Truck Service Department

Technical Service Bulletin

DATE September 1, 1967

NUMBER 67DT-15 **MODEL** AXLE

GROUP ELECTRICAL **SUBJECT** ALTERNATOR RATED OUTPUT

SUMMARY ALTERNATOR RATED OUTPUT IS RELATED TO PART NUMBER, ENGINE AND TRUCK MODEL.

To assist service personnel in identifying alternator assemblies used on Dodge Truck models, a complete list of available alternators, rated output and applications is shown below.

Alternator assembly part numbers have seven digits and are stamped into or appear on a decal on the outer side of the rectifier - end housing just above the BAT terminal. Do not become confused by numbers cast into the end housings since these refer to the housings only.

Alternator Assy. Complete	Rated Output Amperes	Engine	Truck Models	Color Code
2642538	30	170	A1	Yellow
2444347 (Prestolite ALK 5001S)	34	225-1 225-2	D1,2,3, W1,2,3 D4,5,W5	None
2642537	37	225-1 225-1 225-2 LA318-1	A1 D1,2,3,W1,2,3,P2,3 D4,5,W5,P4,L6 D1,2,3,W1,2,3	None
2642708	37	251-3 P/Diesel	WM3 PC5,6,PD5,6	None
2642709	37	LA318 LA318-3 383	A1 D4,5,6,W5,L6,C5 D1,2,3	None
2642710	37	361-2 361-2 361-3 361-4 413-2 413-3	C6 D5,6,C5,L6 D7,C7,CT7,L7 D8,C8,CT7,8 D8,L7,CT7,8,9 C10,CT8,9	None

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(Over)

Alternator Assy. Complete	Rated Output Amperes	Engine	Truck Models	Color Code
2444599	46	170 & 225-1	A1,D1,2,3,W1,2,3,P2,3	Green
		225-2	D4,5,W5,P4,L6	
		LA318-1	D1,2,3,W1,2,3	
2642851	46	251-3	WM3	Green
		P/Diesel	PC5,6,PD5,6	
2642852	46	LA318-1	A1	Green
		LA318-3	D4,5,6,W5,L6,C5	
		361-2	L6	
		383	D1,2,3,W1,2	
2098880	46	361-2	C5,6,D5,6,L6	Green
		361-3	D7,L7	
		361-4	D7,8	
		413-2	C7,8,CT7,8,9,L7,D8	
		413-3	C10,CT8,9	
2642121	60	170,225-1	A1,D1,2,3,W1,2,3,P2,3	Black
		225-2	D4,5,W5,P4,L6	
		LA318-1	D1,2,3,W1,2,3	
2642854	60	251-3	WM3	Bla.
		P/Diesel	L6	
2642680	60	LA318-1	A1	Black
		LA318-3	D4,5,6,W5,L6	
		383	D1,2,3,W1,2	
		225-2,LA318-3	S4,5,6	
		361-3		
2444898	60	361-2	D5,6,C5,6,L6	Black
		361-3	D7,C7,CT7,L7	Black
		361-4	D7,8,CT7,8,C8	
		413-2	C7,8,CT7,8,9,D8,L7	
		413-3	C8,10,CT8,9	
2444073	62	*C/Diesel	CN9,CNT9,LN10	None
		6 Cylinder	LNT10	
2875258	62	*Det Diesel	LV10,LVT10	None
		8 Cylinder		
2875370	62	C Diesel	L7	None
		V8-185		
2444077	85	C Diesel	CN9,CNT9,LN10	None
		6 Cyl.	LNT10	
2875260	85	Det Diesel	LV10,LVT10	None
		8 Cyl.		

NOTE: All alternators listed above are used with the Essex externally-adjustable regulator, P/N 2444980, except those listed below.

Alternator	Make	Regulator	Make
2444347	Prestolite	2444348	Prestolite
2642121	Chrysler	2642257	Leece-Neville (Post Office)
2444077	Delco	2444064 Reg. W/2444065 Field Relay	Delco (trans) Delco (trans)
2875260	Delco	2444064 Reg. W/2444056 Field Relay	Delco (trans)
2444073	Delco	2444064 Reg. W/2444065 Field Relay	Delco (trans)
2875258	Delco	2444064 Reg. W/2444065 Field Relay	Delco (trans)
2875370	Delco	2444064 Reg. W/2444065 Field Relay	Delco (trans)

* Standard Equipment

**Rating Identification - Color Paint Dot on End Head

Policy: Information only.

R. H. KLINE
Manager - Service
DODGE DIVISION

P-2703

Truck Service Department

Technical Service Bulletin

DATE August 25, 1967

NUMBER 67DT-16 **MODEL** LN, LNT1000

GROUP ELECTRICAL **SUBJECT** IMPROVED AIR-OPERATED WINDSHIELD WIPER MTR. KIT

SUMMARY IMPROVED AIR WIPER MOTOR KIT REPLACES WIPER MOTOR IN CURRENT USE ON HEAVY DUTY TILT CAB TRUCKS.

A new air-operated windshield wiper motor kit, P/N 2824660, has been released as a service replacement for the wiper motor in current use on Heavy Duty Tilt Cab truck models, P/N 2234338.

The windshield wiper motor kit, P/N 2824660 consists of the following items.

Part No.	Title	Quantity
2824544	Assembly - W/S Wiper Motor (Air)	1
160305	Screw - W/S Wiper Motor-to-Plate Mtg.	2
2238035	Assembly - W/S Wiper Motor-to-Plate Mtg. - Washer and Seal	2
2824081	Assembly - W/S Wiper Arm	1
2824546	Assembly - W/S Wiper Blade	1
2824547	Assembly - W/S Wiper Control Valve	1
81-685-1110	Installation Instructions	

Install the air-operated windshield wiper motor parts in accordance with instructions enclosed in the kit.

The new air-operated windshield wiper motor entered production on April 20, 1967, effective with Serial Number XXX1-737491.

P/N 2824660 is stock Class Code "D".

Policy: Information only.

R. H. KLINE
Manager - Service
DODGE DIVISION

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Truck Service Department

Technical Service Bulletin

DATE August 25, 1967

NUMBER 67DT-17 **MODEL** ALL

GROUP ELECTRICAL **SUBJECT** STARTER MOTOR IDENTIFICATION

SUMMARY STARTERS USED ON DODGE TRUCKS ARE IDENTIFIED AS TO APPLICATION.

Starting motors used on Dodge Trucks may be identified by part numbers stamped into the side of the housing. Because of apparent confusion in identifying starters in the field the following chart has been prepared which identifies these starters by model number, make, type and application.

STARTER				APPLICATION
Part No.	Make	Type	Drive	
2098500	Chrysler	4-Coil Wound	Geared	170 Cu.In.
2095150*	Chrysler	3-Coil Series Wound 1 Shunt Coil	Geared	225-1
1889100**	Chrysler	3 Series 1 Shunt Coil	Straight thru	225-2
2095296	Prestolite MDU7013	3-Coil Wound	Bendix Folo-thru	251 Cu.In.
1889100	Chrysler	3 Series 1 Shunt Coil	Straight thru	318 Cu.In. Note 1
2095296	Prestolite MDU7013	3-Coil Wound	Bendix Folo-thru	318 Cu.In. Note 2
2095753	Chrysler	3 Series 1 Shunt Coil	Straight thru	Note 3
2642692	Chrysler	3 Series 1 Shunt Coil	Straight thru	Note 4
2098879	Delco Remy 1113651	4 Coil	Coaxial	354 Cu.In.
	Delco Remy	4 Coil		Note 5

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(Over)

* D100, D200, D300, P100, P200, P300 W/LOAD FLITE

** D Models and P Models 100, 200, 300, 400, 500 W/O LOAD FLITE

Note 1. Up to Serial Number XXX1-282271 and after Serial Number XXX1-286750 on 100 and 200 models. Up to Serial Number XXX1-282272 and after XXX1-286744 on 300, 400, 500 and 600 models.

Note 2. From Serial Number XXX1-282271 thru XXX1-286750 on 100 and 200 models and from Serial Number XXX1-282272 thru XXX1-286744 on 300, 400, 500 and 600 models.

Note 3. 361 and 413 cu. in. gasoline engines up to Serial Number XXX1-660560.

Note 4. 383 cu. in. engines on 100, 200 and 300 models and on 361 and 413 cu. in. engines after Serial Number XXX1-660560.

Note 5. Delco Remy 114088 starting motor with Delco Remy 1119828 relay used on Heavy Duty Dodge Trucks equipped with Cummins Diesel engines. For service parts, refer orders directly to the nearest authorized Cummins Service Shop.

Policy: Information only.

R. H. KLINE
Manager - Service
DODGE DIVISION

P-2622

Truck Service Department

Technical Service Bulletin

DATE October 6, 1967

NUMBER 67DT-25 **MODEL** P200 Post Office Dept. Trucks (S-6)

GROUP Electrical **SUBJECT** Service Procedures for Modified Charging System

SUMMARY Modifications and Service Procedures for P200 Charging Systems are Detailed.

Reference: Technical Service Bulletin 66DT-13, dated March 24, 1967.

The charging system of Model P200 Post Office Trucks has been modified to incorporate a reverse polarity relay to protect the transistorized regulator from the effects of reverse battery polarity. This modification, shown in schematic form in Figure 1, applies to 6P200 Model trucks, USPO Registration Number Series 640000, produced under contract GS-00S-59968. Service procedures described in Technical Service Bulletin 66DT-13 apply to P200 Post Office Trucks produced previously.

Service Procedures

Preliminary Checks: The tests described below must be performed prior to alternator, regulator and relay tests. Unless otherwise noted, all tests will be performed with charging system components on the vehicle.

1. Check Battery Condition: Perform recommended battery tests to determine battery condition and state of charge. If the battery proves defective or is not fully charged, install a fully-charged battery in good condition before further tests are made.

2. Check Alternator Belt Tension and Condition: If necessary, replace the alternator drive belt and make sure that belt tension is correct.

3. Check Wiring and Connections: Check condition of wiring and electrical connections to all charging system components. Correct any discrepancies, such as loose or corroded connections, burned wiring harness and similar faults before proceeding.

Charging System Tests (on vehicle)

NOTE: Use test voltmeter rated at least 1000 ohms-per-volt for all tests.

Field Circuit Tests:

1. Check battery terminal voltage and note.

2. With truck ignition switch "OFF", ground voltmeter negative probe and touch positive probe to the NO terminal of the reverse polarity relay. The voltmeter should read zero.

   If battery voltage appears at the NO terminal of the relay with the ignition key OFF, the relay requires repair.

3. Turn the truck ignition switch "ON". Leave the negative voltmeter probe connected to ground and again touch the positive probe to the relay NO terminal. The voltmeter should now read battery voltage. If the voltmeter still reads zero, touch the voltmeter positive probe to the relay terminal connected to the ignition switch. If the voltmeter now reads battery voltage, either the relay energizing coil, the protective diode or the relay ground is at fault. Correct any discrepancies before proceeding.

4. If previous tests indicates that protective relay operation is satisfactory, leave the truck ignition "ON", the negative voltmeter probe grounded, and touch the positive voltmeter probe to the POS terminal of the Model 5016R Leece Neville Voltage Regulator. The voltmeter should read battery voltage. If it does not, check wiring between the protective relay NO terminal and the regulator POS terminal.

5. If the correct voltmeter reading was obtained at the regulator POS terminal, touch the positive voltmeter probe to the FLD terminal of the voltage regulator. The voltmeter should again read battery voltage. If it does not, the Voltage Regulator should be removed and sent to an authorized Leece Neville Service Station for test and repair.

   NOTE: The Model 5016R Voltage Regulator is transistorized and no attempt should be made to disassemble or repair it. Refer service and repair to Leece Neville.

6. Alternator Test: The alternator should be checked in the truck, using the Full Field Test Procedures outlined in the Dodge Truck Technical Service Manual. During this test, isolate the Voltage Regulator by disconnecting it at the POS and FLD terminals.

7. Voltage Regulator Setting: Reconnect the Voltage Regulator. Connect the test voltmeter negative lead to ground and the positive test probe to the Voltage Regulator POS terminal. Start the engine and run at idle speed. Allow the engine to reach full operating temperature before checks begin. At idle, the voltmeter reading should be approximately battery terminal voltage. Increase engine speed to about 1200 RPM. As the engine is speeded up, the voltmeter reading should increase until it reads between 13.8 and 14.2 volts. If the voltmeter reading does not fall within these limits after it is stabilized, check to see that no electrical loads are switched on. If not, the Voltage Regulator must be adjusted.

8. Voltage Regulator Adjustment: Remove plug cover from Voltage Regulator adjusting screw. If stable voltage output is less than 13.8 volts, turn adjusting screw clockwise to increase output. If output voltage is greater than 14.2 volts turn adjusting screw counter-clockwise to reduce output.

NOTE: There may be instances where the specified regulator setting (14.0 $\pm$ 0.2 volts) may fail to meet battery requirements. If indications show that the specified setting consistently results in battery overcharge, as evidenced by abnormal loss of battery water, reduce the Voltage Regulator setting by 0.4 to 0.5 volts. The Voltage Regulator setting may be increased by 0.4 to 0.5 volts if the battery is not consistently kept between three/quarters charge and full charge.

However, if such adjustments are required it might be well to check out the battery thoroughly since a normal battery in good condition should be kept charged with the Voltage Regulator adjusted to the specified setting.

Policy: Information only.

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Manager - Service
DODGE DIVISION

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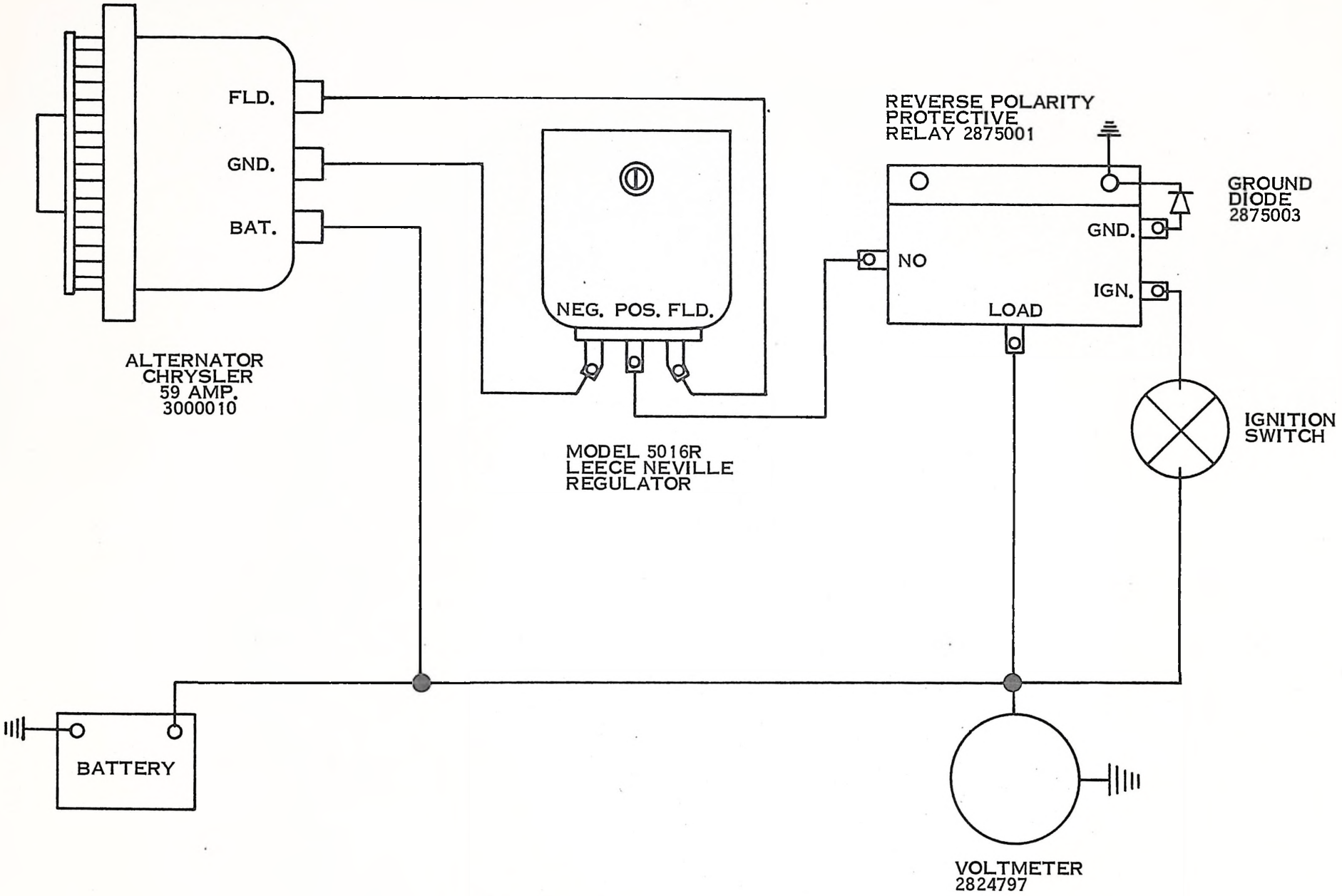

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FIG. 1 SIMPLIFIED SCHEMATIC
USPO 640000 SERIES
P200 CHARGING SYSTEM

Truck Service Department

Technical Service Bulletin

DATE November 10, 1967

NUMBER 67DT-40 MODEL ALL MODELS SO EQUIPPED

GROUP ELECTRICAL SUBJECT SPEEDOMETER & TACHOMETER REPLACEMENT

SUMMARY AN IMPROVED SPEEDOMETER & TACHOMETER HAS BEEN RELEASED FOR PRODUCTION AND SERVICE.

An improved truck speedometer and mechanical tachometer entered production approximately April 1, 1967 and are available through the Parts Division. These new instruments have a more durable magnetic shaft bearing of sintered bronze.

If you should receive complaints of speedometer or tachometer failures, replacement should be made using the improved instrument.

Speedometer	Stock Class Code
2906063	"S" 1
1936997	"S" 1
2906000	"S" 1

Tachometer	Stock Class Code
1936999	"T" 1
1937001	"T" 1
2234135	"T" 1
2234322	"T" 1

To identify the new assemblies, refer to the manufacturers date code located on the instrument barrel. In reading the date code, consider the last two "call outs" in the serial number sequence only.

EXAMPLE 360-GL6

1. The first four digits (360-G) are the vendor part number and identify the part.
2. The last two digits (L6) identify the year and month of production, in this case it was built in June 1967.

Use only parts dated L4 or after for replacement.

Policy: Information only.

R. H. KLINE
Manager-Service
DODGE DIVISION

P-3532

Truck Service Department

Technical Service Bulletin

DATE January 5, 1968

NUMBER 67DT-51 **MODEL** ALL EQUIPPED WITH HEATER SWITCH P/N 2232084

GROUP ELECTRICAL **SUBJECT** HEATER SWITCH FAILURE

SUMMARY SWITCH MODIFICATION MINIMIZES SWITCH FAILURE

The push-pull truck heater blower switch (P/N 2232084) has proven to be subject to early failure because of extreme heat radiation by the resistor. The closeness of the resistor to the switch assembly proper causes terminal failure because of heat transfer.

If failure of the push-pull heater blower switch occurs, the replacement switch assembly (P/N 2232084) should be ordered but reworked before installation in accordance with the procedure below:

Switch rework is simple, fast, and effective. The entire operation is detailed in Figure 1 and involves only the insertion of an asbestos heat shield, 1 1/2" X 1" from 3/32" to 1/8" thick, between the high wattage resistor and the switch body. Refer to Figure 1.

1. Bend spade connector down.
2. Insert asbestos heat shield.
3. Bend spade connector up.

The asbestos, commonly marketed as Johns-Mansville "Flexiboard" is readily available locally.

Policy: When switch is replaced under warranty, submit W.R.O. in usual manner for reimbursement. Flat rate time: A-100 models 0.6 hr. All other models 0.4 hr.

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DODGE DIVISION

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(Over)

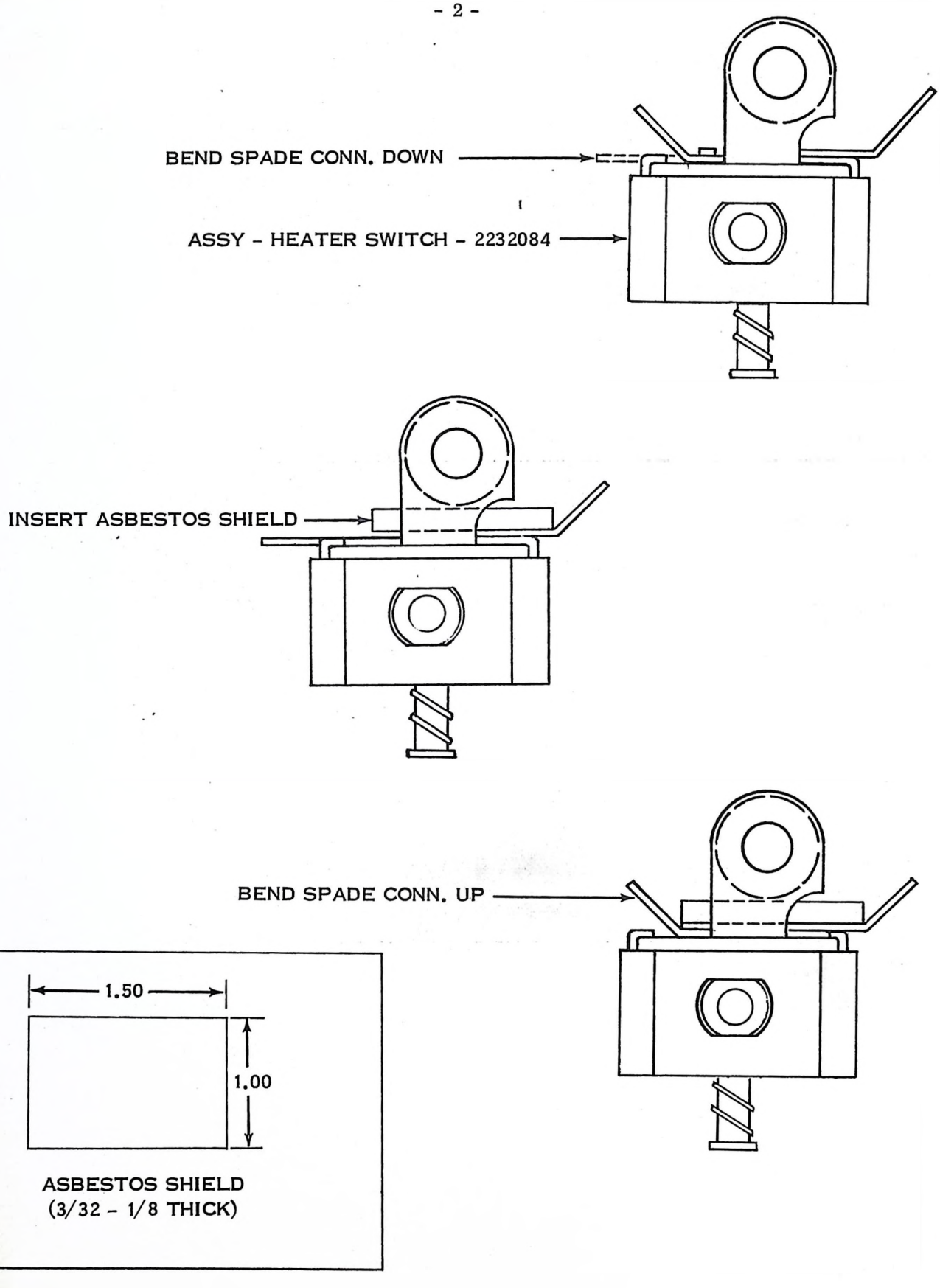

FIGURE 1. HEATER SWITCH REWORK