



Reference Number	Bulletin 2023 01
Affected Product	Caterpillar 9U-7763 150T Puller Studs with date code 10 20 or 12 20
Risks Identified	Certain 9U-7763 Puller Studs with date codes '10 20' or '12 20' may fail at less than the rated capacity of 150 tons (136 metric tonne). Risk of tooling assembly failing resulting in personal injury
Release Date	30 March 2023

Caterpillar 9U-7763 Puller Studs with date code '10 20' or '12 20' – 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 is the insertion of the puller stud through the centre of a hollow ram hydraulic cylinder. The puller stud moves with ram extension to pull press-fitted components such as pins, bushings and bearings into, or to withdraw the items from, their installed position in major components on machines. The stud capacity is marked in tons (150 US tons equating to 136 metric tonne) and indicates the maximum safe tensile load, when the load is applied through the stud axis.

Risk Overview

Certain 9U-7763 puller studs have been found to have inadequate heat treat which could cause the puller stud to fail at less than the rated capacity. The 9U-7763 stud has a 2" 12 tpi thread and is 48" (1220 mm) long. Only 9U-7763 puller studs marked with a date code of '10 20' and '12 20' are affected by this issue.

Potential 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 from a hydraulic cylinder. There is a risk of the puller rod elongating and breaking at less than the rated capacity which could result in bodily injury.

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 '10 20' or '12 20' 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 affected parts for further advice.

The date code is marked on one end of the stud (refer to Figure 1). The date code is a sequence of two groups of two numbers. A date code that has the sequence '10 20' or '12 20' are the date codes which are relevant to this bulletin.



Figure 1 Date Code '10 20' location on end of stud.

Note: All other date codes on 9U-7763 studs have not been identified as having this issue and can be reused if in serviceable condition. 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 its 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.

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