

DEV NUMBER:  
DEV25-0148

ORIGINATOR:  
Juan Gonzalez / Delfino Ramirez

DATE:  
24-Jun-25

DMR# (IF APPLICABLE):

DEVIATION  
TYPE:  
NEW ☐  
EXTENSION ☒

OF DEV#:  
DEV24-0385

TOP-LEVEL SKU P/N(S) AND MODEL NUMBER(S):  
PN177593 MOLD 48116

PROJECT NAME OR NO. (OPTIONAL):

RAIN BIRD

DEVIATION FORM (DRAWING)

FORM#233813-01 REV: R

BUSINESS UNIT (SBU and PLANT) W/ PRIMARY DESIGN CONTROL:  
025 OTY >>> CP

AFFECTED MFG PLANTS (WHERE USED):  
005 LAM ☐ 013S STL ☐ 025 OTY ☒ 041 NOG ☐  
008 BUY ☐ 019 AZU ☐ 028 TUC ☐ 047 TUC ☐  
013E EEX ☐ 020MX NMD ☐ 026 ELG ☐ CHINA ☐

REASON FOR DEVIATION:  
This document aims to accept the Gearbox Cup (PN177593) with DIM "B" out of control for cavities 15 and 19.  
The drawing calls out for DIM "B", mold 48116, a value of .421+/- 0.002 (note 14)  
Quality reported measurements of .4186" (cav 15), and .4187" (cav 19) both dimension out of spec.  
Core pins of CAV 28 was replaced and DIM 0.085 (non critical) is Out of Spec. Quality reported measurements of .0899  
DIM B is a vertical distance between the center of two holes that retain metal shafts in the final gearbox assembly (detail G)  
The team is asking an additional extension on dates for this deviation due to the following facts:  
1. The previous plan was not completed due to failures caused by the poor condition of the mold.  
2. Several events occurred where the mold was sent for repairs, so the 20-week inventory plan could not be completed. Currently, there are 13 weeks remaining, and we need to continue increasing the inventory to avoid losses.

APPROVALS (ALL REQUIRED):  
QUALITY MGR. OR QUALITY ENG.  
Ramiro Casas / Jose L. Montero  
MANUFACTURING ENGINEER  
Claudia Anaya  
ENGINEERING MANAGER  
Paul Dibene / Xavier Vela  
BUYER OR BUYER/PLANNER  
Jose Huerta  
PLANT MANAGER  
Jorge Borquez  
SBU PRODUCT MGR. OR SBU ENG. MGR.  
Jeffrey Johnson  
OTHER: Daniel Mendoza, Shery Huang  
Carlos Domingues, Delfino Ramirez  
QUALITY DIRECTOR (REQUIRED FOR BACK-TO-BACK DEVIATIONS)  
Blanca Salas

RISK ASSESSMENT/ CORRECTIVE ACTION PLAN (NAMES & DATES)/ COMMITMENT:  
Risk is Low: Engineering built 250 rotors (PCO27948), 100% were tested per internal operation and rotation in the 3500 assembly cell #3.  
No rotational issues were detected during or at the end of the test.  
100% of the rotors were evaluated in the water tank, all the rotors met the rotation time specification (6 to 20 seconds)  
Based on the results, the condition reported by ELAG molding, DIM "B", does not jeopardize the performance of the 3500 rotors and considers the impact as low risk.  
Corrective plan (Updated):  
- Molding will build 20 weeks of inventory, Daniel Mendoza. Estimated completion date 07/30/24  
- Mold refurbishment, Sherry Huang. Estimated completion date 11/27/25  
- Mold validation, Carlos Dominguez. Estimated completion date 12/14/25

DRAWING NUMBER:	DRAWING REVISION:	DEVIATION REVISION:	DRAWING TITLE/ PART DESCRIPTION:	VENDOR:
177593	H	H3	Gearbox cup	026 EL LAGO

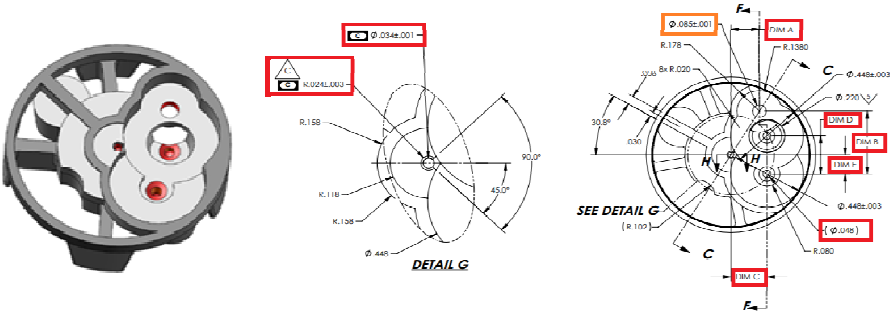
DESCRIPTION OF DEVIATION (IS/WAS CONDITION AND DRAWING ZONE FOR EACH PART NO. OR ATTACH REDLINE PRINTS):

IS

[.421" + .003" - .005"]  
[.085" + .005" - .001"]

WAS

[.421" + .002" - .002"]  
[.085" + .001" - .001"]



14. MOLDS:

ORIGINAL DESIGN INTENT			DIM A	DIM B	DIM C	DIM D	DIM E
MOLD NO.	CAVITY NO.	USAGE	0.175±.002	0.421±.002	0.221±.002	0.255±.002	0.128±.002
90125	NONE (1 CAV)		N/A	N/A	N/A	N/A	N/A
25233	1 - 4	SECONDARY	N/A	N/A	N/A	N/A	N/A
25472	5 - 12	INACTIVE	N/A	N/A	N/A	N/A	N/A
48116	13 - 28	PRIMARY	0.175 +.002/- .005	0.421±.002	0.221+.004/- .002	0.255±.002	0.128+.002/- .005

THESE DIMENSIONS ARE APPLICABLE FOR THE LIFE OF THE MOLD ONLY AND MOLDING PROCESS.  
ORIGINAL DESIGN DIMENSIONS SHALL BE ADHERED TO WHEN FABRICATING NEW OR PORTIONS OF EXISTING TOOLING.

## Gonzalez, Juan OTY 4356

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**From:** Gonzalez, Juan OTY 4356  
**Sent:** Monday, May 19, 2025 8:13 AM  
**To:** Casas, Ramiro OTY 4364; Montero, Jose Luis OTY 4361; Vela, Xavier OTY 4377; Huerta, Jose OTY 4333; Borquez, Jorge OTY 4398; Huang, Sherry SDR 2624; Curiel, Omar ELAG 1284  
**Subject:** FW: DEV25-0148 EXTENSION GEAR BOX CUP PN177593 (YOUR SIGNATURE IS MISSING)  
**Attachments:** DEV25-0148 EXTENSION GEAR BOX CUP PN177593.xls  
**Importance:** High

**Tracking:**

**Recipient**

Casas, Ramiro OTY 4364  
Montero, Jose Luis OTY 4361  
Vela, Xavier OTY 4377  
Huerta, Jose OTY 4333  
Borquez, Jorge OTY 4398  
Huang, Sherry SDR 2624  
Curiel, Omar ELAG 1284

**Claudia Anaya**  
**Blanca Salas**

**Response**

**See next page**

Approve: 5/19/2025 8:44 AM  
Approve: 5/20/2025 7:29 AM  
Approve: 5/21/2025 1:25 PM  
Approve: 5/19/2025 11:45 AM  
Approve: 5/19/2025 9:45 AM  
Approve: 5/19/2025 8:30 AM

**See next page**  
**See next page**

See next page for additional approvals

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**From:** Gonzalez, Juan OTY 4356  
**Sent:** Friday, May 16, 2025 3:09 PM  
**To:** Casas, Ramiro OTY 4364; Montero, Jose Luis OTY 4361; Vela, Xavier OTY 4377; Huerta, Jose OTY 4333; Borquez, Jorge OTY 4398; Johnson, Jeffrey SOPT 6120; Ramirez, Delfino ELAG 1202; Huang, Sherry SDR 2624  
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**Importance:** High

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	Casas, Ramiro OTY 4364	Approve: 5/20/2025 11:16 AM
	Montero, Jose Luis OTY 4361	
	Vela, Xavier OTY 4377	
	Huerta, Jose OTY 4333	
	Borquez, Jorge OTY 4398	
	Johnson, Jeffrey SOPT 6120	Approve: 5/16/2025 3:37 PM
	Ramirez, Delfino ELAG 1202	Approve: 5/19/2025 7:19 AM
	Huang, Sherry SDR 2624	

Team,

Please find the **DEV25-0148 EXTENSION (DIM "B" out of control for cavities 15 and 19. GEAR BOX 177593)**

- This deviation has the purpose to extend the deviation DEV24-0385
- The team is asking an additional extension on dates for this deviation due to the following facts:
  1. The previous plan was not completed due to failures caused by the poor condition of the mold.
  2. Several events occurred where the mold was sent for repairs, so the 20-week inventory plan could not be completed. Currently, there are 13 weeks remaining, and we need to continue increasing the inventory to avoid losses.

**Your approval is highly appreciated.**

Thanks in advance

**Juan Gonzalez Jr.**  
**Project Sr. Engineer**  
(619) 661-4356 phone

**Ensamblés Hyson**  
Ave. Industrial 333  
Seccion Dorada  
Mesa de Otay 22500  
Tijuana, Mexico

[jgonzalez@rainbird.com](mailto:jgonzalez@rainbird.com)

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	Huerta, Jose OTY 4333	Approve: 5/21/2025 1:25 PM
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	Huang, Sherry SDR 2624	Approve: 5/19/2025 9:45 AM
	Curiel, Omar ELAG 1284	Approve: 5/19/2025 8:30 AM

Good morning,  
Omar,  
I know the importance of the deviation, but I am still gathering the pending signatures. I will let you know when I have all of them.  
Thanks, and best regards.

i This message was sent on 5/16/2025 3:09 PM. Reply Totals: Approve 2; Reject 0		
Recipient		Resg
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[jgonzalez@rainbird.com](mailto:jgonzalez@rainbird.com)



## **Gonzalez, Juan OTY 4356**

---

**From:** Anaya, Claudia OTY 4329  
**Sent:** Monday, May 5, 2025 7:40 AM  
**To:** Gonzalez, Juan OTY 4356  
**Subject:** Approve: DEV25-0148 EXTENSION GEAR BOX CUP PN177593.xls



## **Gonzalez, Juan OTY 4356**

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**From:** Salas, Blanca LAM2 4020  
**Sent:** Wednesday, May 14, 2025 10:27 PM  
**To:** Gonzalez, Juan OTY 4356  
**Subject:** Approve: DEV25-0148 EXTENSION GEAR BOX CUP PN177593.xls