210 Inverness Center Parkway
Birmingham, AL 35242

Telephone: 205-991-7733
Facsimile: 205-991-9993
www.altec.com

This notice applies to your vehicle. See SIL for specific unit identification.

November 4, 2020

Dear Altec Owner,

Altec Industries, Inc. has developed a product improvement which relates to certain DMB Series, DB41B and DR41B Series derricks built from March through May 2020.

Refer to SIL 771 for items covered under the warranty policy. Altec will supply necessary parts to correct this condition.

In order to determine if your unit is affected by SIL 771, compare the serial number of your unit with the list of affected units as described on the SIL. The product improvement can be performed by the customer or you may contact Altec at 1-877-GO-ALTEC (1-877-462-5832) for further assistance.

At any time, you may contact Altec at 1-877 GO ALTEC (1-877-462-5832) with your unit's serial number to determine if there are any other outstanding notices.

If you have sold or retired the unit please call Altec at 1-877-GO-ALTEC (1-877-462-5832) so the records may be changed.

We regret this inconvenience; however we are taking this action in the interest of your safety and continued satisfaction with Altec products.

Thank you for your immediate attention on this important matter.

Altec Industries, Inc.
Midwest Operations
St. Joseph, MO

SIL 771

Service Information Letter

November 4, 2020

Units Affected: Certain DMB Series, DB41B and DR41B Series derricks built from March through May 2020 (Verify that your unit serial number is affected by reviewing the attached list in this SIL or by accessing your fleet on connect.altec.com/login)

Circuit Board Inspection

Altec is committed to providing our customers safe and reliable products from initial delivery throughout the useful life of the machine.

Below Rotation Valve Driver (BRVD), Above Rotation Valve Driver (ARVD), and CAN bridge circuit boards on Altec derricks require the use of a clear potting compound so diagnostic light emitting diodes (LEDs) on the boards are visible for troubleshooting. Altec has discovered that a black potting compound was used on some of these circuit boards on the affected units, which prevents the LEDs from being visible.

Altec requires that each unit be inspected for visibility of the diagnostic LEDs no later than the next periodic maintenance interval. Use the Inspection Procedure beginning on page 2. If circuit board replacement(s) are required, use the Replacement Procedure beginning on page 6.

This inspection and repair are covered under the Altec Warranty Policy and can be performed by Altec, the customer, or the customer's warranty provider. Altec will perform the inspection and repair for free at an Altec facility. If the customer or the customer's warranty provider performs the inspection and/or repair, a warranty claim must be submitted to be reimbursed for the cost of the parts and/or labor. Altec will allow up to $45 for the labor to perform this inspection and up to $90 for the labor to perform this repair. Call 1-877-GO ALTEC (1-877-462-5832) to schedule the work to be done by an Altec service technician. Customers are responsible for the travel costs of an Altec Mobile Service technician if the technician performs the inspection and/or repair at the owner's location.

Altec Use Only	
Inspection labor	0.5 hr
Repair labor	1.0 hr
Account #	010.0391.43151.097.0000.000
Travel	Not Included
NHTSA code	98
Prime fail P/N	970166432, 970355788, 970476748, 970490768, 990147979, 990147979
Doc ref	None

Parts Kit	Part Number	Qty	Warranty
Below rotation valve driver, DMB, DR41B	970355788	1	Yes
Below rotation valve driver, DB41B	970490768	1	Yes
Above rotation valve driver, DMB Series	990147979	1	Yes
Above rotation valve driver, DB41B	990544878	1	Yes
CAN bridge module, DMB Series	970476748	1	Yes
CAN bridge module, DB41B	970166432	1	Yes

Inspection Procedure

Unit Setup

Normal mechanic's hand tools are required for this inspection. Read and understand all steps of the instructions before beginning the procedure.

1. Set up the unit depending on the type of chassis.
   - Position a wheeled unit on a level surface, apply the parking brake, chock the wheels, and turn off the engine.
   - Position a track unit on a level surface or on a level, securely parked trailer with the trailer wheels chocked, and turn off the engine.

2. The circuit boards that may need inspection are the Below Rotation Valve Driver (BRVD), Above Rotation Valve Driver (ARVD), and CAN Bridge Board (CBB). Refer to Figure 1 to determine which board(s) to inspect based on the unit serial number.

Unit Serial Number	Unit Model	Inspection Required		
		BRVD	ARVD	CBB
0320FR5836	DM47B	X		X
0320FR5837	DM47B	X		X
0320FR5840	DM47B	X		X
0320FR5841	DM47B	X		X
0320FR5843	DM47B	X		X
0320FR5846	DM47B	X		X
0320FR5852	DM47B	X		
0420FR5856	DM47B	X		X
0420FR5859	DM47B	X		X
0420FR5863	DM47B	X		X
0420FR5866	DM45B	X		X
0420FR5867	DM45B	X		X
0420FR5869	DM45B	X	X	X
0420FR5877	DM47B	X		
0420FR5879	DM47B	X		
0320GW0409	DB41B			X
0320GW0411	DB41B			X
0320GW0412	DB41B	X		X
0320GW0413	DB41B			X
0320GW0414	DB41B	X		X
0320GW0415	DB41B	X	X	
0420GW0417	DB41B	X		X
0320GW0419	DB41B	X		X
0420GW0421	DB41B	X		X
0420GW0424	DB41B	X		X
0420GW0426	DB41B	X		
0420GW0428	DB41B	X		X
0420HP0149	DR41B	X		

Figure 1 – Circuit Boards Requiring Inspection

3. Proceed to the step(s) shown below for the required inspection(s).
   - For the BRVD, proceed to step 4.
   - For the ARVD, proceed to step 10.
   - For the CAN bridge board, proceed to step 16.
   - If all the required inspections have been completed, proceed to step 21.

BRVD Inspection

4. Provide power to the BRVD.
   - On DMB Series, turn the ignition on but do not start the engine. Engage the PTO.
   - On DB41B, turn the ignition on but do not start the engine.
   - On DR41B, turn the ignition on but do not start the engine. Move the PTO switch to the On position, and press the parking brake switch to the On (in) position.

5. Locate the BRVD.
   - On DMB Series, remove the pedestal cover to access the BRVD mounted inside the pedestal.
   - On DB41B, remove the left (street side) engine compartment cover to access the BRVD.
   - On DR41B, remove the front pedestal cover to access the BRVD mounted inside the pedestal.

6. Look at the BRVD to confirm the status of the +12V LED as shown in the figure listed below.
   - For DMB Series or DR41B, refer to Figure 2.
   - For DB41B, refer to Figure 3.

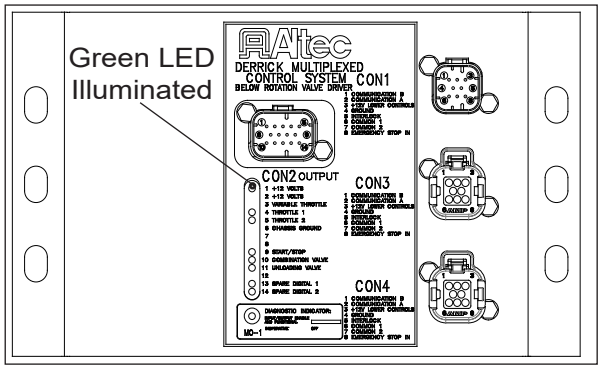

Figure 2 – BRVD for DMB Series and DR41B

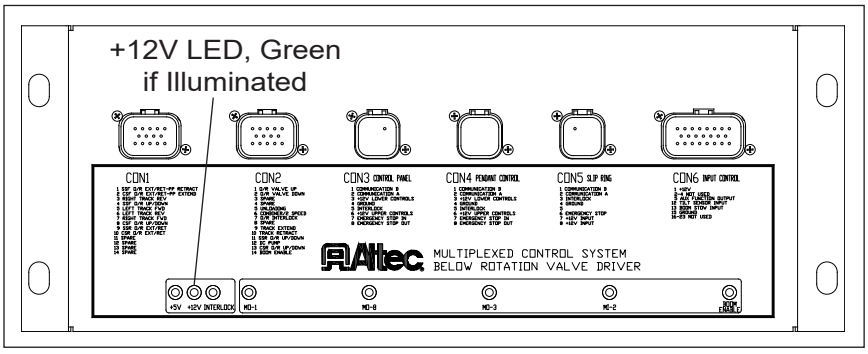

Figure 3 – BRVD for DB41B

7. Proceed based on the status of the +12V LED.
   - If the LED is not visible, find the BRVD part number shown on its part number tag and mark the corresponding part number in Figure 7 for replacement due to black potting.
   - If the LED is illuminated green, the BRVD does not require replacement.

8. Install the cover that was removed.

9. Return to step 3.

ARVD Inspection

10. Provide power to the ARVD.
    - On DMB Series, turn the ignition on but do not start the engine. Engage the PTO.
    - On DB41B, turn the ignition on but do not start the engine.

11. Locate the ARVD.
    - On DMB Series, remove the cover on the left side of the turntable (as viewed from the boom tip looking toward the turntable) to access the ARVD mounted on the turntable.
    - On DB41B, locate the ARVD mounted on the rear of the turntable.

12. Look at the ARVD to confirm the status of the +12V LED (refer to Figure 4).

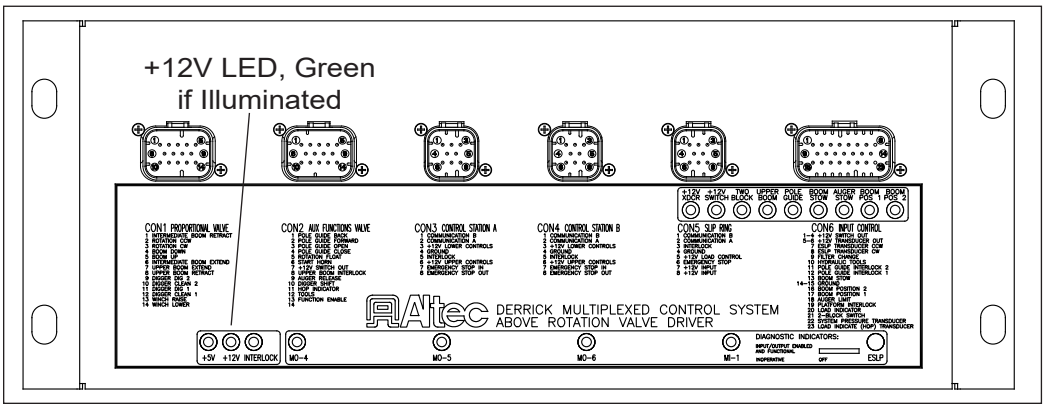

Figure 4 – ARVD for DMB Series and DB41B

13. Proceed based on the status of the +12V LED.
    - If the LED is not visible, find the ARVD part number shown on its part number tag and mark the corresponding part number in Figure 7 for replacement due to black potting.
    - If the LED is illuminated green, the ARVD does not require replacement.

14. On DMB Series, install the cover that was removed.

15. Return to step 3.

CBB Inspection

16. Provide power to the CBBD.
    - On DMB Series, turn the ignition on but do not start the engine. Engage the PTO.
    - On DB41B, turn the ignition on but do not start the engine.

17. Locate the CBB, mounted on the rear of the turntable next to the radio controls receiver.

18. Look at the CBB to confirm the status of the Power LED as shown in the figure listed below.
    - For DMB Series, refer to Figure 5.
    - For DB41B, refer to Figure 6.

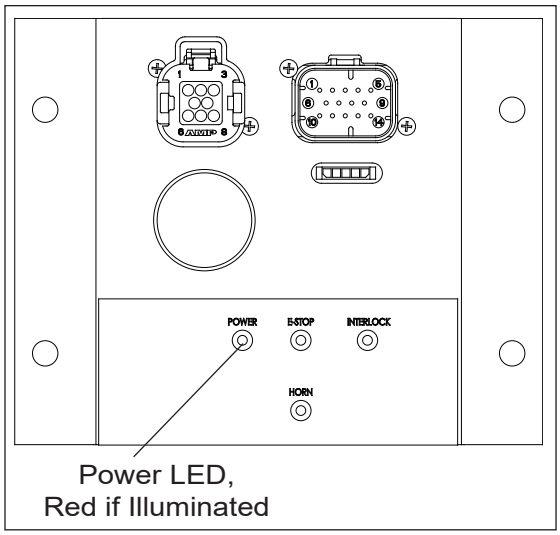

Figure 5 – CBB for DMB Series

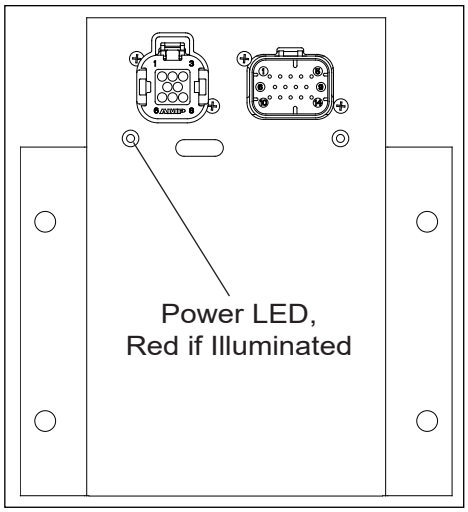

Figure 6 – CBB for DB41B

19. Proceed based on the status of the Power LED.
    - If the LED is not visible, find the CBB part number shown on its part number tag and mark the corresponding part number in Figure 7 for replacement due to black potting.
    - If the LED is illuminated red, the CBB does not require replacement.

20. Return to step 3.

Inspection Completion

21. On DMB Series and DR41B, disengage the PTO.

22. Turn the ignition off.

23. Review the results of steps 4 through 20.
    - If no black potting was identified on any circuit boards, complete the inspection sheet at the end of the SIL showing the completion of the inspection and return it to Altec as specified. Return the unit to service. No further action is required.
    - If black potting was identified on any circuit board(s), confirm the required replacement part(s) are documented in Figure 7. Call 1-877-GO ALTEC (1-877-462-5832) to order the required replacement part(s). Return the unit to service. Do not complete the inspection sheet at the end of the SIL. Proceed to the Repair Procedure when the replacement part(s) have been received.

Description	Part Number	Qty to Order if Reqd	Mark Item(s) that Need to be Ordered
Below rotation valve driver, DMB, DR41B	970355788	1	
Below rotation valve driver, DB41B	970490768	1	
Above rotation valve driver, DMB Series	990147979	1	
Above rotation valve driver, DB41B	990544878	1	
CAN bridge module, DMB Series	970476748	1	
CAN bridge module, DB41B	970166432	1	

Figure 7 – Replacement Part(s) Required Due to Black Potting

Replacement Procedure

Normal mechanic's hand tools are required for the replacement of the Below Rotation Valve Driver (BRVD), Above Rotation Valve Driver (ARVD), and CAN Bridge Board (CBB). A CADI or AXIS calibration tool is also required if an ARVD is being replaced. Read and understand all steps of the instructions before beginning the procedure.

Unit Setup

1. Set up the unit depending on the type of chassis.
   - Position a DMB Series unit on a level surface, apply the parking brake, and chock the wheels. Engage the unit's hydraulic system and properly set the outriggers. Turn off the engine.
   - Position a DB41B on a level surface. Properly set the outriggers and turn off the engine.
   - Position a DR41B on a level surface, apply the parking brake, and actuate the PTO. Properly set the outriggers and turn off the engine.

2. Proceed to the step(s) shown below for the required circuit board replacement(s).
   - For the BRVD, proceed to step 3.
   - For the ARVD, proceed to step 7.
   - For the CBB, proceed to step 19.
   - If all the required replacements have been completed, proceed to step 23.

BRVD Replacement

3. Locate the BRVD.
   - On DMB Series, remove the pedestal cover to access the BRVD mounted inside the pedestal.
   - On DB41B, remove the left (street side) engine compartment cover to access the BRVD.
   - On DR41B, remove the front pedestal cover to access the BRVD mounted inside the pedestal.

4. Disconnect the wiring harnesses from the BRVD and remove the BRVD.

5. Install the new BRVD and connect the wiring harnesses to the BRVD.

6. Return to step 2.

ARVD Replacement

7. Locate the ARVD.
   - On DMB Series, remove the cover on the left side of the turntable (as viewed from the boom tip looking toward the turntable) to access the ARVD mounted on the turntable.
   - On DB41B, locate the ARBD mounted on the rear of the turntable

8. Turn the ignition on but do not start the engine. On DMB Series and DR41B, ensure the PTO is engaged.

9. Connect the CADI or AXIS calibration tool to the connection socket on the unit.

10. Put the CADI or AXIS in calibration mode.

11. Use the CADI or AXIS to determine the current TH, MX, and LMX settings for each parameter and write these down in Figure 8.

Function	Threshold (TH)	Max Out (MX)	Low Speed (LMX)
Boom Up			
Boom Down			
CW			
CCW			
Intermediate Extend			
Intermediate Retract			
Upper Extend			
Upper Retract			
Winch In			
Winch Out			
Digger Dig			
Digger Clean			
Throttle			
HOP Meter			
HOP Trip			
ESLP CW			
ESLP CCW			

Figure 8 – Current ARVD Parameter Settings

12. Turn off the ignition.

13. Disconnect the wiring harnesses from the ARVD and remove the ARVD.

14. Install the new ARVD and connect the wiring harnesses to the ARVD.

15. Turn on the ignition.

16. Use the CADI or AXIS to adjust the TH, MX, and LMX settings for each parameter to the values recorded from the original ARVD (refer to Figure 8).

17. Turn off the ignition.

18. Return to step 2.

CBB Replacement

19. Locate the CBB, mounted on the rear of the turntable next to the radio controls receiver.

20. Disconnect the wiring harnesses from the CBB and remove the CBB.

21. Install the new CBB and connect the wiring harnesses to the CBB.

22. Return to step 2.

Testing and Completion

23. Start the engine and operate the unit while checking for proper operation.
    a. If the BRVD was replaced, operate start/stop, throttle, and boom raise/lower from the lower controls.
    b. If the ARVD was replaced, operate all the functions on the lower controls.
    c. If the CBB was replaced, operate all the functions on the radio controls.
    d. Make any necessary corrections.

24. Stow the booms. Retract the outriggers. Install any covers that were removed. Return the unit to service.

25. Complete the inspection sheet at the end of the SIL showing the completion of the inspection and repair, and return it to Altec as specified.

SIL 771 Inspection Sheet

Complete this form and return to Altec to document inspection completion.

Choose one of these options.

- Online through the customer portal – Altec Connect*
  Sign in or Register for an account at www.altec.com/altec-connect/
  1. Select Equipment
  2. Select Altec Product Notices
  3. Select Report a Completed APN
- Scan and Email to product.safety@altec.com
- FAX to 1-877-659-9929

*Customer performed warranty can be submitted online for reimbursement

To login to your existing Altec Connect account, scan here with your smart phone!

Model	Altec Unit Serial Number	Date Inspected

Company Name: _____ Phone _____

Service Company Name: _____ Phone: _____

Company Contact: _____

Company Street Address: _____

City _____ State: _____ ZIP Code: _____

Signature: _____

Submission of this form does not order parts or schedule service from Altec.

If the customer or the customer's warranty provider performs the repair, a warranty claim must be submitted to be reimbursed for the cost of the parts and/or labor through Altec Connect.

For more information or to schedule the work to be done by an Altec Service technician, call:
1-877-GO ALTEC (1-877-462-5832)

Make copies of this form for additional units if needed.