

## **Equipment Safety Bulletin**

**Technical Support Department** 

Reference Number	Bulletin 2020-01
Affected Tooling	Caterpillar 9U-7763 150T Puller Studs with date code '05 19'
Risks Identified	Certain 9U-7763 Puller Studs with Date Code '05 19' may fail at less than the rated capacity of 150 ton (136 metric tonne). Risk of tooling assembly falling and/or personal injury from flying object.
Release Date	12 November 2020

# Caterpillar 9U-7763 Puller Studs with date code '05 19' – potential for failure at less than rated capacity.

#### Introduction

Puller studs are intended to be used as tooling. The most common application of the 9U-7763 uses the stud inserted through the centre of a hollow ram hydraulic cylinder. The stud moves with ram extension to pull press-fitted components such as pins, bushings and bearings into, or to retrieve the items from, their installed position in major components on machines. The stud capacity is marked in tons (equating to 136 metric tonne) and indicates the maximum safe tensile load, when the load is applied through the stud axis.

#### **Risk Overview**

A rating capacity discrepancy has been identified with certain 9U-7763 puller studs failing below their rated capacity. The 9U-7763 stud is rated at 150 ton [136 tonne] has a 2" 12 tpi thread and is 48" [1220 mm] long. Only 9U-7763 puller studs marked with a date code of '05 19' are affected by this issue.

Impending failure of a puller stud can be difficult to detect since the stud cannot usually be sighted over its full length while in use and under tension. Stud failure can result in the tooling assembly falling or personal injury from flying parts.

#### **Issue Management Actions**

In addition to any recommended inspections for serviceability, immediately inspect all 9U-7763 puller studs in use and held in tool stores/parts warehouses or service facilities. If a 9U-7763 stud with the date code '05 19' is found, immediately withdraw the part from use or storage and hold in a quarantine location so that there is no risk of the puller stud being used or repurposed. Contact a Hastings Deering Mining Support Representative immediately upon identifying this date code for further advice.



## **Equipment Safety Bulletin**

**Technical Support Department** 

The date code is marked on one end of the stud (refer to Figure 1). The date code can be a sequence of two groups of two numbers, or three groups of two numbers. A date code that has the sequence '05 19' is the date code to look for.



Figure 1 - Date code '05 19' found on 9U-7763 puller studs to be removed from use.

**Note:** All other date codes on 9U-7763 studs do not have this issue and can be reused if serviceable. All puller studs should be inspected for serviceability prior to each use by a competent person, and considered as a consumable product when regularly used at rated capacity. Always ensure the nuts and other hardware used in the pulling assembly are fit for purpose and only use the tooling specified for the task in accordance with the applicable service procedure.

### **Contact Details:**

If further information is required in regard to this bulletin, contact a Hastings Deering Mining Support Representative, or Hastings Deering on 131 228.

This bulletin is to inform you of the recommendations of the supplier in respect of issues dealt with in the bulletin and should not be used as specific advice in respect of any particular events. Advice from a qualified repairer should be sought in respect of any particular events and Hastings Deering (Australia) Limited accepts no responsibility for any loss or damage occasioned by a party using this general bulletin.

ESB 2020 01

Issue date: 12 November 2020