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SERVICE BULLETIN

SUPERSEDE
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SUBJECT:
AUXILIARY RELAYS FOR 32MP CONTROLLERS

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PURPOSE

To advise of the proper selection of relays for use with the 32MP controller.

MACHINES AFFECTED

All 17/19 series machines with 32MP controls

FINDINGS

When selecting relays for use with the 32MP, there are some important considerations to keep in mind.

1) Size the relay coil correctly. The solid state switches on the Input/Output board on the microprocessor have a small leakage current even when the output is turned off. As a result, digital voltmeters can read up to full voltage with the output off though the actual amperage is very small. It is important to use a relay with a large enough impedance so that the coil is not energized constantly. For example, usually the micro-sized relays will not work correctly with the 32MP because it takes only a small current to energize the coil. Relays should have a minimum coil VA of 2.0.

2) Size the relay contacts correctly. The contact electrical rating must be higher than the requirements of the load being energized. On the 32MP Retrofit Kit, we recommend an auxiliary relay (part number HN61KL616) for pilot duty to pull in a pump starter relay. The electrical rating for the contacts on this relay is only about three amps @ 250 volts, NOT sufficient for power duty. The contact ratings are always visible on the relay itself. It should NOT be used for a purge relay (known as K1 on wiring diagrams) or to start other motors. If used for this purpose, the relay contacts could weld in the closed position and problems can result. A suitable relay, in the case of the purge, is part number HN61KK912 which has two sets of contacts, both rated for 15 amps @ 277 volts. Chart 1 below lists Replacement Component Division relays with the coil and contact ratings.

CHART 1

Part Number	Coil Volts	Coil Sealed VA	Contact AMPS	Contact Volts	HP
HN61KL616	120v	3.3	3 amps	@ 250v	1/10
HN61KK912	120v	9.5	15 amps	@ 277v	1/2

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