



## HEAD RUSH TECHNOLOGIES WHITE PAPER

# zipSTOP MANUAL UPDATES

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December 2019

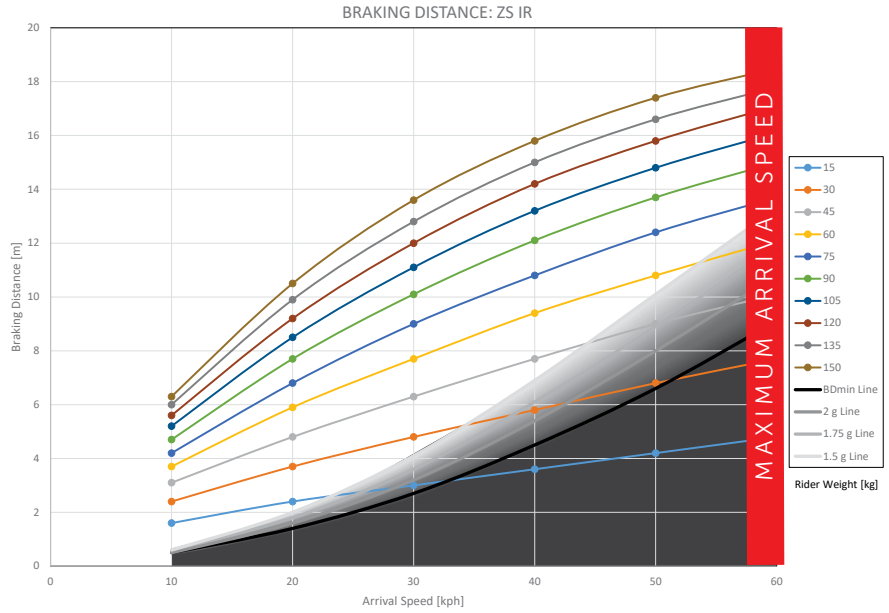
Over the past year Head Rush has received many questions on certain requirements listed in the zipSTOP Manual. In an effort to add clarity to these areas a new version of the manual has been released (Rev 03). This white paper will summarize the two major changes, which relate to retraction spring life and recommissioning requirements. Users can always find the latest version of all Head Rush Manuals on the web at [www.headrushtech.com/manuals](http://www.headrushtech.com/manuals).

### **Retraction Spring Overextension**

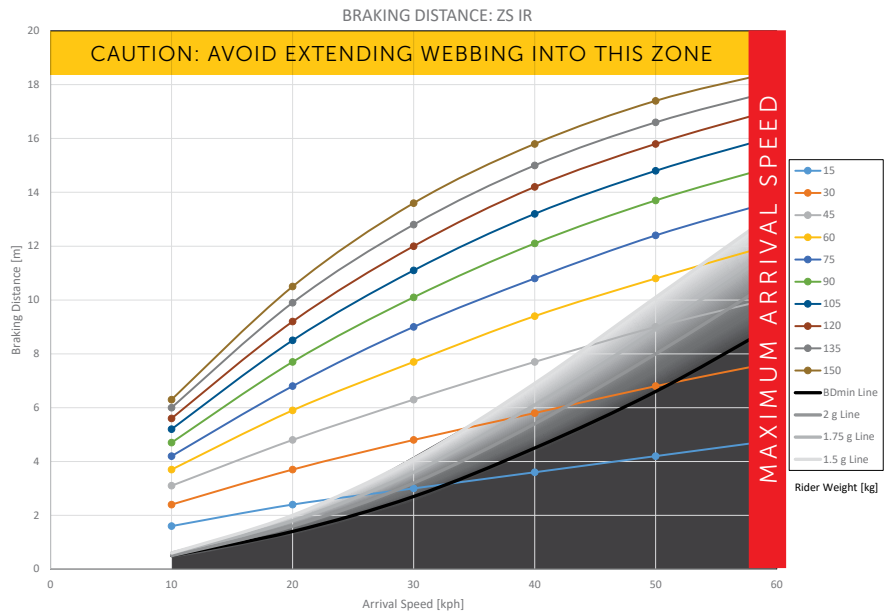
After many years of studying retraction spring life in both lab and field conditions, Head Rush has determined that "overextending" these springs repeatedly can drastically reduce their lifespan. In the case of zipSTOP Braking, a failed retraction spring will result in incomplete brake trolley retraction. This does not affect braking performance, but without automatic reset the zipSTOP brake is no longer fit for use and must be taken out of service and returned to an authorized service center for repair. Further defining overextension in zipSTOP braking is a major clarification present in the zipSTOP Installation Manual.

The following modifications to braking charts and additional warnings have been added to the zipSTOP manual to stress the importance of operating within the limits of the retraction spring.

## Current Braking Chart Example for zipSTOP IR



## Updated Braking Chart Example for zipSTOP IR



As seen in the preceding diagrams graphical representation has been added to clearly define overextension that can lead to premature retraction spring failure. This additional yellow “warning zone” defining maximum webbing extension has been added to all braking charts in the zipSTOP Installation Manuals.

A modification of the original warning against this scenario has also been made.

Original warning from previous manuals:



**AVOID MAXIMUM LINE EXTENSION OF BRAKING LINE**

Repeated extension of braking line to maximum Line Extension (LEX as defined in this manual) will cause premature wear and void warranty coverage of the retraction spring.

Updated Warning:



**EXTENDING THE WEBBING INTO YELLOW ZONE (REFERENCE CHARTS PG. 39-42) WILL VOID SPRING WARRANTY.**

## **RECOMMISSIONING REQUIREMENT MODIFICATION**

In the zipSTOP Installation Manual as of November, 2018, a section has been added regarding recommissioning the zipSTOP after any major modifications. Recommissioning is also required after reinstallation following annual recertification. This process is vitally important to ensure that the brake system continues to function as designed and initially tested after the zipSTOP is taken down and reinstalled for the mandatory annual recertification. Due to many questions about the requirements listed in the manual, Head Rush has revised this section to clarify the intent of mandatory recommissioning.

Previously the recommissioning language read:

*“Proof load testing of the primary braking system, per above, must be repeated, at minimum, under the following circumstances and as determined by the Responsible Party:”*

and later:

*“The recommissioning testing procedure and evaluation criteria is the same as the commissioning test procedure.”*

The newly modified language has clarified the intent of recommissioning, which is to verify that the zipSTOP still functions as designed and initially tested during original installation and testing (commissioning). With the removal of references to the original testing mandated in the manual, the zipSTOP Installation Manual (pg. 55) now reads:

*“Proof load testing of the primary braking system must be conducted, at minimum, under the following circumstances and as determined by the Responsible Party:”*

and later:

*“The recommissioning testing procedure and evaluation criteria shall be determined by the Responsible Party and be adequate to verify original commissioning test results and operational envelope.”*

## Summary

As always Head Rush strives to provide superior products and customer service. Visiting our Product Resources and Product Manuals pages will allow users, installers, and inspectors to stay up to date with the most recent manual changes and technical information to get the most out of your Head Rush Technologies products.