

Before performing any service always follow applicable safety precautions. Consult company safety manual or supervisor for questions concerning safety.

SUBJECT: Balancer – Intermittent Z-Stop Functionality

Affected Products: All 200/325/500 Lb. Capacity Balancers with Z-Stop option within the following Series B-Series, BA-Series, ZA-Series, EA-Series and Intelift Series (see Table 1 in Appendix)
Note: Standard Balancers without the Z-Stop option are not affected

Affected Date Range and Serial Numbers:

Manufacture Dates: January 1, 2014 through December 31, 2017
Serial Numbers: KTB-XXXX-014 thru KTB-XXXX-017

Related Issue #: 2016TFM-5779

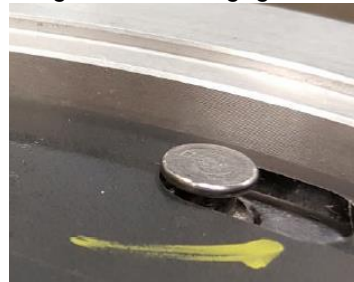
Issue Description:

During loss of supply air the Engagement Pin within the Z-Stop Assembly may fail to fully engage Stop Plate. Once supply air is returned to the Balancer, the Engagement Pin may prematurely disengage, allowing the End-Effector and load (if attached) to drop unexpectedly.

Figure 1: Partial Engagement



Figure 2: Full Engagement



Root Cause:

The lack of Pin engagement is a result of improper positioning and alignment of the Stop Plate relative to the Engagement Pin.

Corrective Action:

The End Cover Hub where the Z-Stop Assembly resides has been modified to provide better positioning of the Stop Plate relative to the Engagement Pin. These modifications reduce the distance between the Engagement Pin and the Stop Plate as well as reduce the Z-Stop Assembly's ability to move axially during operation.

Actions Required:

New Balancer units held in distributor inventory and Balancers currently in operation with Z-Stops should be retrofitted with a new Z-Stop Assembly.
Note: Only units from serial numbers KTB-XXXX-014 thru KTB-XXXX-017 are affected by this required action.

New Part Required for Rework:

Table 1: The Z-stop Assembly parts and required hardware will be provided within the Kits within table below.

| Size/Capacity | Part Number | CCN Number | Part Description |
|------------------|-------------|------------|----------------------------------|
| 200 Lb. Balancer | 13301 | 54090394 | Z-Stop Assembly Retro-Kit 200 LB |
| 325 Lb. Balancer | 13311 | 54090436 | Z-Stop Assembly Retro-Kit 325 LB |
| 500 Lb. Balancer | 13321 | 54090451 | Z-Stop Assembly Retro-Kit 500 LB |

Each Replacement Kit includes all the required parts, as well as an Instruction Sheet showing the exploded parts view and the parts list.

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For Balancer Authorized Service Centers

Material Disposition:

Hold the removed material 30 days for warrantable repairs, and follow instructions in the Warranty system for material return or discard. If non-warrantable, dispose of parts properly in accordance with local regulations.

Warranty Strategy:

The replacement of the Z-Stop Assembly on any Balancer equipped with Z-Stop will be warrantable regardless of the original purchase date of the hoist (within or after the first year of standard warranty coverage).

No other repairs performed during the Z-Stop Assembly replacement will be warrantable if the hoist is outside of the standard 1 year warranty period.

Table 2: Information to build a Tavant Warranty claim is below.

| Claimed Item | Causal Part | Failure Location | Service Procedure Job Code | Labor Allowance |
|--|-------------|---|----------------------------|-----------------|
| C/Z-BAL (U.S. and CAN), BALANCERS (outside North America) | 13301 | Structural(DD)- Frame(031)- Stop(0354)- Assembly(0689) | DD-031-0354-0689-AA | 1 hour |
| | 54090394 | | | |
| | 13311 | | | |
| | 54090436 | | | |
| | 13321 | | | |
| | 54090451 | | | |

Additional Comments:

Associated parts that will be replaced during this rework process are listed below.

For Additional Information:

Help Center/Knowledge Base: <https://cxsupport.ingersollrand.com>

Technical Support: Contact Ingersoll Rand Technical Support at irtechsupport@irco.com.

Warranty Support: Contact the Warranty Department at TFM_Warranty@irco.com.

Distribution:

| | | | |
|--|---|--|---------------------------------|
| <input checked="" type="checkbox"/> Internal | <input checked="" type="checkbox"/> Authorized Service Center | <input checked="" type="checkbox"/> Channel Partners | <input type="checkbox"/> Public |
|--|---|--|---------------------------------|

APPENDIX

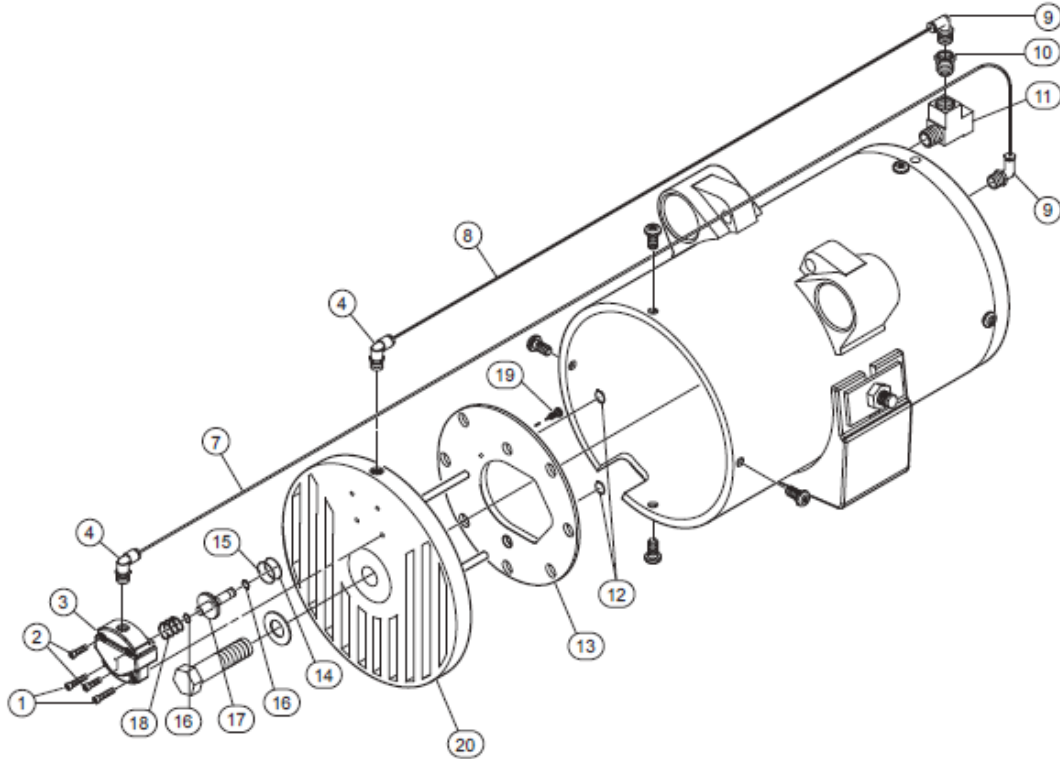
Affected Balancer Models:

| B-Series | BA-Series | ZA-Series | EA-Series | Intelift |
|-----------|------------|------------|------------|------------|
| BW020120S | BAW020120S | ZAW020120S | EAW020120S | IBW020120S |
| BW032080S | BAW032080S | ZAW032080S | EAW032080S | IBW033080S |
| BW040060S | BAW040060S | ZAW040060S | EAW040060S | IBW050080S |
| BW04120S | BAW04120S | ZAW04120S | EAW040120S | IAW020120S |
| BW050080S | BAW050080S | ZAW050080S | EAW050080S | IAW033080S |
| BW065040S | BAW065040S | ZAW065040S | EAW065040S | IAW050080S |
| BW065080S | BAW065080S | ZAW065080S | EAW065080S | ICW020120S |
| BW080060S | BAW080060S | ZAW080060S | EAW080060S | ICW033080S |
| BW100040S | BAW100040S | ZAW100040S | EAW100040S | ICW050080S |
| BW100080S | BAW100080S | ZAW100080S | EAW100080S | ISW020120S |
| BW130040S | BAW130040S | ZAW130040S | EAW130040S | ISW033080S |
| BW200040S | BAW200040S | ZAW200040S | EAW200040S | ISW050080S |

Appendix Table 1

Parts Included in Z-Stop Assembly Kit:

Z-STOP 200/325/500 LB. (91/147/227 KG) ASSEMBLY AND PARTS LIST



(Dwg. MHP1962)

| Item No. | Description of Part | Total Qty. | Part Number | | |
|----------|-----------------------|------------|---|---|--|
| | | | 13301 - Z-Stop Assembly 200 lb. (91 kg) Balancer | 13311 - Z-Stop Assembly 325 lb.(147 kg) Balancer | 13321 - Z-Stop Assembly 500 lb. (227 kg) Balancer |
| 1 | Capscrew | 2 | ZH570255 | | |
| 2 | Capscrew | 2 | ZH570254 | | |
| 3 | 'Z' Stop Housing | 1 | 13335 | | |
| 4 | Fitting, Elbow | 3 | ZH593969 | | |
| 7 | Tube, 5/32 in. Red | 2 ft | 93960-R | | |
| 8 | Tube, 5/32 in. Yellow | 2 ft | 93960-Y | | |
| 9 | Fitting, Elbow | 2 | 93970 | | |
| 10 | Fitting, Reducer | 1 | 13502 | | |
| 11 | Fitting, Tee | 1 | ZH510708 | | |
| 12 | Retaining Ring | 2 | 99126 | 13039 | 99127 |
| 13 | Engagement Plate | 1 | ZHSEA0035 | ZHSEA0035 | ZHSEA0036 |
| 14 | O-ring | 1 | 13342 | | |
| 15 | O-ring | 1 | 13343 | | |
| 16 | Quad ring | 2 | 13344 | | |
| 17 | Engagement Pin | 1 | 13338 | | |
| 18 | Spring | 1 | ZH576522 | | |
| 19 | Screw | 2 | ZHSEA0029 | | |
| 20 | End Cover | 1 | 13306 | 13316 | |

Document Revision History:

| Revision | Date | Comments | Responsible |
|----------|--------------|----------------|-----------------|
| 00 | 14-June-2018 | Original issue | Steve Synoracki |