1080, 1080B
CRAWLER EXCAVATOR

Service Manual

8-42681

CASE

MidWestTech | Case 1080, 1080B Excavator Service Manual | Publication 8-42681

Order the manual at mid-west-tech.com >

1001

SAFETY RULES, SERVICE MANUAL INTRODUCTION, AND TORQUE SPECIFICATIONS

TABLE OF CONTENTS

Safety Rules 1001-2

Service Manual Introduction 1001-4

Torque Specifications - U.S. Hardware 1001-5

Torque Specifications - Metric Hardware 1001-6

Torque Specifications - Steel Hydraulic Fittings 1001-7

Written In *C*lear *A*nd *S*imple *E*nglish

CASE CORPORATION

8-42680

Printed in U.S.A.
Issued February 1985

MidWestTech | Case 1080, 1080B Excavator Service Manual | Publication 8-42681 Order the manual at mid-west-tech.com >

SAFETY RULES

This symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED. The message that follows the symbol contains important information about safety. Carefully read the message. Make sure you fully understand the causes of possible injury or death. 1-1-C

NOTE: *To prevent injury on job, follow the Warning, Caution, and Danger notes in this section and other sections throughout this manual. Follow the instructions carefully.*

The procedures recommended and shown in this manual are good, effective service methods. However, all possible procedures and service hazards may not be covered. Therefore, if you use a tool or procedure not recommended, you must make sure that the method you select is a safe method.

Put the warning tag shown below on the key for the key switch when you are servicing or repairing this machine. One warning tag is on every new machine. You can buy additional warning tags, part number 331-4614, from Service Parts Supply.



WARNING: *Read operator's manual to familiarize yourself with control lever functions.* 46-27

WARNING: *Operate tractor and equipment controls from the seat position only. Any other method could result in serious injury.* 48-55

WARNING: *This is a one man machine, no riders allowed.* 35-8

WARNING: *Before starting engine, study operator's manual safety messages. Read all safety signs on machine. Clear the area of other persons. Learn and practice safe use of controls before operating.*

It is your responsibility to understand and follow manufacturer's instructions on machine operation, service, and to observe pertinent laws and regulations. Operator's and service manuals may be obtained from your J I Case dealer. 46-2

WARNING: *If you wear clothing that is too loose or do not use the correct safety equipment for your job, you can be injured. Always wear clothing that will not catch on objects. Extra safety equipment that can be required includes hard hat, safety shoes, ear protection, eye or face protection, heavy gloves and reflector clothing.* 45-3-A



WARNING: *When working in the area of the fan belt with the engine running, avoid loose clothing if possible, and use extreme caution.* 35-4

Order the manual at mid-west-tech.com >

WARNING: *When doing checks and tests on the equipment hydraulics, follow the procedures as they are written. DO NOT change the procedure.* 47-44

WARNING: *When putting the hydraulic cylinders on this machine through the necessary cycles to check operation or to remove air from a circuit, make sure all people are out of the way.* 47-45

WARNING: *Use insulated gloves or mittens when working with hot parts.* 47-41A

CAUTION: *Lower all attachments to the ground or use stands to safely support the attachments before you do any maintenance or service.* 49-11

CAUTION: *Pin sized and smaller streams of hydraulic oil under pressure can penetrate the skin and result in serious infection. If hydraulic oil under pressure does penetrate the skin, seek medical treatment immediately. Maintain all hoses and tubes in good condition. Make sure all connections are tight. Make a replacement of any tube or hose that is damaged or thought to be damaged. DO NOT use your hand to check for leaks; use a piece of cardboard or wood.* 40-6-A

CAUTION: *When removing hardened pins such as a pivot pin, or a hardened shaft, use a soft head (brass or bronze) hammer or use a driver made from brass or bronze and a steel head hammer.* 46-17

CAUTION: *When using a hammer to remove and install pivot pins or separate parts, using compressed air or using a grinder, wear eye protection that completely encloses the eyes (approved goggles or other approved eye protectors).* 46-13

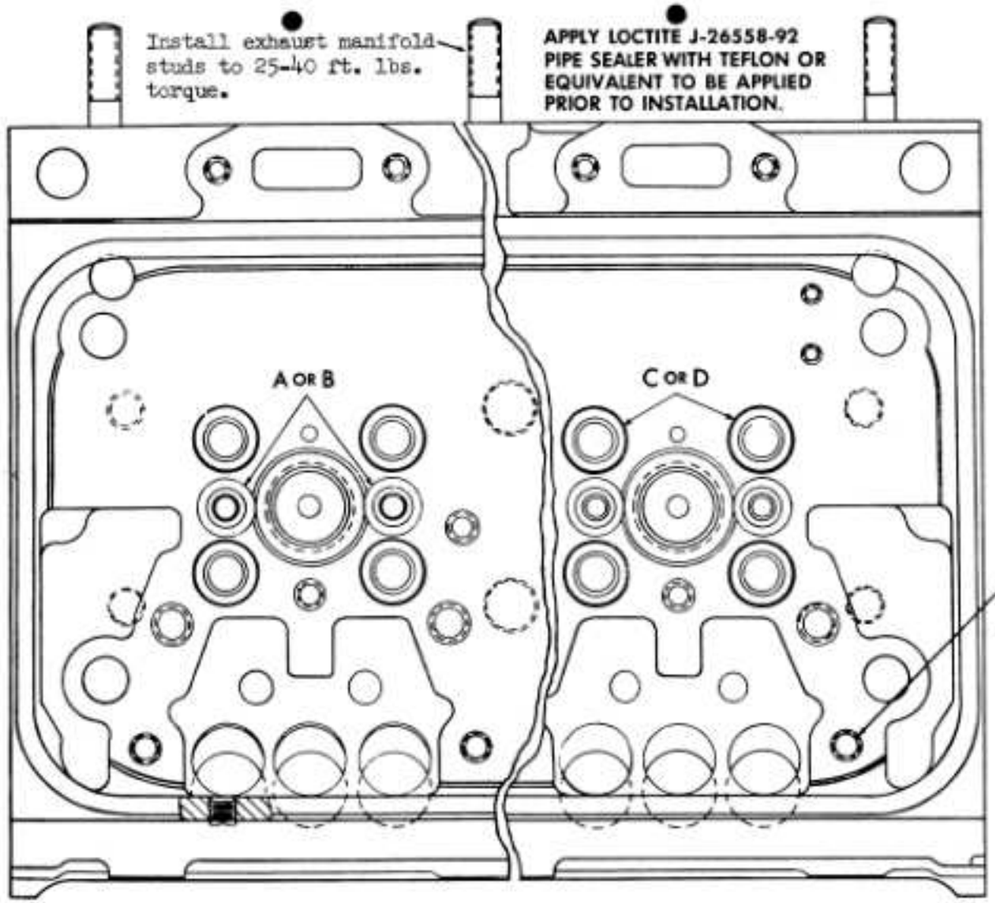
CAUTION: *When servicing or repairing the machine, keep the shop floor and operator's compartment and steps free of oil, water, grease, tools, etc. Use an oil absorbing material and/or shop cloths as required. Use safe practices at all times.* 40-8

CAUTION: *Use suitable floor (service) jacks or chain hoists to raise wheels or track off the floor. Always block machine in place with suitable safety stands.* 40-7-A

CAUTION: *Some components of this machine are very heavy. Use suitable lifting equipment or additional help as instructed in this service manual.* 40-10

DANGER: *Engine exhaust fumes can cause death. If it is necessary to start the engine in a closed place, remove the exhaust fumes from the area with an exhaust pipe extension. If you do not have an exhaust pipe extension, open the doors and get outside air into the area.* 48-56

Order the manual at mid-west-tech.com >



SERIES 71
FOUR VALVE HEAD
PLUGGING CHART

STANDARD PIPE PLUG TORQUE*

PIPE PLUG SIZE	TORQUE/FT. LBS.
1/8	10-12
1/4	14-16
3/8	18-22
1/2	23-27
3/4	33-37

*Caution—Do Not Over Torque Teflon Wrapped Pipe Plugs.

Install plug in both ends of cylinder head except on thermostat housing end(s) for 6V and 8V engines only.

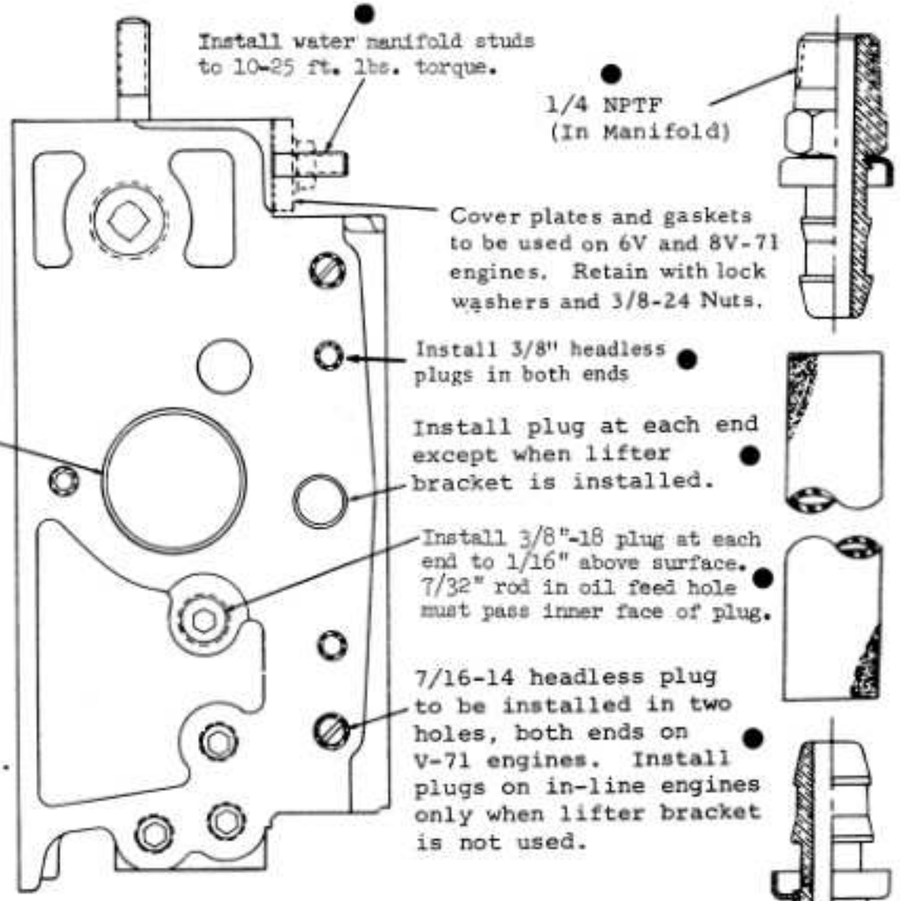
Install fuel manifold connectors and washers.

A - Use with three spring design (spring under bridge).

B - Two spring design (no spring under bridge).

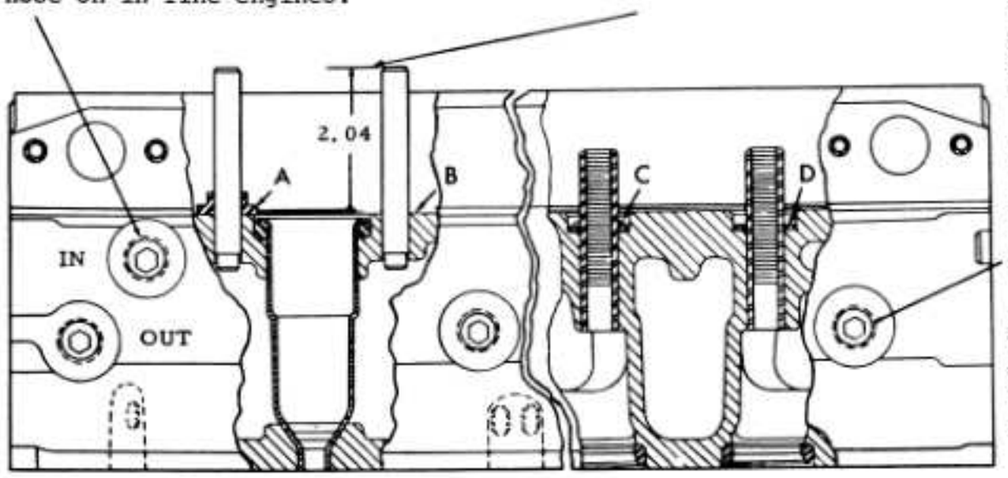
C - Use with .581 I.D. valve spring.

D - Use with .645 I.D. valve spring.



Install special 1/4 pipe plugs in all manifold end and side positions except fuel inlet and outlet positions convenient for assembly of flexible hose on in-line engines.

Bridge guides to be installed as shown.

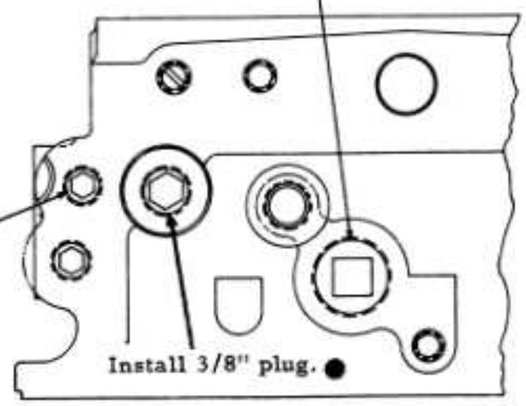


Install restricted (R) orifice connector in convenient location in fuel manifold outlet.

Note: Use .1065" connector (marked R10) with 90CMM injectors. Use .080" connector (marked R80, R08 or R8) with all other injectors.

Install 1/4 pipe plugs below surface of head when assembling plugs in end positions on 71 in-line engines.

Before installing thermostat housings on 12V-71 engines, remove 3/4 pipe plug from front of both cylinder heads.



TO ASSEMBLE HOSE & FITTINGS

(1) Cut hose to required length. Oil inside of hose and outside of nipple.

(2) Push hose on fitting underneath protective cap.

REV. 1-81

Order the manual at mid-west-tech.com >