

# 680B AND 680C LOADER BACKHOE

## Table of Contents

SERIES/SECTION	SECTION NO.	FORM NO.
<b>10 SERIES - GENERAL</b>		
Specifications for Case A267 Diesel Engine, Series B Prior to SN 9103967 .....	C	9-78741
General Engine Specifications, Series B Loaders, SN 9103967 and After .....	11	9-79501
General Engine Specifications, Series C Loaders .....	11	9-79921
Lubrication, Maintenance, and Torque Charts, Series B .....	CC	9-71981
Maintenance and Lubrication, Series C .....	13	9-71982
<b>20 SERIES - ENGINE</b>		
Prior to SN 9103967		
Throttle Controls and Linkage .....	I	9-71981
Stall Checks .....	None	9-71981
Air Intake and Exhaust System .....	G	9-71981
Cylinder Heads, Valve Systems, Rocker Arms, Decompressor .....	K	9-76972
Engine Block .....	M	9-75222
Engine Counter Balancer .....	MM	9-76731
Water Pump .....	3M	9-77461
SN 9103967 Thru 9111008		
Throttle Controls and Linkage .....	1, Sup. 1	9-71982
Stall Checks, Engine Removal and Installation .....	21	9-71982
Cylinder Head and Valves .....	22	9-79392
Engine Block Assemblies .....	23	9-79403
Air Cleaner .....	24	9-71982
Cooling System and Engine Oil Filters .....	25	9-79421
<b>30 SERIES - FUEL SYSTEM</b>		
Prior to SN 9103967		
Fuel Injectors, Case Powercel Fuel Injection Pump .....	I	9-75421
SN 9103967 Thru 9111008		
Electric Fuel Pump .....	34	9-71982
Fuel System and Filters .....	3010	9-75297
Fuel Injection Pump .....	3012	9-74937
Fuel Injectors .....	3013	9-74959
<b>40 SERIES - HYDRAULICS</b>		
Hydraulic Testing .....	None	9-71981
Hydraulic Testing .....	Sup. 1	9-71982
Equipment Pump .....	None	9-71981
Equipment Pump .....	Sup. 1	9-71982
Control Valves .....	None	9-71981
Control Valves .....	Sup. 1	9-71982
Hydraulic Cylinders .....	None	9-71981
Hydraulic Cylinders .....	Sup. 1	9-71982

SERIES/SECTION	SECTION NO.	FORM NO.
50 SERIES - STEERING		
Hydrostatic Steering System, Series B Prior to SN 9103967 . . . . .	None	9-71981
Steering System, Series B with SN 9103967 and After and Series C . . . . .	51	9-71982
60 SERIES - POWER TRAIN		
4-Speed Synchromesh Transmission Series C . . . . .	64	9-71982
Differential and Planetaries, Series C . . . . .	67	9-71982
4-Speed Mechanical Transmission and Differential Brakes, Series C . . . . .	S	9-77341
Supplement to Section S . . . . .	None	9-77342
Forward-Reverse Transmission and Torque Converter . . . . .	SS	9-71981
Forward-Reverse Transmission . . . . .	SS, Sup. 1	9-71982
Trouble Shooting the Forward-Reverse Transmission . . . . .	SS, Sup. 2	9-71982
Forward-Reverse Transmission and Torque Converter . . . . .	SS, Sup. 3	9-71982
70 SERIES - BRAKES		
Brakes, Series C . . . . .	71	9-71982
Hydraulic Brake System, Series B . . . . .	3S	9-71981
<b>NOTE:</b> For units equipped with Differential Brakes, refer to Section S in 60 Series.		
80 SERIES - ELECTRICAL		
Electrical System, Series B . . . . .	F	9-71981
Electrical, Series C . . . . .	82	9-71982
90 SERIES - MOUNTED EQUIPMENT		
Loader . . . . .	None	9-71981
Loader Supplement, Series C . . . . .	92	9-71982
Model 36 Backhoe . . . . .	None	9-71981
Model 36 Backhoe . . . . .	Sup. 1	9-71982

**NOTE:** Powrcel Engines were on units with SN 9102281 to 9103966. "Open Chamber" engines on all units thereafter. First Series C unit was SN 9106000.

**SECTION**

**I**

**THROTTLE CONTROLS  
AND LINKAGE**

# ADJUSTMENT/INSTALLATION OF THROTTLE LINKAGE

## Specifications

Low idle speed, no load	750 RPM
High idle speed, no load	2125 to 2175 RPM

## Checking the Adjustment

### HIGH IDLE TOO HIGH (ABOVE 2175 RPM)

Service the injection pump. Refer to Section I of the Fuel System.

### HIGH IDLE TOO LOW (BELOW 2125 RPM)

Make the following check to determine if the fault is in the throttle linkage or injection pump:

1. Refer to Figure 1, Inset B. Disconnect the throttle link rod at the injection pump governor control lever.
2. Start the engine and move the control lever against the high speed adjusting screw.
3. If high idle speed is still below 2125 RPM, service the injection pump. See Section I, Fuel System. If high idle speed is now 2125-2175 RPM, adjust the throttle linkage. See "Idle Speed Adjustments" below.

## Idle Speed Adjustment

### LOW IDLE SPEED ADJUSTMENT

1. Check and adjust (if required) the accelerator linkage as described under "Accelerator Linkage Installation" below.
2. Adjustment of low idling speed can be made at the throttle link adapter block. See Figure 1, Inset A.
  - a. If low idle speed is too LOW, adjust the throttle link adapter block FORWARD on the throttle rod.
  - b. If low idle speed is too HIGH, adjust the throttle link adapter block REARWARD on the throttle rod.

NOTE: If problem is a "hunting" condition (Low idle speed drops to a very low RPM, then speeds up), refer to Section I, Fuel System for adjustments of injection pump.

### HIGH IDLE SPEED ADJUSTMENT

3. With the low idle speed properly adjusted, start the engine and adjust the pedal stop bolt to contract the bottom of the pedal when engine speed is at 2125-2175 RPM. Tighten the jam nut.

## Installation

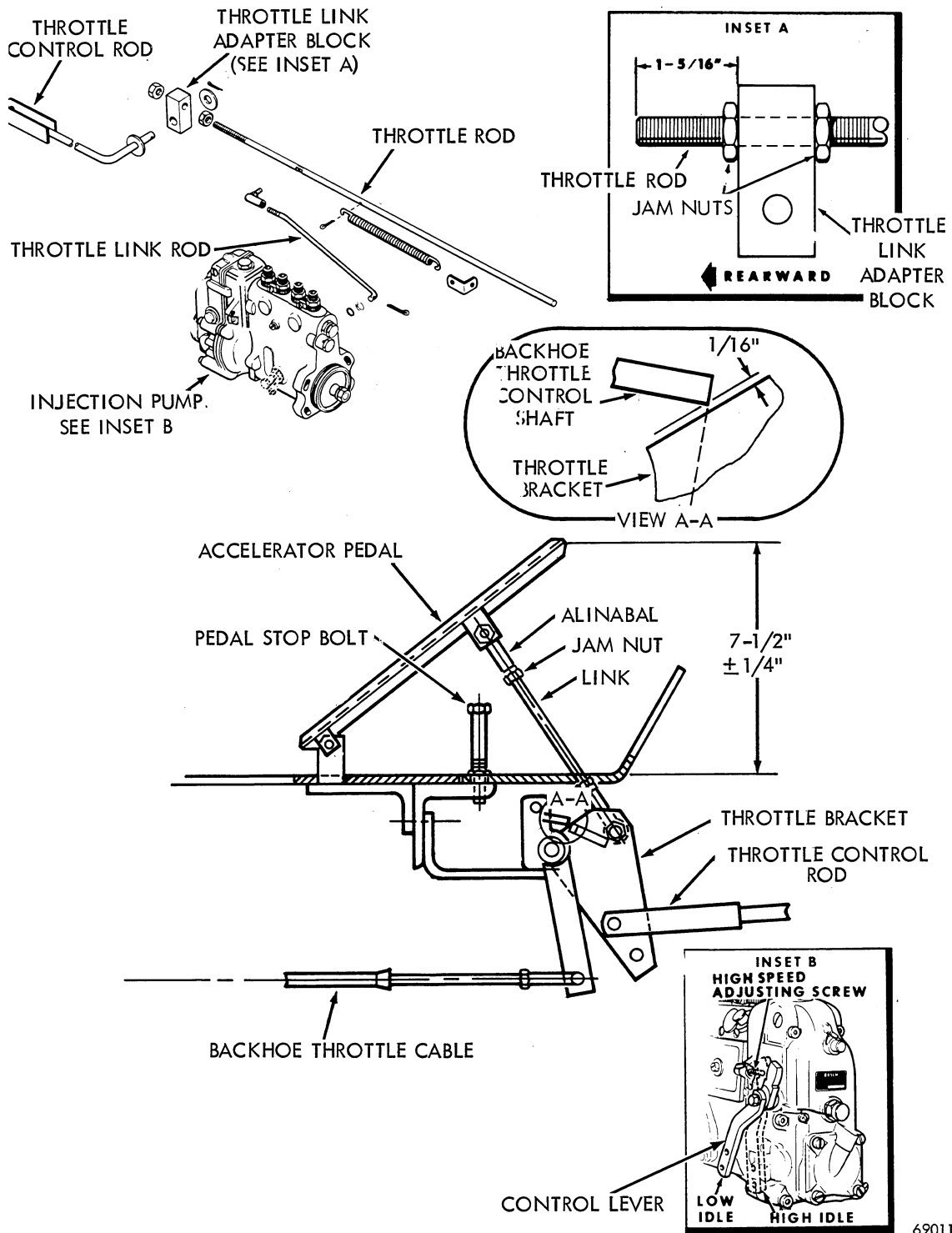
### ACCELERATOR LINKAGE INSTALLATION

1. Position linkage in fuel shutoff position by depressing fuel shutoff pedal.
2. Refer to Figure 1. Loosen jam nuts on accelerator link rod and adjust alinabals to the 7-1/2" dimension.
3. With backhoe throttle cable in fully closed position, adjust the cable at the yoke until the throttle shaft control plate is in contact with the throttle shaft bracket within 1/16" or less.

### THROTTLE ROD INSTALLATION

Refer to Figure 1, Inset A.

1. Install the throttle link adapter block on the throttle rod so it extends approximately 1-5/16" rearward. Tighten the jam nuts.
2. Start the engine and allow it to idle. Engine speed should be 750 RPM. If not, make the adjustment described under "Low Idle Speed Adjustment" above.



690117

Figure 1

Thank you so much for reading.  
Please click the “Buy Now!”  
button below to download the  
complete manual.



After you pay.

You can download the most  
perfect and complete manual in  
the world immediately.

Our support email:

[ebooklibonline@outlook.com](mailto:ebooklibonline@outlook.com)