

# Guardian NV Flywheel Coupling

Service & Installation Instructions

GUA-MRK-DOC-014



 **Guardian Couplings**<sup>®</sup>  
*Altra Industrial Motion*

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### IMPORTANT READ ALL NOTICES & WARNINGS BEFORE ATTEMPTING ANY INSTALLATION!

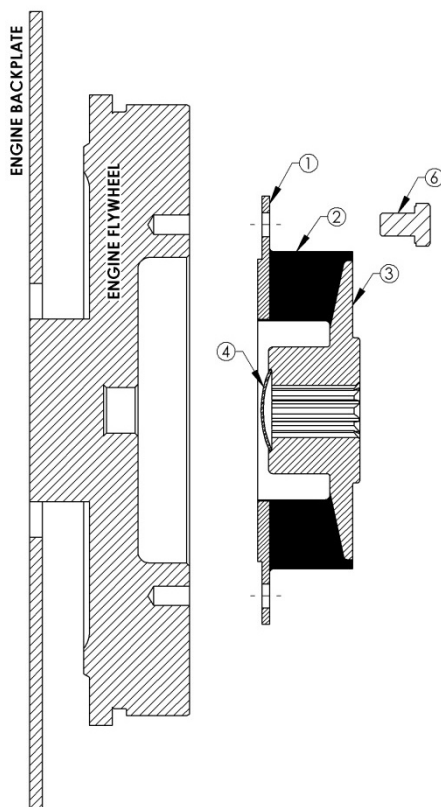
#### NOTICES:

- PLEASE CAREFULLY READ OVER AND UNDERSTAND INSTRUCTIONS BEFORE ATTEMPTING ANY MAINTENANCE. IF ADDITIONAL ASSISTANCE IS NEEDED PLEASE CONTACT GUARDIAN BEFORE SERVICING/INSTALLING THE PRODUCT.
- WHILE GUARDIAN MAKES EVERY EFFORT TO ENSURE THE ACCURACY OF THE INFORMATION PROVIDED, WE MAKE NO WARRANTY AS TO THE ACCURACY OR COMPLETENESS OF SAID INFORMATION. THE INFORMATION PROVIDED CORRESPONDS TO THE INSTALLATION STANDARDS AT THE TIME OF PRINTING.
- THESE INSTALLATION INSTRUCTIONS ACT AS GENERAL GUIDELINES, AND DO NOT COVER EVERY SCENARIO. IF YOUR INSTALLATION DOES NOT APPLY, PLEASE CONTACT GUARDIAN TO FURTHER REVIEW YOUR APPLICATION TO ENSURE PROPER INSTALLATION IS COMPLETED.
- ENSURE PROPER SIZING AND OFFSETS TO AVOID CAUSING DAMAGE TO THE MACHINERY AND/OR COUPLING.
- KEEP COUPLINGS FREE OF DUST AND GRIME TO ENSURE LONG LIFE.
- VERIFY APPLICATION DATA AND REVIEW TORQUE SPECIFICATIONS, MIS-ALIGNMENT, AND APPLICATION SERVICE FACTORS. IF FURTHER ASSISTANCE IS NEEDED PLEASE CONTACT GUARDIAN COUPLINGS.
- CHECK TO MAKE SURE MAXIMUM ALLOWABLE BORE DIAMETERS ON HUBS ARE NOT EXCEEDED. SEE CATALOG SPECIFICATIONS FOR MORE DETAILS.
- HUBS THAT ARE MODIFIED OR MACHINED BY THE CUSTOMER ARE NOT COVERED UNDER THE STANDARD WARRANTY TERMS. IF MODIFICATIONS ARE MADE BY THE CUSTOMER IT IS RECOMMENDED THAT THE CUSTOMER ADHERES TO GUARDIAN MACHINING STANDARDS TO ENSURE PROPER OPERATION.

#### WARNINGS:

- DISENGAGE ALL POWER TO NECESSARY MACHINERY BEFORE PERFORMING ANY WORK ON THE ASSEMBLY. MAKE SURE NO ACCIDENTAL ENGAGEMENT CAN OCCUR.
- IMPROPER USE OR INSTALLATION MAY RESULT IN SERIOUS INJURY OR DEATH. GUARDIAN COUPLINGS WILL NOT BE LIABLE FOR IMPROPER USE/INSTALLATION OF THE PRODUCTS. THE PURCHASER/INSTALLER IS RESPONSIBLE FOR PROPER INSTALLATION, SAFEGUARDS, MAINTENANCE AND OPERATION OF THE PRODUCT AND EQUIPMENT.
- ANY MODIFICATIONS TO INSTRUCTIONS AND/OR COUPLING CHARACTERISTICS MAY RESULT IN A PREMATURE FAILURE.
- MAKE SURE THAT HUBS ARE NOT IN CONTACT WITH ANY NON-ROTATING SURFACES.
- IF ANY PROBLEMS OCCUR DURING ASSEMBLY, CONTACT GUARDIAN COUPLINGS IMMEDIATELY.
- THIS PRODUCT CONTAINS WEAR ELEMENTS THAT WILL FAIL IN TIME. MAKE SURE THE ASSEMBLY IS ADEQUATELY COVERED/ENCLOSED TO AVOID INJURY IN CASE OF A FAILURE.
- WARNING: THIS PRODUCT MAY CONTAIN CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND/OR BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

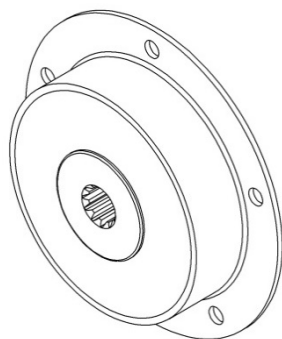
## SECTION 1 – COUPLING OVERVIEW



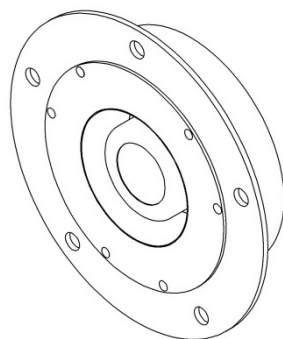
ITEM NUMBER	ITEM DESCRIPTION
1	NV COUPLING FLANGE
2	NV BONDED ELASTOMERIC ELEMENT
3	NV COUPLING HUB
4	GREASE PLUG (OPTIONAL)
5	COUPLING MOUNTING HARDWARE*

\*SHOWN FOR REFERENCE ONLY – NOT INCLUDED WITH COUPLING

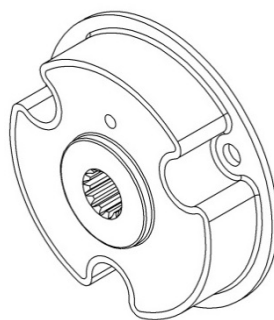
**FIGURE 1.1 NV COUPLING CROSS SECTION**



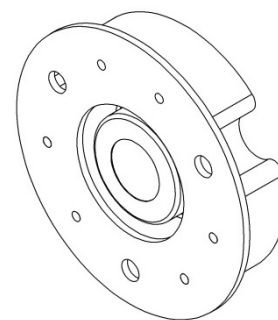
**FIGURE 1.2 NV K106  
COUPLING (PUMP SIDE)**



**FIGURE 1.3 NV K106  
COUPLING (ENGINE SIDE)**



**FIGURE 1.4 NV K135  
COUPLING (PUMP SIDE)**



**FIGURE 1.5 NV K135  
COUPLING (ENGINE SIDE)**

## SECTION 2 - TOOLS/MATERIAL REQUIRED

- TORQUE WRENCH
- ALLEN SOCKETS
- MEDIUM STRENGTH REMOVABLE LOCTITE

### SECTION 3 – INSTALLATION INSTRUCTIONS

- 1) **PLEASE READ & FOLLOW ALL NOTICES & WARNINGS PRIOR TO INSTALLATION OF THIS PRODUCT**  
**DISENGAGE ALL POWER TO NECESSARY MACHINERY BEFORE PERFORMING ANY WORK ON THE ASSEMBLY**  
**MAKE SURE NO ACCIDENTAL ENGAGEMENT CAN OCCUR**
- 2) INSTALL AND MATE COUPLING WITH ENGINE FLYWHEEL PILOT AND MOUNTING HOLES  
COUPLING SHOULD BE INSTALLED WITH THE ELASTOMERIC ELEMENT AWAY FROM THE ENGINE FLYWHEEL
- 3) WITH COUPLING HOLES ALIGNED, INSTALL PROPER SIZED BOLTS INTO COUPLING MOUNTING HOLES  
GUARDIAN RECOMMENDS USING MEDIUM STRENGTH REMOVABLE LOCTITE  
(SEE TABLE 4.1 FOR STANDARD KUBOTA ENGINE FLYWHEEL HOLE SIZES)
- 4) ENSURING COUPLING IS FLAT WITH ENGINE FLYWHEEL, TORQUE BOLTS TO RECOMMENDED SEATING TORQUE  
(SEE TABLE 4.1 FOR BOLT SEATING TORQUES)
- 5) APPLY LUBRICATING GREASE TO COUPLING SPLINE AND MATING SPLINED SHAFT  
GUARDIAN RECOMMENDS USING SHELL ALVANIA CG GREASE (GREASE SUPPLIED WITH COUPLING)
- 6) COUPLING IS NOW READY FOR INSTALLATION OF PUMP/ENGINE HOUSING  
REFER TO GUARDIAN’S SUPPLEMENTARY INSTALLATION INSTRUCTIONS FOR FURTHER ASSISTANCE

### SECTION 4 - REFERENCE DATA

**TABLE 4.1 KUBOTA ENGINE FLYWHEEL HOLE SIZES AND SEATING TORQUES**

KUBOTA ENGINE SERIES		K106 SUPER MINI	K135 SUPER 5
METRIC BOLTS		M8	M10
SEATING TORQUE	FT-LBS	20	40
	Nm	27	54

### SECTION 5 - STORAGE

- COUPLINGS SHOULD BE STORED IN A DRY, WELL MAINTAINED ENVIRONMENT
- HUMID STORAGE ENVIRONMENTS COULD LEAD TO SURFACE RUST ON THE HUB AND SPLINE BORE  
(INSPECT SPLINE BORE FOR RUST AND BURRS PRIOR TO INSTALLATION)
- COUPLING SHOULD BE STORED WITH RUBBER ELEMENT FREE OF OIL



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