

# Fletcher

Product  
Newsletter

**J. H. Fletcher & Co.**

HUNTINGTON, WEST VIRGINIA

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## NEW CHASSIS DESIGN FOR RIB PROTECTION

Under certain mining conditions the ribs can present a serious hazard to roof drill operators.

Recognizing the need for improved operator protection from the hazards created by adverse rib conditions, Fletcher has developed a complete line of dual head arm feed and mast feed roof drills which feature inside drilling controls along with a walkway thru or over the center of the machine chassis.

Although the majority of the units utilizing this feature have been supplied to high seam mines, units have been built with an overall tramming height as low as 36".

In the past Fletcher has provided machines with drilling controls located on the inside (or inside and outside) of the drill booms to provide operator protection from ribs. The problem with this arrangement was the fact that the operators felt trapped - in that there was no rapid means of escape from the face area in the event of a roof fall or other emergency.

By providing a walkway thru or over the machine chassis this problem has been eliminated.

To further eliminate the need for personnel to stand or travel between the machine and the rib, remote dumping dust collector boxes are also provided. Also, a majority of the components and service points on the machine are accessible from

the walkway or the rear of the machine chassis.

CURRENTLY OVER FIFTY FLETCHER WALK-THRU OR WALK-OVER CHASSIS DESIGN DRILLS HAVE BEEN MANUFACTURED AND PLACED IN SERVICE THROUGHOUT THE UNITED STATES. UNITS OF THIS DESIGN ARE ALSO IN OPERATION IN NORWAY AND CANADA.

If dangerous ribs are a problem

in your operation, we would recommend that you consider conversion to walk-thru or walk-over chassis design machines. In addition to the purchase of new units we can, in some cases, develop a program for retrofitting or rebuilding units incorporating this important safety feature.

*(Continue on next page)*

## Welcome To The First Edition

Welcome to the first edition of the **Fletcher Product Newsletter**.

We have developed this newsletter in an effort to improve our communications with those who own, operate and maintain Fletcher equipment.

In this, as well as future editions, we will be presenting various short articles which should prove helpful

in the areas of safety, training, operation and maintenance. Your ideas for future articles and features are welcomed. We look forward to hearing your comments and ideas.

Publication will occur quarterly. If you are not yet on our mailing list, please fill out and return the subscription order form on the back page.

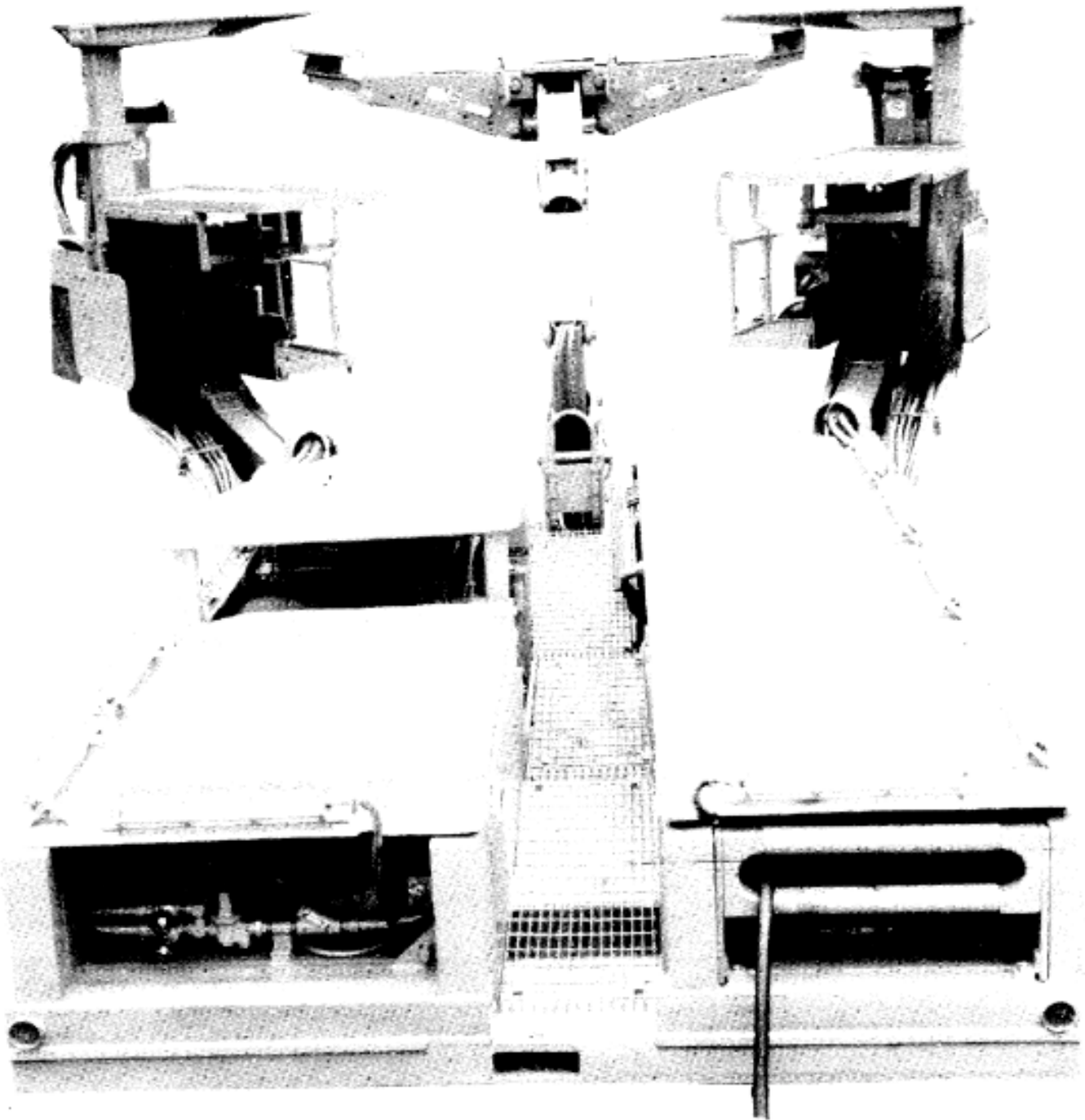
Currently, we are only sending the Fletcher newsletter to a selective readership. If you know of someone in your company who wishes to get on our mailing list, please let me know. Below is a form that may help us get them on our mailing list more quickly. Just fill out the form and return it to J. H. Fletcher & Co., Box 2187, Huntington, WV 25722.

### FREE SUBSCRIPTION FORM

Name \_\_\_\_\_ Job Title/Description \_\_\_\_\_  
Company \_\_\_\_\_ Address \_\_\_\_\_  
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**J. H. Fletcher & Co.**

## NEW CHASSIS DESIGN FOR RIB PROTECTION



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This Model HDDR is a good example of a walk-thru chassis machine. In addition to inside drilling controls, the operator platforms and drilling units elevate to provide the operators with a

# BOOM SWING SAFETY CHECKLIST

The best means of preventing accidents involving the boom swing mechanism on your drill is thru proper training and preventative maintenance.

The following is a suggested safety checklist for preventing accidents involving boom swing:

1. **INSTRUCT OPERATORS AND OTHER PERSONNEL NEVER TO STAND OR TRAVEL BETWEEN THE MACHINE AND THE RIB OR ANOTHER PIECE OF EQUIPMENT WHILE THE MACHINE IS BEING TRAMMED.**

This would make a good topic for discussion during your next regular safety meeting.

2. **CHECK THE CONDITION OF THE BOOM SWING CYLINDER ANCHORS AND CYLINDER ROD ENDS. MAKE SURE THEY ARE NOT CRACKED OR BROKEN AND THAT THEY ARE WELDED SECURELY.**

When making this check also make sure the bushings are not worn or broken.

It is recommended that if the cylinder rod end is not of the new one piece forged design it be upgraded to this design.

3. **MAKE SURE THE CYLINDER ANCHOR PINS ARE BEING LUBRICATED AS CALLED FOR IN THE SERVICE MANUAL.**

Lack of proper lubrication will lead to excessive wear on the bushings and pins.

4. **BE SURE THE PROPER TYPE OF CYLINDER ANCHOR PINS ARE BEING USED.**

The cylinder anchor pins must be made with a head on the top of the pin to prevent it from falling out of the connection point. See photo.

Also check to make sure the cotter pin is properly installed in

5. **CHECK THE BOOM SWING CONTROL HANDLES — MAKE SURE THEY MOVE FREELY AND RETURN TO THE CENTER (NEUTRAL) POSITION WHEN RELEASED AND THAT THE HANDLE DIRECTION IS CORRECT.**

Normal convention is for the operator to pull upward or outward on the boom swing in order to swing the boom in his direction.

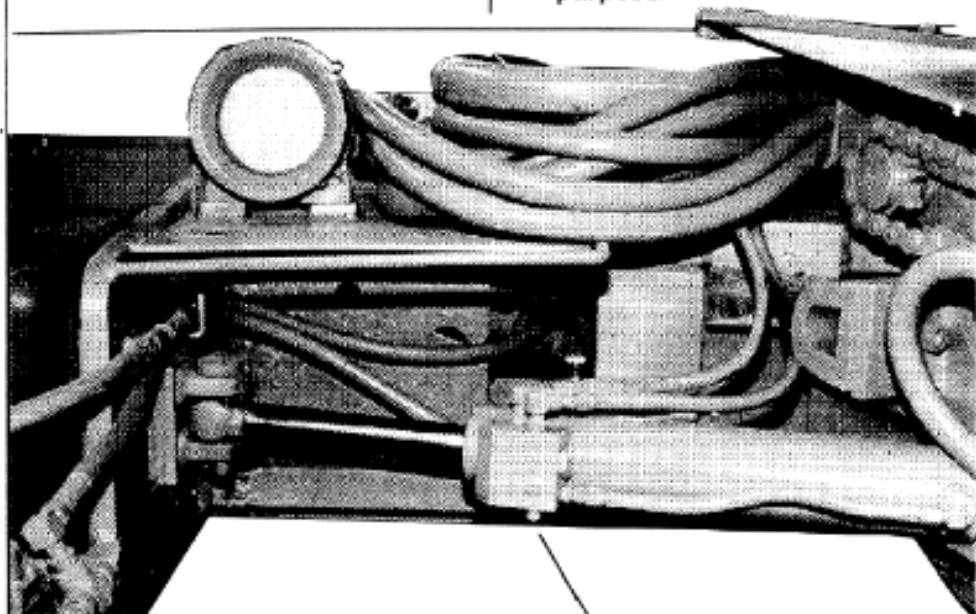
6. **MAKE SURE THE BOOM SWING**

**CYLINDERS ARE EQUIPPED WITH PILOT OPERATED CHECK VALVES.**

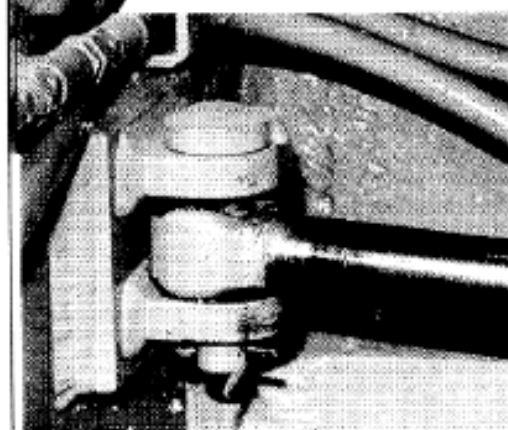
The pilot operated check valve prevents the boom from swinging in the direction of the operator in the event a hose or fitting should break.

7. **MAKE SURE THE BOOM SWING SPEED IS ADJUSTED PROPERLY.**

Flow controls are provided in the boom swing circuit for this purpose.



PILOT OPERATED CHECK VALVE ON BOOM SWING CYLINDER.



BOOM SWING CYLINDER PIN OF CORRECT TYPE WITH COTTER PIN INSTALLED AT THE BOTTOM

IF YOU HAVE ANY QUESTIONS, OR NEED ASSISTANCE, REGARDING THE SAFETY OF THE BOOM SWING SYSTEM ON YOUR MACHINE; CONTACT YOUR LOCAL FLETCHER REPRESENTATIVE OR OUR PRODUCT SAFETY DEPARTMENT (304) 525-7811.

## **CYLINDER HOUSING IMPROVEMENT**

The housing for the raise cylinder on canopy support posts and safety posts is made of interlocking square tubing.

After continued use these tubes will wear causing a sloppy fit and allow bending of the housing assembly when extended. Also the corners of the tubes will tend to crack due to the stress created as the housing bends.

In the past, when this situation occurred, it was necessary to replace the entire housing assembly.

To eliminate these problems we are now welding reinforcing collars on the ends of the interlocking tubes.

In addition to providing the reinforcement necessary to prevent the corners of the tubes from cracking, the collars are also machined to accept replaceable wear pads and shims. Thus, as wear occurs, shims can be added to eliminate the sloppy fit and resultant bending of the housing assembly.

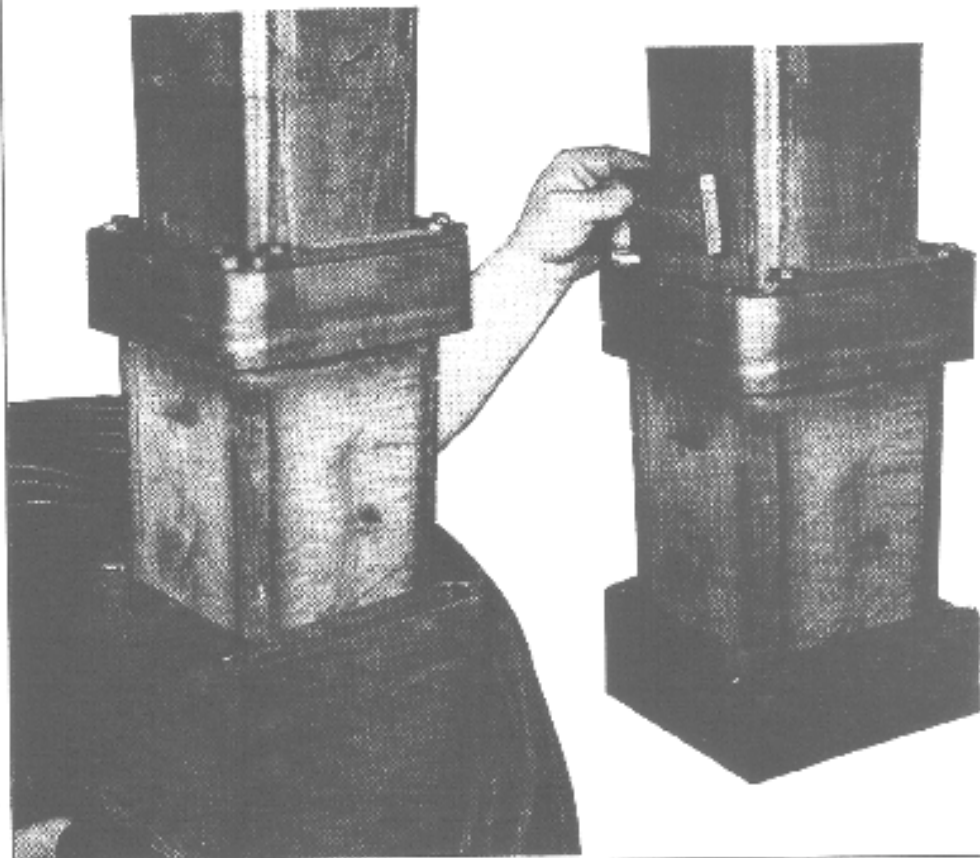
This improvement is being incorporated on all new housing assemblies where possible. It is also available for retrofit on existing housings.

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There are two drawbacks - the collars, when incorporated into new housings, reduce the extended height of the housing, also when applied as a retrofit, they add to the collapsed height. Additionally, there are some applications where the addition of the collars would interfere with

the pocket in which the housing fits.

FOR FURTHER INFORMATION OR ASSISTANCE IN ORDERING RETROFIT KITS CONTACT YOUR LOCAL FLETCHER REPRESENTATIVE OR OUR SERVICE DEPARTMENT AT (304) 525-7811.



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