

CONTACTORS, KS-15514

1.001 This addendum supplements Section A401.579, Issue 2.

1.002 This addendum is reissued to change the list of materials, to add information regarding the use of petroleum spirits, to change the maximum permissible temperature of the coils, and to refer to the use of Oilite bearings on certain capacities of contactors.

2. REQUIREMENTS

The following changes apply to Part 2 of the section:

- (a) 2.05 - revised
- (b) 2.09 - revised

2.05 Contact Gap

(a) The stationary auxiliary contacts shall be adjusted to break when the plunger is at the distance from its top position shown in the table below:

Ampere Capacity	Distance From Top Position
30, 75, and 100	7/32 inches
150	9/32 inches
200 and 300	11/32 inches
600	15/32 inches

Use scale and 81A test set.

*#2.09 Temperatures: The temperatures shall not exceed:

	Maximum
Coils and Contacts	105C (221F)

If the temperature is thought to be excessive, measure with the thermometer.

3. ADJUSTING PROCEDURES

The following changes apply to Part 3 of the section:

- (a) 3.001 - revised
- (b) 3.003 - added
- (c) 3.07(3) - revised
- (d) 3.08(1) - revised

3.001 Additional Materials

Cloth, cleaning, KS-14666 (or the replaced D-98063)

3.003 When using petroleum spirits for cleaning purposes in the power room,

provide as much ventilation as practicable. After using the petroleum spirits, the commutators of all dc machines in the power room should be burnished, in accordance with approved procedures for the machines involved, since the fumes from the petroleum spirits may soften commutator film and thus adversely affect commutation.

3.07 Operating Mechanism (Rq 2.07)

(3) If poor operation is traced to the ball bearings (see note) which support the shaft carrying the main movable contact arms, remove the caps which cover them. Pick away old grease with the orange stick and wipe with a cleaning cloth. Apply one or two drops of light mineral oil and operate the contactor several times to assist the oil to work its way into the bearing. Apply grease, filling the space between the inner and outer ball races nearly full. Replace the caps.

Note: The shafts carrying the main movable contact arms of later models of the 30-, 75-, and 100-ampere contactors are equipped with Oilite bearings and do not require lubrication.

3.08 Electrical Requirements (Rq 2.08)

(1) When checking for the electrical requirements, the contactor should be disconnected from the working circuit. This can usually be accomplished by operating a switch. Disconnect and tape the leads at terminals B3, B4, A3, and A4. Set up the checking circuit shown in Fig. 3, using wire of the size specified below. The operating coil is designed for momentary duty only and for that reason the contactor should not be operated more often than once per minute.

Capacity of Contactor Amperes	Wire Size Minimum
30, 75, and 100	No. 14
150	No. 12
200, 300, and 600	No. 8

Use the engine-alternator under manual control as the source of voltage. If the contactor fails to operate as required, recheck the auxiliary contacts in 2.02, 2.03, 2.05, and 2.06. Check 2.07.