Fletcher®

2024 NEWSLETTER ISSUE #1

IN THIS ISSUE

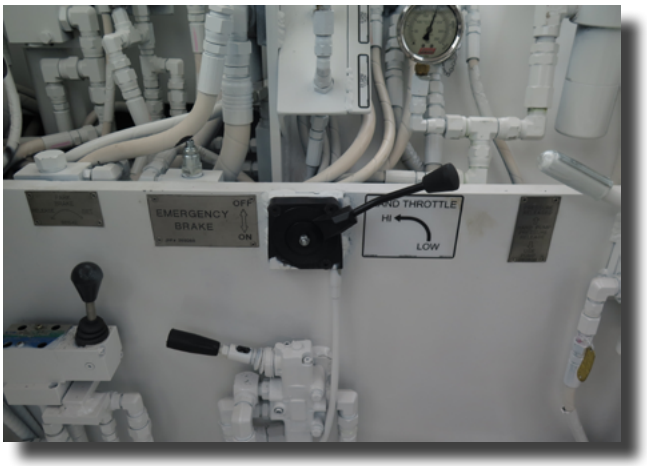
PROPERLY MAINTAINING AND USING PARK BRAKES

J.H. Fletcher and Co. manufactures many different machines. This article does not cover skid steer or rail machines that Fletcher manufactures. The park brake design regarding how the brake is set, released, interlocked and tested can vary from machine to machine.

To determine what park brake design your machine is equipped with, refer to your machine's hydraulic circuits, electric circuits, Operator's Manual, Service Manual, and Parts Catalog. If you have any remaining questions, ask your supervisor. All operators are required to be familiar with the equipment and properly task trained before operating the equipment. If you are not familiar with the machine and the park brake system you risk machine damage, serious injury or death.

Some machines are equipped with interlocks which may prevent the machine from either starting or from releasing the park brake. Most interlocks are used to ensure proper operation. If the operator follows the procedures outlined in the Operator's Manual, the operator may not be aware interlocks exist. Before operating the machine, the operator should first check that the park brake is set (if the park brake is equipped with a manual control). Once the operator is certain the park brake is set, the operator should walk around the machine ensuring any latching stop pushbuttons are pulled out, any gates/doors are in the closed position, hydraulic oil and fuel levels are adequate, methane level is low, chassis/boom selector is in the proper position, etc. Any of these items could prevent the machine from starting or from releasing the park brake.

A park brake shouldn't be used as a service brake but it is a required secondary method of stopping the machine and should be used if the primary service brakes have failed. If the park brake has been used in this manner it can affect the life of the park brake and indicates a problem with the service brakes or operator understanding of when to use the park brake. If the park brake has been used as a dynamic brake (park brake stopped a machine in motion), it should be tested shortly after.



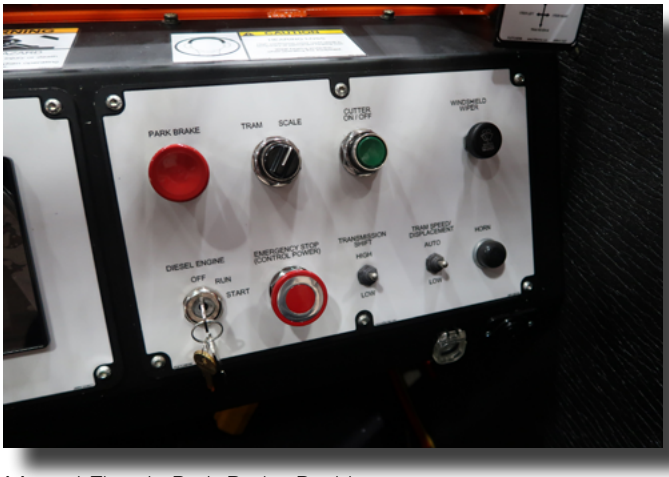
Manual Hydraulic Park Brake and Emergency Brake (Service and Park Brake) Controls

...continued from page 1

Brake tests should be performed once a shift, anytime the park brake has been used as a dynamic brake (park brake stopped a machine in motion), anytime maintenance has been performed on the brakes or brake circuit, anytime brakes are suspected of going or being bad, etc. Most machines have brake tests outlined in the Operator's Manual. Brake tests may also be found in the Service Manual, on a safety tag installed on the machine, or in a Technical Information Document found on www.jhfletcher.com.

If you cannot find a brake test procedure in your machine's documentation, check with your supervisor to determine how to properly test the brakes on your machine.

Follow all instructions when testing park brakes. Some park brake tests are conducted by attempting to tram through the brake and see if the machine moves. If the transmission is set in one of the higher reduction gears or if a relief valve setting was not reduced as outlined in the documentation, then you may be able to tram through the brakes and possibly cause damage to the brakes.



Manual Electric Park Brake Pushbutton.

Once the testing is completed return the machine setting back to operational mode.

Unless performing park brake tests that specify otherwise, do not tram the machine with the park brake set. Tramming the machine with the park brake set may result in damage to the park brake and cause the machine not to stop when needed. Some machines may be equipped with pressure gauges, an audible / visual alarm, or an alert on a display module to notify the operator that the park brake is still set. Other machines may be equipped with tram alarms that are connected to the brake circuit. If your machine is equipped with an audible / visual tram alarm that does not sound / illuminate when tramming the machine, immediately stop the machine and find the root cause. The tram alarm may not be actuating because the park brake is still set. Do not operate the machine unless all alarms are in working order. Once finished tramming, ensure the park brake is set before leaving the tram deck, cab, boom, etc. Set any stabilizing devices as required.

Properly releasing, testing, and setting the park brake at the appropriate times will help increase the overall life of the park brake, and help ensure they it is operating properly when it is needed.

For additional safety information and procedures for your machine, refer to your machine's Operator's Manual, Service Manual, and Parts Catalog.

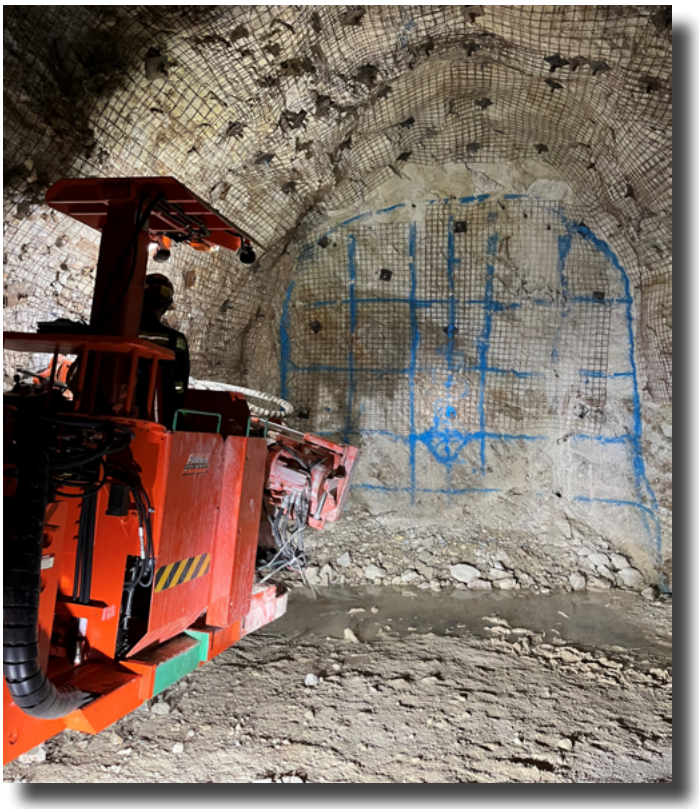
If your machine is not equipped with a desirable interlock (such as a cab door/park brake interlock, a tram/stab jack interlock, etc.), and you'd like to know what interlocks are available for your particular machine, contact your local J.H. Fletcher & Co. sales/service representative or contact a local Fletcher Authorized Rebuilder or Distributor for more information.

UNIVERSITY OF ARIZONA'S SAN XAVIER UNDERGROUND MINING LABORATORY

The San Xavier Underground Mining Laboratory, located 23 miles south of Tucson, is a mine owned by The University of Arizona and run by its students. The original mine was in operation until 1952, producing silver, lead, zinc, and copper. In 1958, the University College of Mines began operating one of the mine shafts and in 1975 the University purchased the mine. The mining lab is structured like an operating mine with a technical engineering group and supervisory positions, including mine manager, safety manager, and shift foreman, staffed by undergraduate students where they gain true hands-on experience in the field. The underground mining lab has also long been a training and research resource for federal and state agencies such as the Laborers' International Union of North America, Bureau of Land Management, Arizona State Mine Inspectors Office, fire departments, and mine rescue teams.

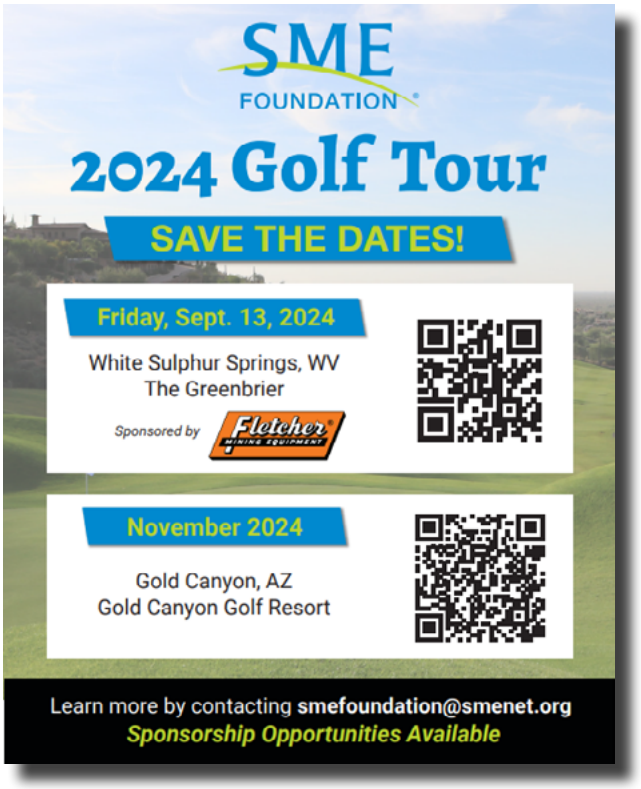
In June 2023, a Cannon single boom jumbo drill was delivered to San Xavier Underground Mine which will be used in a blasting project by The University of Arizona's School of Mining & Mineral Resources. This project is being led by a PhD level graduate student, and the use of this machine will allow students to gather data from the blast necessary to complete projects. Per their website, thanks to decades of mining industry partnerships, the university is considered a center of excellence in mine health and safety and J.H. Fletcher & Co. is extremely honored to have this opportunity to become one of those partnerships. Information found in this article and more can be found on The University of Arizona's San Xavier Underground Mining Laboratory website.

Cannon Single Boom Jumbo Drill, onsite at San Xavier Underground Mine in Arizona.



The blue paint grid [pictured above] indicates a drilling pattern on the mine face. During this project at San Xavier Underground Mine, the Cannon jumbo will drill holes into this pattern, then instrumentation will be installed to analyze the impact of blasts propagating in strata. Once the blasting is complete, they will remove the material, re-support the ground in rock bolts, and repeat the process.

SME FOUNDATION 2024 GOLF TOURNAMENT: WEST VIRGINIA



In our continuous support of SME (Society of Mining, Metallurgy and Exploration) and the SME Foundation's vision to inspire the next generation of engineers and meet the needs of a mineral dependent future, J.H. Fletcher & Co. is sponsoring one of this years SME Foundation Golf Tournaments at The Greenbrier Resort in White Sulphur Springs, West Virginia on Friday, September 13, 2024.

The SME Foundation functions to help raise funds for outreach programs for K-12 science classroom education, scholarships for students to study various mining engineering and geology fields, and programs to inform the public about the importance of mining in everyday lives.

Sponsorship opportunities are still available. Visit the website below and register now to support a worthy cause and enjoy a great day of golf on Meadows Golf Course at West Virginia's Luxury Resort, The Greenbrier.

Register Now: 2024 SME Foundation Golf Tour- West Virginia

J.H. FLETCHER & CO. ENGINEERING SCHOLARSHIP

The J.H. Fletcher & Co. Engineering Scholarship Fund was established in 2012 by J.H. Fletcher & Co. through a generous contribution from the company and is administered yearly by the SME Foundation. The scholarship is awarded annually to students pursuing an undergraduate degree in mining or minerals engineering, with a desire to use their skills to apply technology to underground mine planning, operations, or maintenance. Students pursuing degrees in mechanical or electrical engineering may also be considered if they are minoring in mining engineering or show a strong desire for a career in the underground mining industry.

The 2024 recipient of the J.H. Fletcher & Co. Engineering Scholarship is **Colby McGrady**. Colby is in his Junior year at Virginia Tech majoring in Mining Engineering. He has previously served as treasurer for SME's Virginia Tech Campus Chapter and is looking to work as a mining engineer in the coal or aggregates industry after graduation.

Congratulations, Colby!

TERMS TO KNOW

Go / No Go Zones: These are areas around the machine where it is acceptable and not acceptable for personnel to be positioned while different functions of the machine are being utilized. Go Zones are shown in green, and No Go Zones are shown in red. Familiarize yourself with these zones by referencing your machine's Operator's Manual.

Go / No Go Zones while using & setting ATRS system

FOLLOW OUR SOCIALS

Follow all divisions of J.H. Fletcher & Co. and Cannon Mining Equipment across social media like Facebook, Instagram, and LinkedIn to obtain up-to-date information like job opportunities, giveaways, upcoming appearances and more.

@FletcherMiningEquipment
@FletcherEngSol
@CannonMining

Did you know you can also find J.H. Fletcher & Co. videos on YouTube? Click below for machine demos and more!

YouTube

UPCOMING TRADE SHOWS & CONFERENCES

Saskachewan Mining Supply Chain Forum **April 17-18, 2024**

Aistech Technology Conference **May 6-8, 2024**

CIM Connect Convention & Expo **May 14-15, 2024**

Elko Mining Expo **June 4-5, 2024**

Canadian Mine Expo **June 5-6, 2024**

North American Tunneling Conference **June 24-26, 2024**

MINExpo **September 26-28, 2024**

International Workboat Show **November 12-14, 2024**

J.H. FLETCHER & CO. WEBSITE

Visit our website at www.jhfletcher.com for news, product information and contact details. Looking for other helpful content? Our site also contains additional useful materials which can be found at any of the links below:

- Resources- Bulletins, safety posters/stickers, newsletters, maintenance procedures & more!
- Careers- Current job openings & a link to the employment application.
- Customer Survey- Tell us how we're doing!

DISCLAIMER

The information contained in this newsletter has been obtained from sources believed to be reliable, and the editors have exercised reasonable care to assure its accuracy. However, J.H. Fletcher & Co. does not guarantee that the contents of this publication are correct and that statements attributed to other sources do not necessarily reflect the opinion or position of J.H Fletcher & Co.