	MVG16-1011	Dowel Pin	2				
8	11500733	Hex Head Bolt, M12x45	6				
9	MVG16-1012	Oil Seal, Inner	1				
10	MVG16-1013	Oil Seal, Outer	1				
11	MVG20-1039	Bearing	2				
12	MVG20-1119	End Nut	1				
13	MVG16-1014A	Shim 1.25mm	AR				
	MVG16-1014B	Shim 1.30mm	AR				
	MVG16-1014C	Shim 1.40mm	AR				
	MVG16-1014D	Shim 1.50mm	AR				
	MVG16-1014E	Shim 1.60mm	AR				
	MVG16-1014F	Shim 1.70mm	AR				
	MVG16-1014G	Shim 1.80mm	AR				
	MVG16-1014H	Shim 1.85mm	AR				
		AR = As Required					

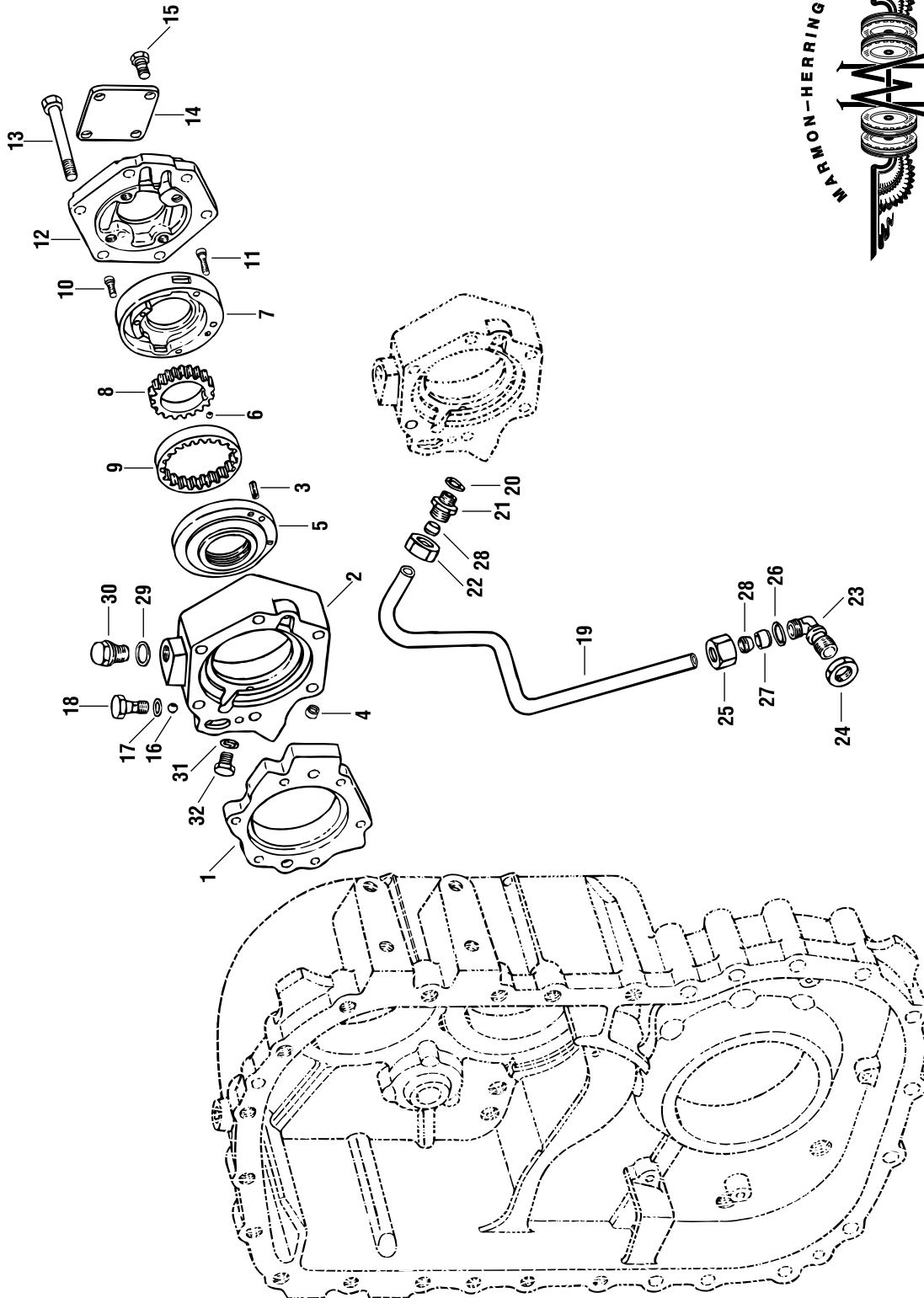
**MARMON-HERRINGTON ALL-WHEEL DRIVE**  
 13001 Magisterial Drive • Louisville, KY 40223  
 (502) 253-0277 • (800) 227-0727 • Fax (502) 253-0317  
 E-mail: info@marmon-herrington.com

**INPUT SHAFT, COVER  
 MVG 1600PDL**





# OIL PUMP MVG 1600PDL



ITEM NO.	MH PART NO.	DESCRIPTION	QTY. REQ.	ITEM NO.	MH PART NO.	DESCRIPTION	QTY. REQ.
1	MVG16-1015	Intermediate Plate	1				
2	MVG16-1103	Bearing Housing	1				
3	MVG75-1033	Pin	1				
4	MVG75-1009	Core Plug	2				
5	MVG75-1034	Oil Pump Cover	1				
6	MVG12-1069	Ball 6.0mm	1				
7	MVG12-1139	Oil Pump Housing	1				
8	MVG12-1068	Oil Pump Gear	1				
9	MVG12-1067	Oil Pump Rim Gear	1				
10	11503857	Screw, M6x30	2				
11	11503858	Screw, M6x35	2				
12	MVG16-1018	Cover	1				
13	11500998	Hex Head Bolt, M12x110	6				
14	MVG12-1015	Cover Plate	1				
15	11500888	Hex Head Bolt, M12x16	4				
16	MVG12-1137	Ball 11.0m	1				
17	MVG75-1128	Sealing Ring	1				
18	MVG75-1030	Hollow Screw	1				
19	MVG16-1105	Oil Pipe	1				
20	MVG12-1040	Sealing Ring	1				
21	MVG20-1117	Elbow	1				
22	MVG75-1038	Union Nut	1				
23	MVG75-1039	Elbow	1				
24	MVG75-1040	Hexagon Nut, M22x1.5	1				
25	MVG75-1041	Union Nut	1				
26	MVG75-1042	Sealing Ring	1				
27	MVG75-1043	Pressure Ring	1				
28	MVG75-1044	Cutting Ring	2				
29	MVG12-1010	Gasket	1				
30	MVG12-1009	Plug	1				
31	MVG75-1024	Sealing Ring	1				
32	MVG16-1107	Screw Plug	1				

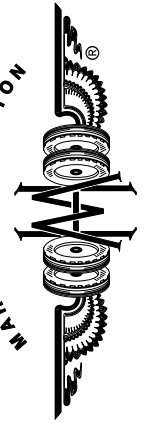
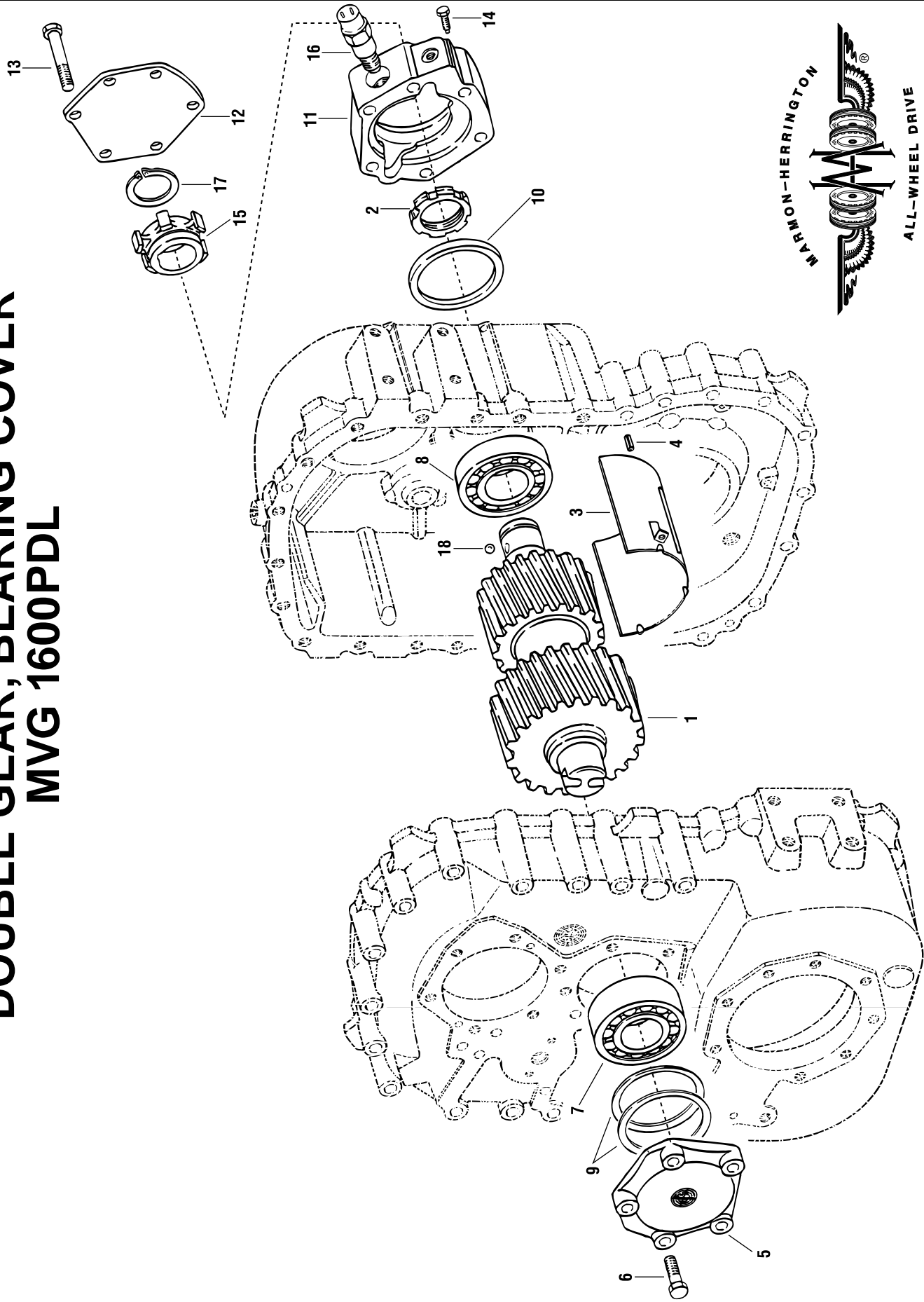
**MARMON-HERRINGTON ALL-WHEEL DRIVE**  
 13001 Magisterial Drive • Louisville, KY 40223  
 (502) 253-0277 • (800) 227-0727 • Fax (502) 253-0317  
 E-mail: info@marmon-herrington.com

**OIL PUMP  
 MVG 1600PDL**

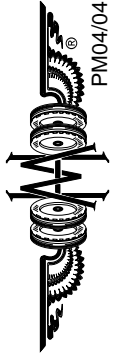


PM04/04

# DOUBLE GEAR, BEARING COVER MVG 1600PDL



ITEM NO.	MH PART NO.	DESCRIPTION	QTY. REQ.	ITEM NO.	MH PART NO.	DESCRIPTION	QTY. REQ.
1	MVG16-1025	Double Gear	1				
2	MVG16-1026	Nut, M60x1.5	1				
3	MVG16-1027	Splash Guard Upper	1				
4	MVG20-1021	Pin	1				
5	MVG20-1004	Cover, Idler Shaft	1				
6	MVG20-1005	Hex Head Bolt, M12x40	5				
7	MVG16-1028	Roller Bearing	1				
8	MVG16-1029	Roller Bearing	1				
9	MVG20-1046A	Shim 0.60mm	AR				
	MVG20-1046B	Shim 0.80mm	AR				
	MVG20-1046C	Shim 1.00mm	AR				
10	MVG16-1030	Centering Ring	1				
11	MVG16-1031	Speedometer Housing	1				
12	MVG20-1026	Cover	1				
13	MVG20-1027	Hex Head Bolt, M12x75	6				
14	MVG12-1201	Hex Head Screw	1				
15	MVG16-1033	Impulse Wheel	1				
16	MVG16-1034	Sensor Speedo	1				
17	MVG16-1035	Snap Ring	1				
18	MVG12-1069	Ball 6.0mm	1				
		AR = As Required					

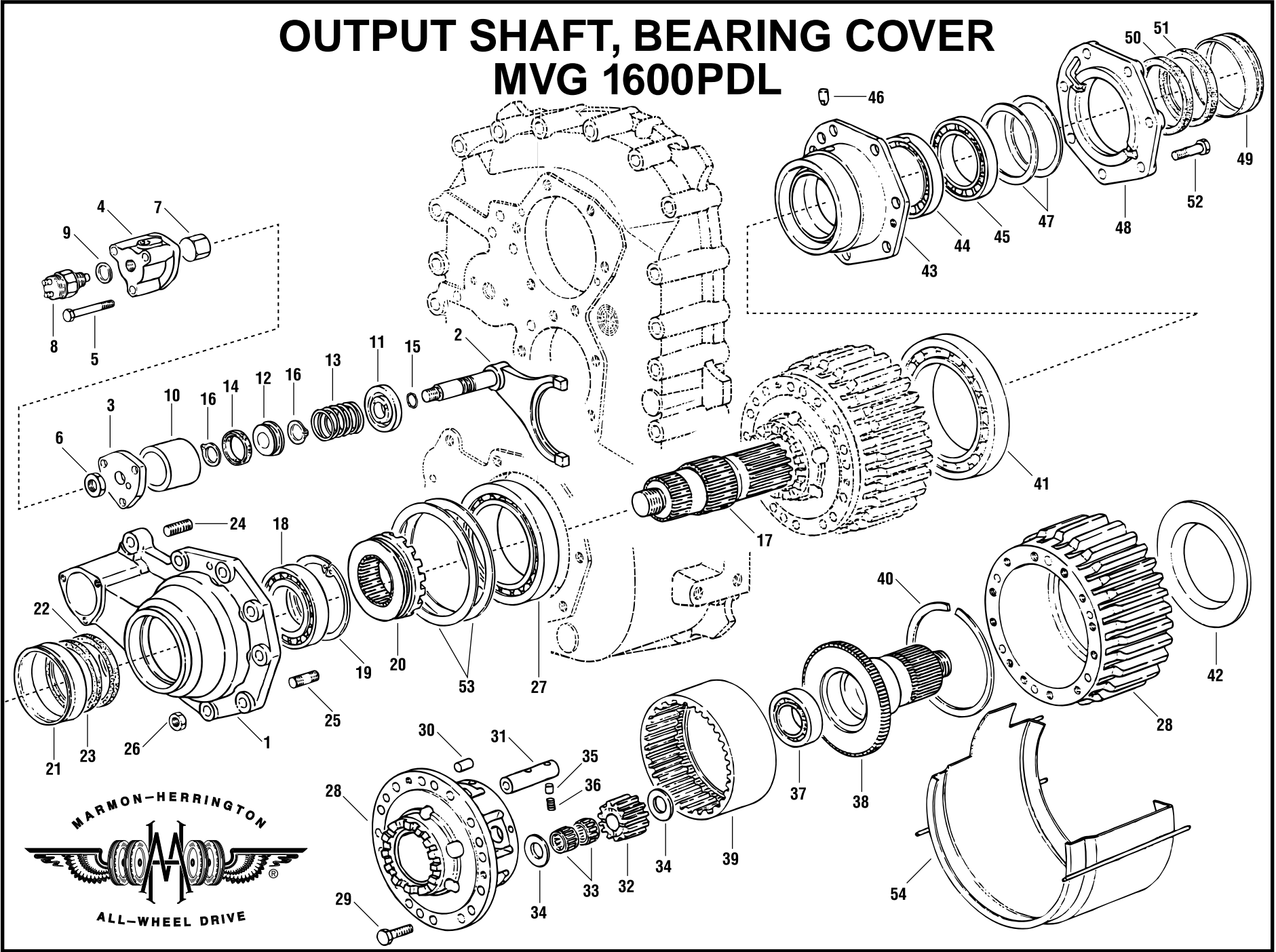


PM04/04

## DOUBLE GEAR, BEARING COVER MVG 1600PDL

**MARMON-HERRINGTON ALL-WHEEL DRIVE**  
 13001 Magisterial Drive • Louisville, KY 40223  
 (502) 253-0277 • (800) 227-0727 • Fax (502) 253-0317  
 E-mail: info@marmon-herrington.com

# OUTPUT SHAFT, BEARING COVER MVG 1600PDL



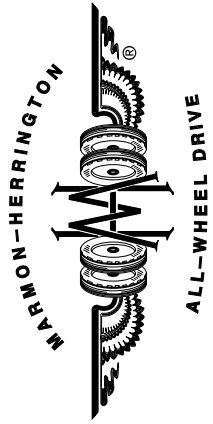
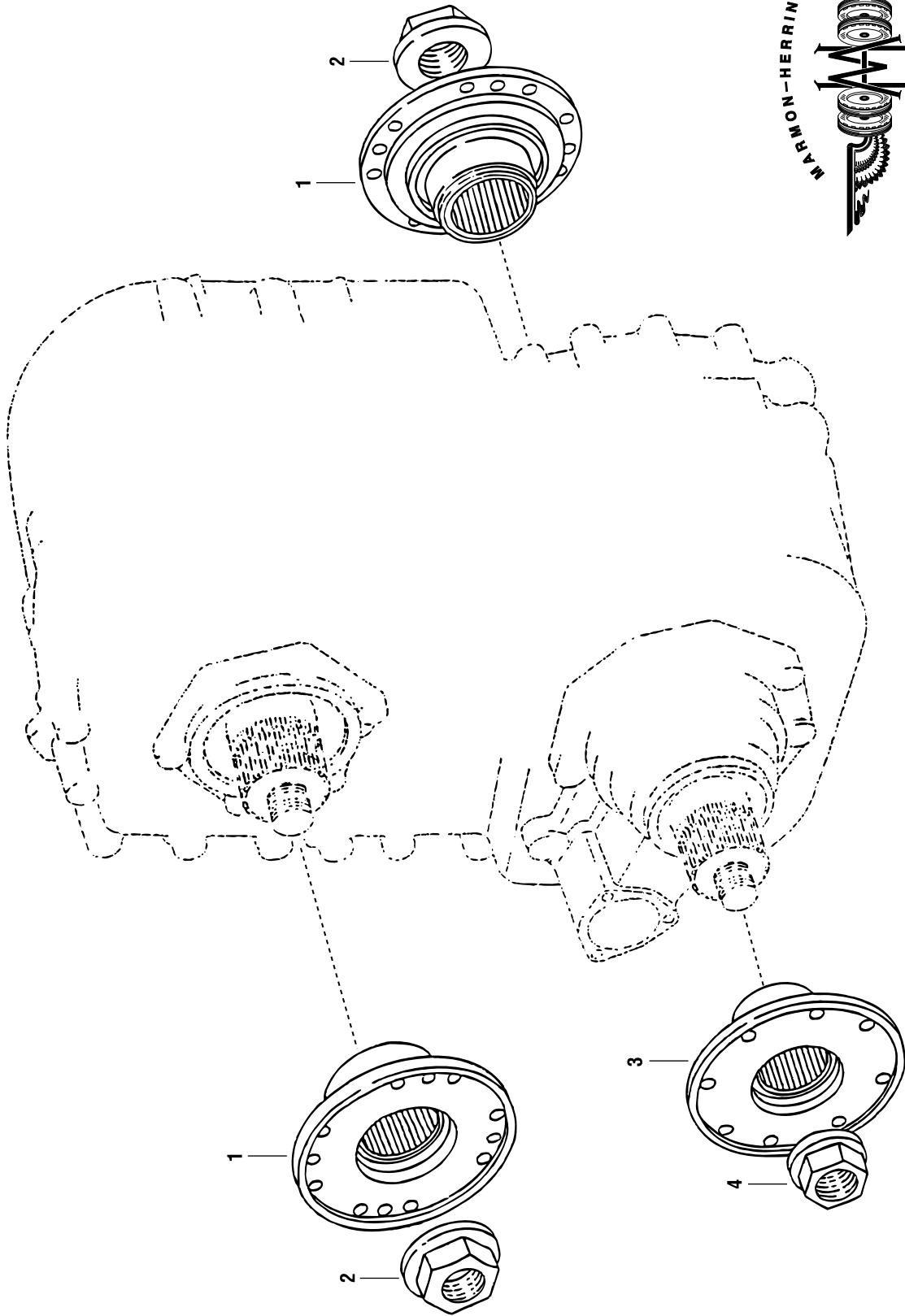
ITEM NO.	MH PART NO.	DESCRIPTION	QTY. REQ.	ITEM NO.	MH PART NO.	DESCRIPTION	QTY. REQ.
1	MVG20-1006	Cover, Front Output	1	34	MVG20-1068	Thrust Washer	10
2	MVG20-1093	Shift Fork	1	35	MVG20-1069	Retaining Pin, M6x10	5
3	MVG20-1009	Cover, Air Cylinder	1	36	MVG20-1070	Pressure Spring	5
4	MVG20-1010	Outer Cover, Air Cylinder	1	37	MVG20-1073	Roller Bearing	1
5	MVG20-1011	Hex Head Bolt, M8x75	3	38	MVG20-1072	Rear Output Shaft	1
6	MVG20-1095	Nut, M16x1.5	1	39	MVG20-1071	Planetary Ring Gear	1
7	MVG20-1096	Nut	1	40	MVG20-1074	Snap Ring	1
8	MVG75-1127	Pressure Switch	1	41	MVG20-1050	Roller Bearing	1
9	MVG12-1040	Gasket	1	42	MVG20-1075	Baffle Washer	1
10	MVG20-1110	Bush	1	43	MVG20-1051	Bearing Support	1
11	MVG12-1031	Washer	1	44	MVG20-1076	4-Point Bearing	1
12	MVG12-1037	Piston	1	45	MVG20-1077	Roller Bearing	1
13	MVG12-1033	Spring	1	46	MVG20-1078	Set Screw	1
14	MVG12-1038	Sealing Cup	1	47	MVG20-1079A	Shim .75mm	AR
15	MVG12-1036	O-Ring	1		MVG20-1079B	Shim .80mm	AR
16	MVG12-1001	Snap Ring	2		MVG20-1079C	Shim .90mm	AR
17	MVG20-1056	Output Shaft	1		MVG20-1079D	Shim 1.00mm	AR
18	MVG20-1057	Bearing Output	1		MVG20-1079E	Shim 1.25mm	AR
19	MVG20-1055	Snap Ring	1	48	DB16-1031	Bearing Cover	1
20	MVG16-1036	Shifting Sleeve	1	49	MVG20-1040	Seal Retainer Assy. (Includes Items #50, #51)	1
21	MVG16-1037	Seal Retainer Assy. (Includes Items #22, #23)	1	50	MVG20-1037	Oil Seal	1
22	MVG16-1038	Oil Seal	1	51	MVG20-1038	Oil Seal	1
23	MVG16-1039	Oil Seal	1	52	MVG20-1032	Hex Head Bolt, M12x45	7
24	MVG16-1040	Stud Bolt, M12x45	3	53	MVG20-1053A	Shim 1.25mm	AR
25	MVG20-1007	Stud Bolt, M12x35	7		MVG20-1053B	Shim 1.30mm	AR
26	MVG20-1008	Nut, M12-1.75	10		MVG20-1053C	Shim 1.40mm	AR
27	MVG20-1052	Roller Bearing	1		MVG20-1053D	Shim 1.50mm	AR
28	DB16-1028	Drive Gear	1		MVG20-1053E	Shim 1.60mm	AR
29	MVG20-1063	Hex Head Bolt, M12x1.5	12		MVG20-1053F	Shim 1.70mm	AR
30	PD1610	Pin	6		MVG20-1053G	Shim 1.80mm	AR
31	MVG20-1065	Planetary Pin	5	54	MVG16-1109	Splash Guard Lower	1
32	MVG20-1066	Planetary Gear	5			AR = As Required	
33	MVG20-1067	Needle Bearing	10				

**MARMON-HERRINGTON ALL-WHEEL DRIVE**  
 13001 Magisterial Drive • Louisville, KY 40223  
 (502) 253-0277 • (800) 227-0727 • Fax (502) 253-0317  
 E-mail: info@marmon-herrington.com

## OUTPUT SHAFT, BEARING COVER MVG 1600PDL



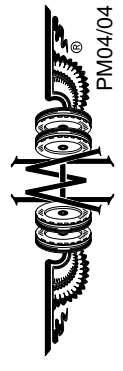
# FLANGES MVG 1600PDL



ITEM NO.	MH PART NO.	DESCRIPTION	QTY. REQ.	ITEM NO.	MH PART NO.	DESCRIPTION	QTY. REQ.
1	MVG16-1046	Comp. Flange Input/Output 1810	2				
2	MVG20-1043	Collar Nut	2				
3	MVG20-1061	Comp. Flange Output 1710	1				
4	MVG12-1058	Collar Nut	1				

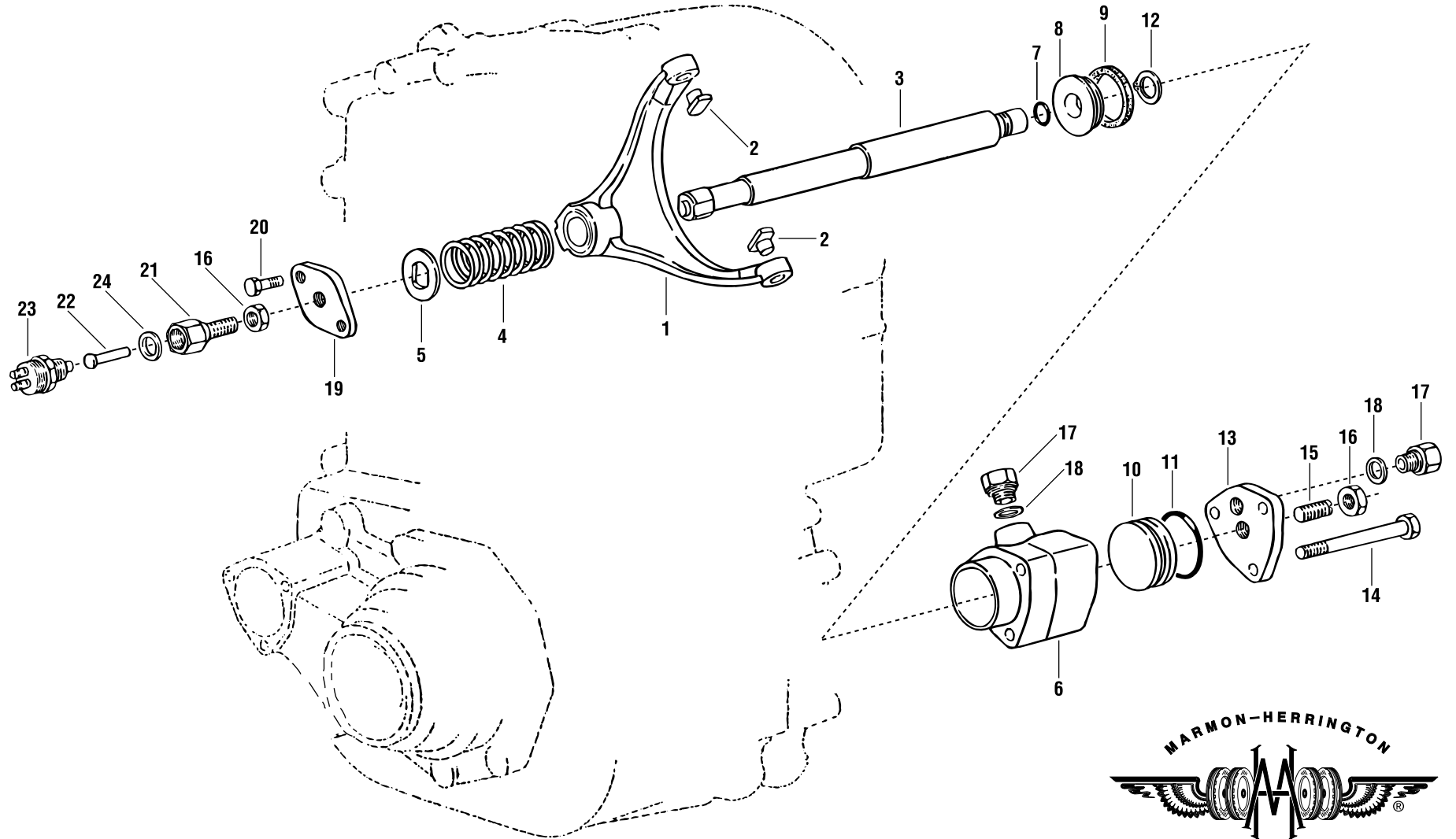
**MARMON-HERRINGTON ALL-WHEEL DRIVE**  
 13001 Magisterial Drive • Louisville, KY 40223  
 (502) 253-0277 • (800) 227-0727 • Fax (502) 253-0317  
 E-mail: info@marmon-herrington.com

**FLANGES  
 MVG 1600PDL**





# GEAR SHIFT MVG 1600PDL



ITEM NO.	MH PART NO.	DESCRIPTION	QTY. REQ.	ITEM NO.	MH PART NO.	DESCRIPTION	QTY. REQ.
1	MVG16-1047	Shift Fork	1				
2	MVG12-1095	Slider	2				
3	MVG16-1048	Shift Rod	1				
4	MVG16-1049	Pressure Spring	1				
5	MVG16-1050	Washer	1				
6	MVG20-1086	Shifting Cylinder	1				
7	MVG12-1036	O-Ring	1				
8	MVG12-1037	Piston	1				
9	MVG12-1038	Sealing Cup	1				
10	MVG16-1052	Piston	1				
11	MVG16-1053	O-Ring	1				
12	MVG12-1001	Snap Ring	1				
13	MVG20-1087	Cover	1				
14	MVG20-1088	Hex Head Bolt, M12x100	3				
15	MVG12-1126	Stud	1				
16	11501073	Nut, M12x1.5	2				
17	MVG12-1121	Reducer	2				
18	MVG12-1122	Sealing Ring	2				
19	MVG20-1113	Plate	1				
20	11500778	Hex Head Bolt, M10x25	2				
21	MVG75-1091	Adjusting Screw	1				
22	MVG20-1091	Pin	1				
23	MVG75-1096	Pressure Switch	1				
24	MVG12-1040	Sealing Ring	1				

**MARMON-HERRINGTON ALL-WHEEL DRIVE**  
 13001 Magisterial Drive • Louisville, KY 40223  
 (502) 253-0277 • (800) 227-0727 • Fax (502) 253-0317  
 E-mail: info@marmon-herrington.com

**GEAR SHIFT  
 MVG 1600PDL**



PM04/04



13001 Magisterial Drive • Louisville, KY 40223  
(502) 253-0277 • (800) 227-0727 • Fax (502) 253-0317  
E-mail: [info@marmon-herrington.com](mailto:info@marmon-herrington.com)