

## What is the difference?

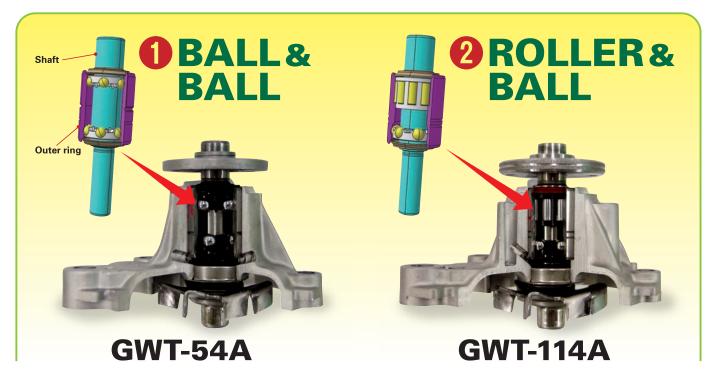
In this issue, we would like to introduce GMB shaft bearings, one of the most important component parts of water pumps.

Water pump bearings can be divided into two types generally:

- 1 Ball & Ball type, both bearing elements consist of Balls
- 2 Roller & Ball type, one line consists of Rollers and the other consists of Balls

As the ball touches raceway of shaft and outer ring at a point, Ball & Ball bearings have an advantage for silent motion. On the other hand, Roller & Ball bearings have an advantage of heavy radial capacity since roller touches raceway of shaft and outer ring at a line.

With above reasons, Ball & Roller types are suitable for the cars with heavy working conditions under hood. As a following example (GWT-54A and GWT-114A), which has two different bearings with similar car applications, please recommend correct water pumps with the application guide shown in our catalog.



## **New Item**

## **GENERAL MOTORS**

PART NO.	APPLICATION GUIDE					
<b>GWG-93A</b> 12566029	04- 04-	BUICK CADILLAC	LACROSSE CXS RENDEZVOUS CXL/ULTRA CTS , SRX , STS (V6 3.6L) (217cid GAS FI N ENGINE)	NOW ON SALE		

## **MAZDA**

NEW PART NO.		APF	PLICATION G	UIDE	
GWMZ-59A*  1A01-15-010A 1A02-15-010A W/HOUSING NO.  (GWMZ-59A=GWS-27A)	K6A 660	AZ OFFROAD AZ WAGON CAROL LAPUTA	D HB22S HP21S JM23W MD21S	(98.10-99.10) (99.03-01.03) (98.10-02.01) (98.10-00.11)	NOW ON SALE
GWMZ-60A*  1A61-15-010B 1A05-15-010A W/HOUSING NO.  (GWMZ-60A=GWS-28A)	K6A 660	AZ WAGON CAROL LAPUTA	CY51S CZ51S HB22S HP21S MD21S	(97.04-98.09) (97.04-98.09) (98.10-00.12) (00.10-01.03) 99.10-00.11	NOW ON SALE
GWMZ-61A*  (1A12-15-010B 1A12-15-010C W/HOUSING NO.  (GWMZ-61A=GWS-32A)	K6A 660	AZ WAGON CAROL LAPUTA SPIANO	HB22S/23S HF21S HP22S MD22S	(00.12-02.04) (02.02-04.04) (01.04-05.03) (00.12-05.03)	NOW ON SALE
GWMZ-62A*  1A13-15-010B 1A13-15-010C W/HOUSING NO.  (GWMZ-62A=GWS-35A)	K6A 660	AZ WAGON LAPUTA SPIANO	MD22S HP22S HF21S	(01.11-05.03) (01.11-) (02.10-04.10)	NOW ON SALE
GWMZ-63A*  1A09-15-010D  W/HOUSING NO.  (GWMZ-63A=GWS-37A)	K6A 660	SCRUM	DG62T DG62V/62W DG63T	(01.09-02.05) (01.09-05.09) (02.05-)	NOW ON SALE