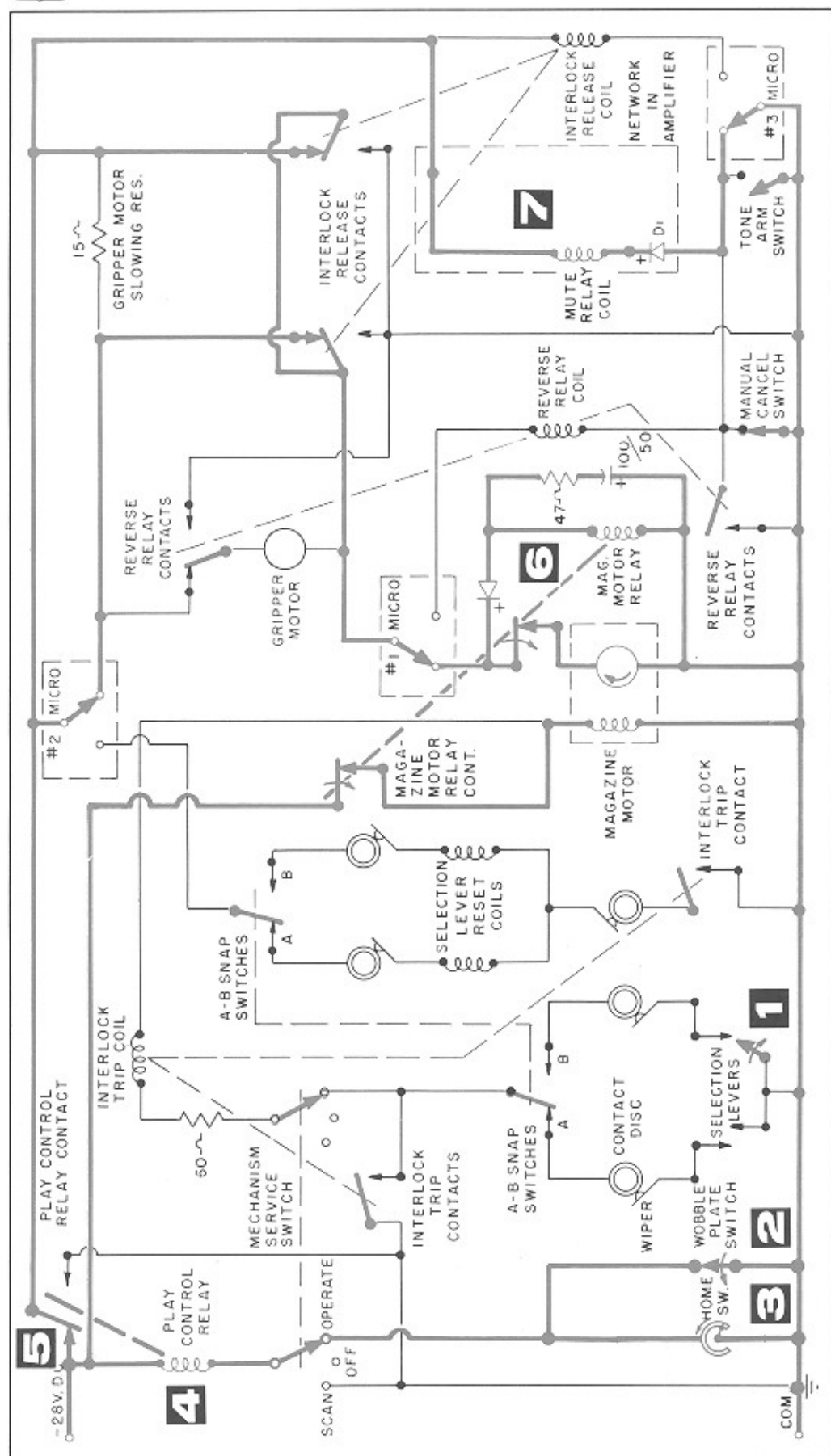


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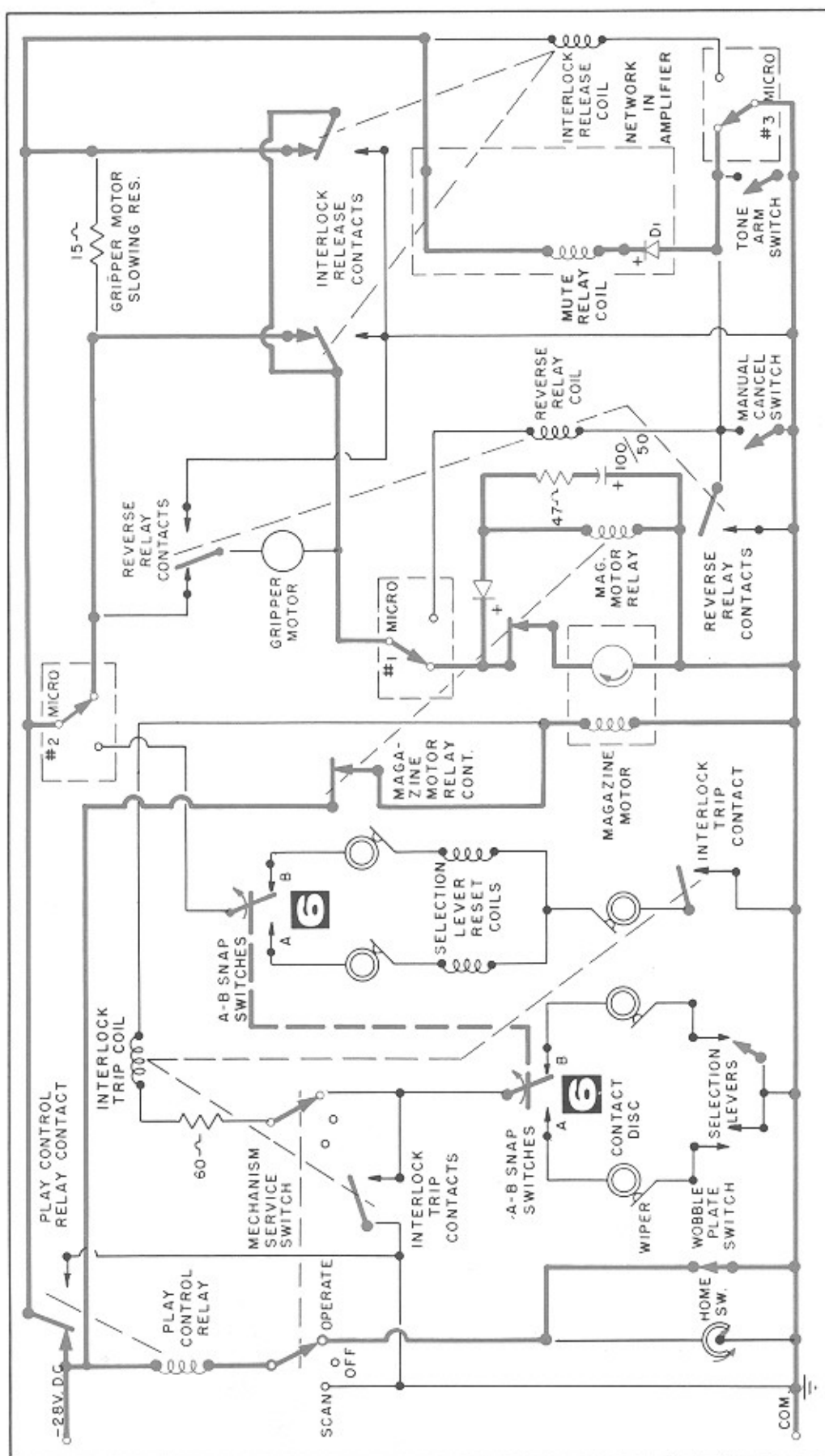


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SEQUENCE NO. 2 • SELECTION REGISTERED

Tripping of any SELECTION LEVER (1) to the play position completes a circuit to the PLAY CONTROL RELAY (4) via the WOBBLE PLATE SWITCH (2). Relay operates, starting the AMPLIFIER and TURNABLE MOTOR (circuit not shown) and contact (5) closes circuits to the MAGAZINE MOTOR

RELAY (6) and MUTE RELAY (7). The MAGAZINE MOTOR RELAY operates thereby closing circuits to the MAGAZINE MOTOR field and armature coils. Magazine begins to rotate; HOME SWITCH (3) closes.

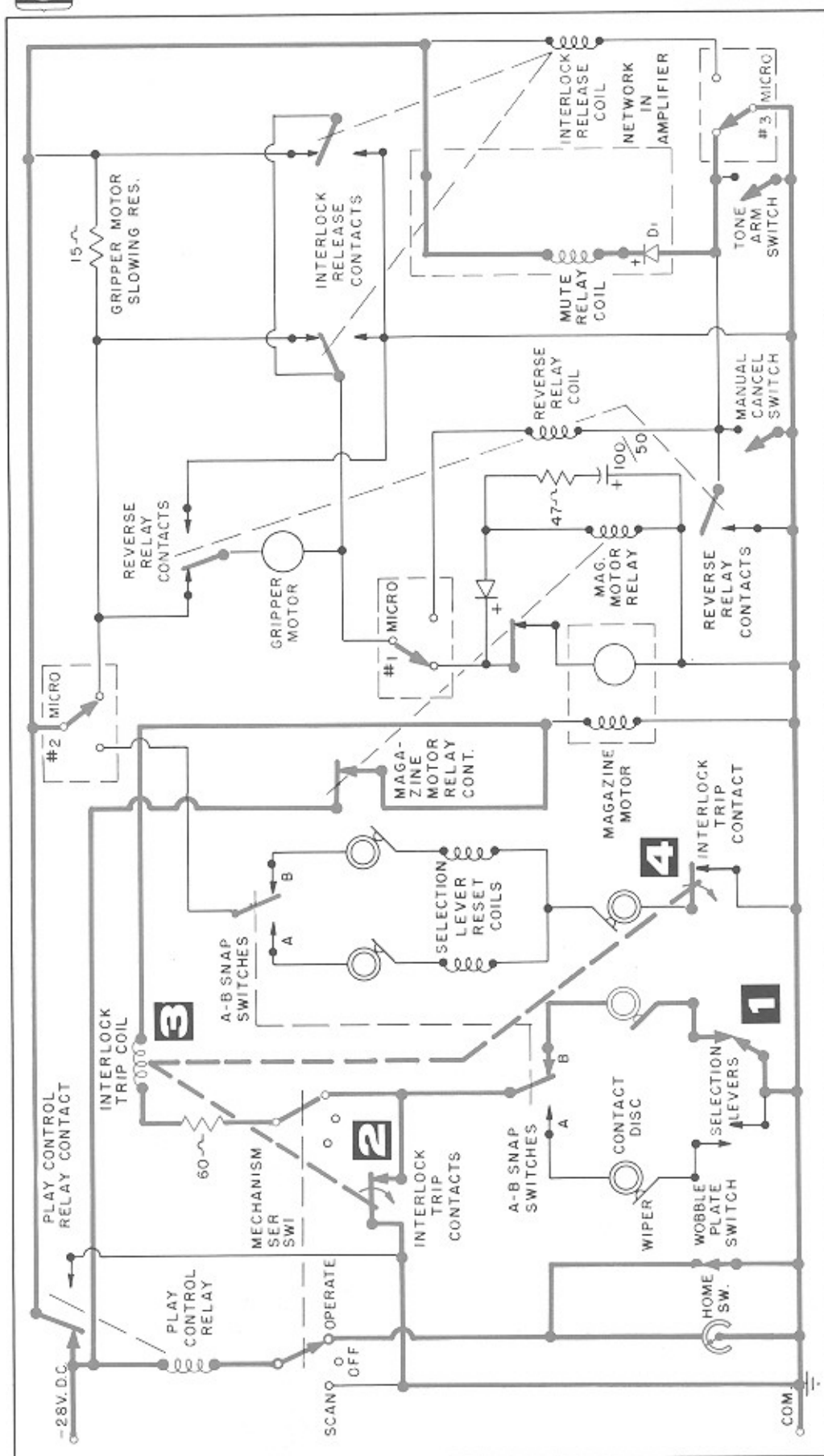


SEQUENCE NO. 3 • A-B SNAP SWITCHES OPERATE

SSNAP SWITCHES then connect circuits for the B selections (6), through a mechanical action that is caused by the cycling of the RECORD MAGAZINE.

Depending on the last "homed" position of the Magazine, the A-B SNAP SWITCHES will select either the A or B side of the record depending upon which comes up first. As the MAGAZINE cycles and fails to locate an A side selection, the

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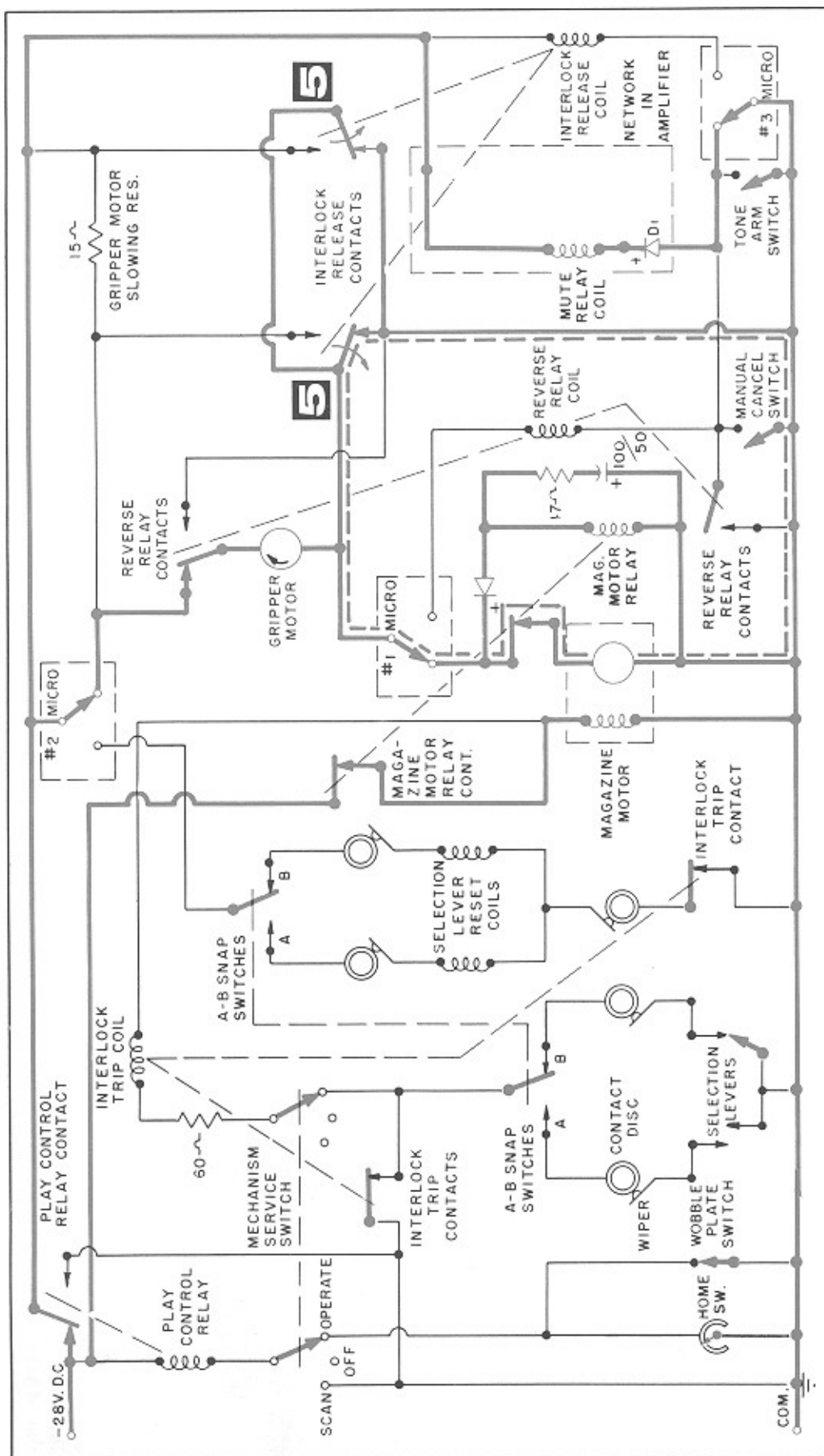


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SEQUENCE NO. 4 - CARRIAGE TRIPS INTERLOCK RELAY

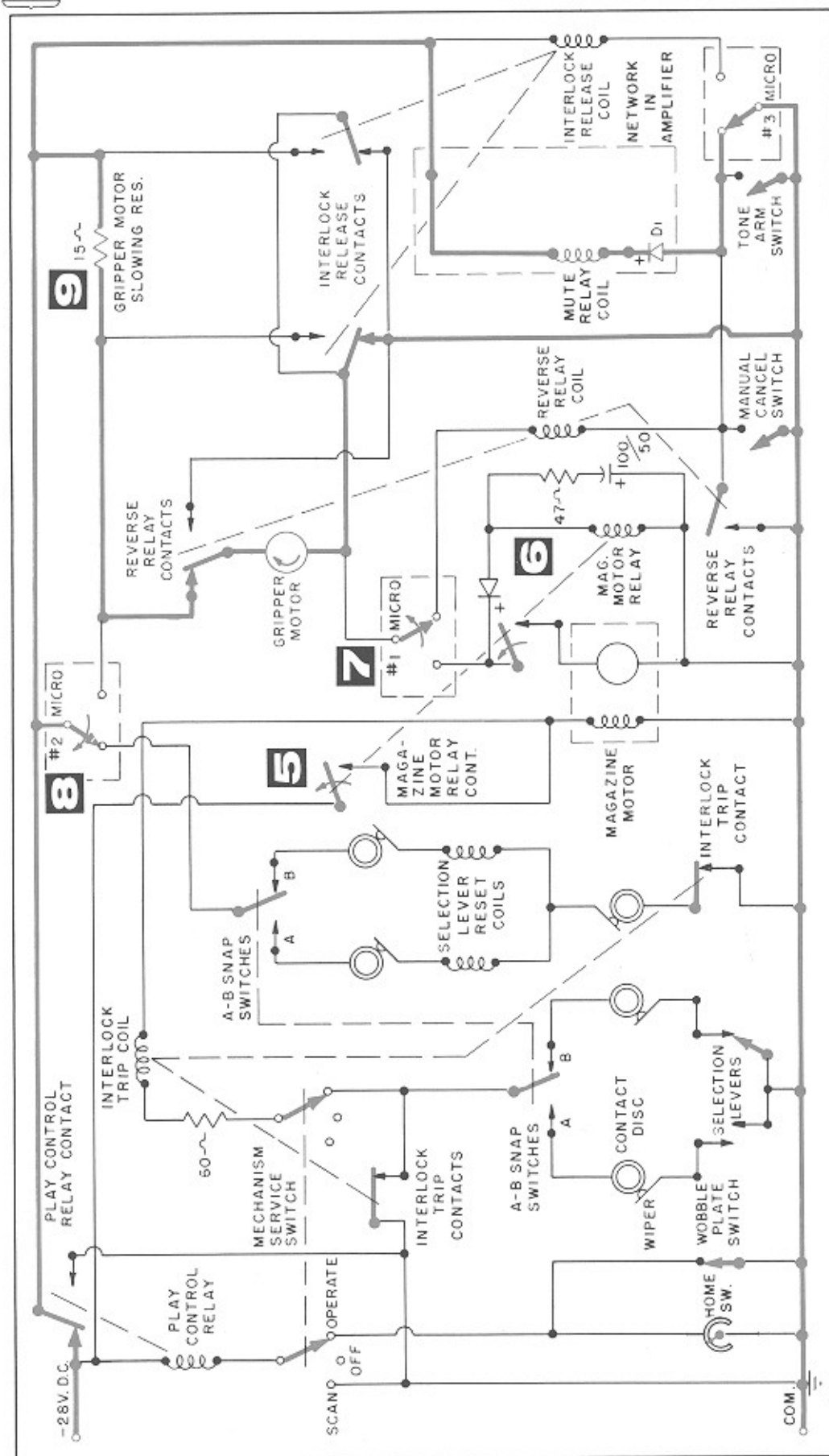
The proper A-B circuits now established, the CARRIAGE INDEXING CONTACT strikes the SELECTION LEVER (1), thereby completing the circuit to the INTERLOCK "TRIP" COIL (3). The INTERLOCK operates, closing contacts (2)

and (4). Contact (2) provides a holding circuit to the INTERLOCK "TRIP" COIL, and contact (4) makes a connection to the SELECTION LEVER RESET COILS for use in a later sequence.



SEQUENCE NO. 5 • RECORD INDEXED

the parallel R-C NETWORK; the rectifier blocks the discharge current from flowing through the short circuit path. A circuit is simultaneously completed to the GRIPPER MOTOR through contact (5), causing it to engage the indexed record.

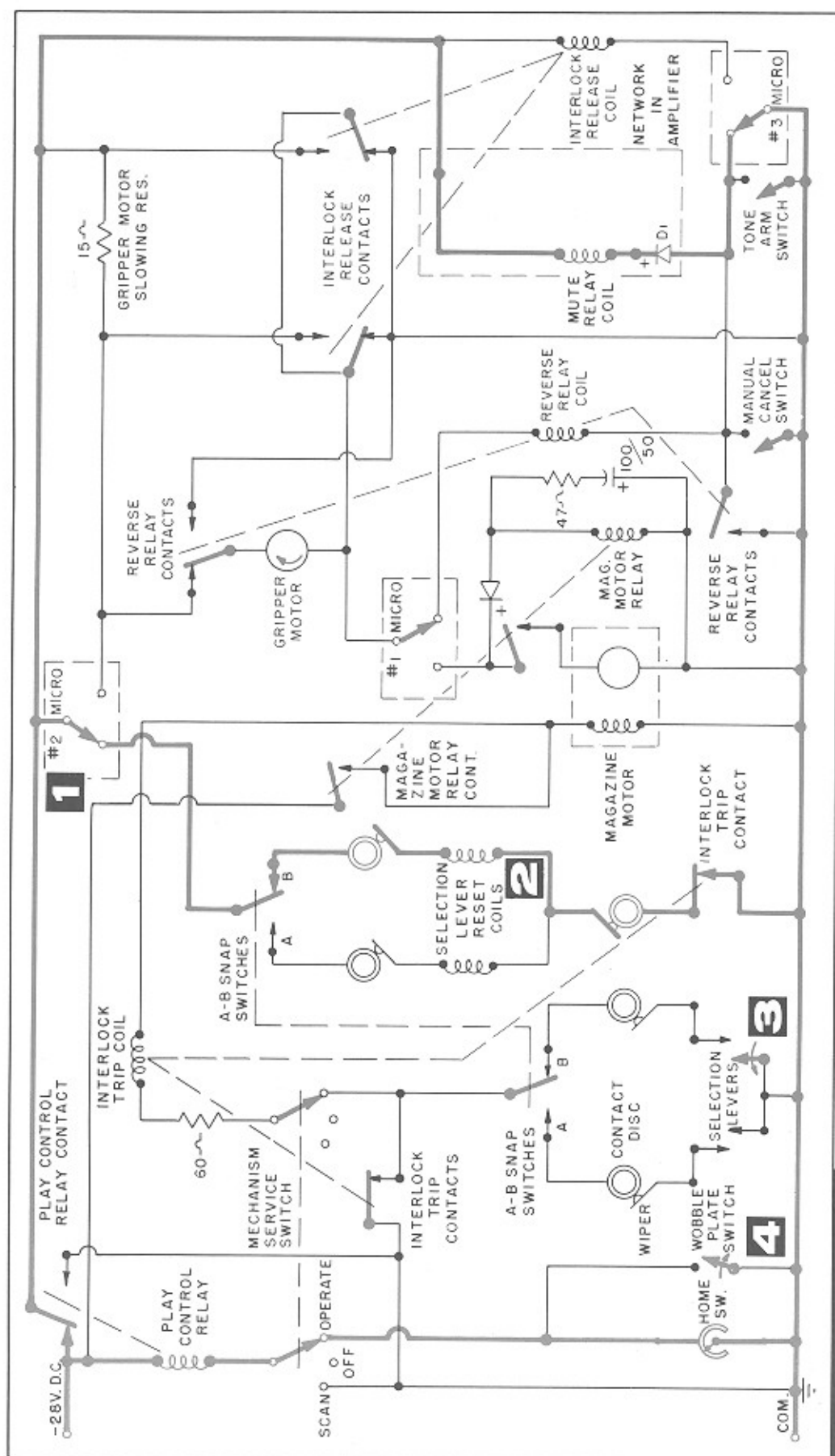


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SEQUENCE NO. 6 • CAM SHAFT ROTATES—MICRO SWITCH No. 1 and No. 2 TRANSFER

Prior to the gripper jaws engaging the record, the MICRO SWITCH CAM CLUSTER operates the NO.1 MICRO SWITCH (7) thereby disconnecting the MAGAZINE MOTOR RELAY coil and its R-C network. Shortly thereafter, the discharge current through the relay coil (6) is so small to keep the relay coil energized; Contact (5) opens thereby disconnecting the MAGAZINE MOTOR field coil.

The GRIPPER MOTOR continues to operate and places the record on the TURNABLE. At this point, the NO.2 MICRO SWITCH (8) operates allowing the GRIPPER MOTOR circuit to be completed through the 15 OHM RESISTOR (9) thereby slowing the speed of the motor.

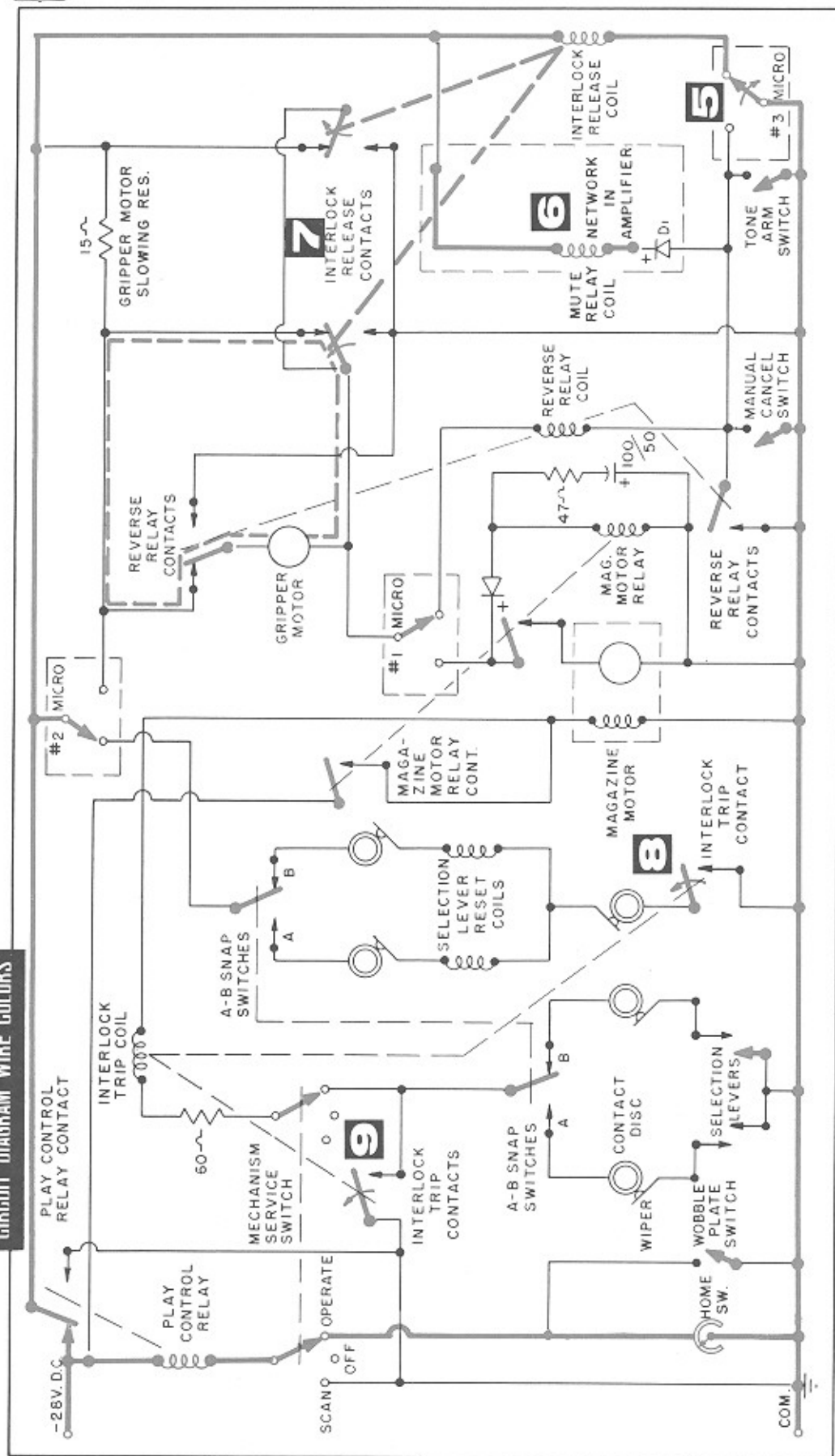


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SEQUENCE NO. 7 • SELECTION LEVER RESET

The NO.2 MICRO SWITCH (1) now transferred, completes a circuit to the SELECTION LEVER RESET COIL (2) which causes a lever to reset the selector lever to its normal position (3). If no other selections are registered, the WOBBLE

PLATE SWITCH (4) returns to OFF position. The PLAY CONTROL RELAY is now held in by the mechanism HOME SWITCH.

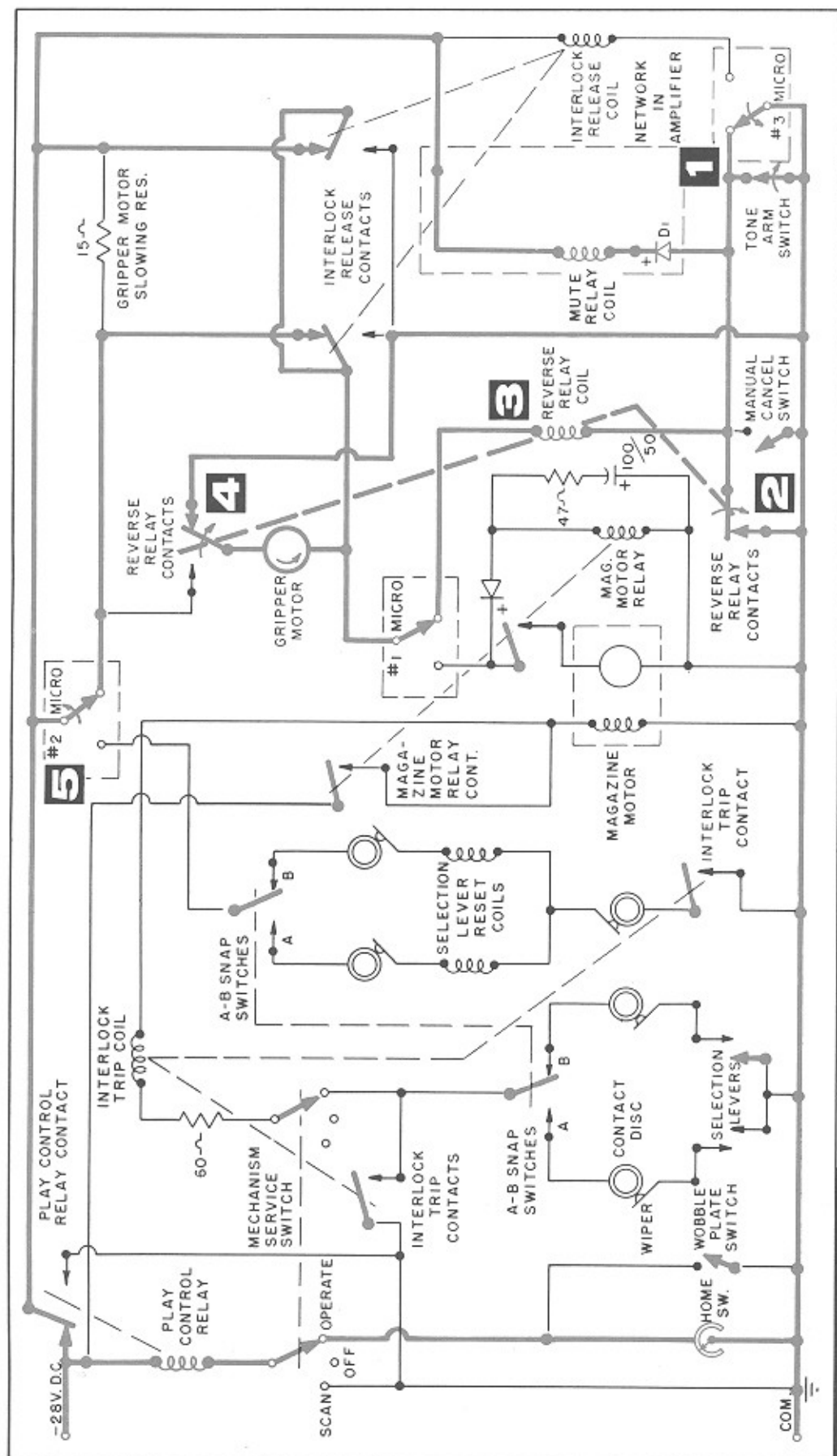


SEQUENCE NO. 8 • RECORD TRANSFER CYCLE COMPLETED—GRIPPER MOTOR STOPS

Continued operation of the GRIPPER MOTOR opens the grip arm jaws, and allows the TONE ARM to be placed on the record. At this point the NO.3 MICRO SWITCH (5) is operated completing a circuit to the INTERLOCK "RELEASE" COIL. The energized release coil armature transfers contact (7) to their original position. This places a short circuit across the GRIPPER MOTOR, dynamically braking it and stopping the grip mechanism. As the INTERLOCK "RELEASE" ARMATURE completes its stroke, the INTERLOCK "TRIP" ARMATURE relaxes, opening contacts (8) and (9).

The opening of contact (8) breaks the circuit to the SELECTION LEVER RESET COIL.

The resistor-capacitor network across the MUTE RELAY COIL at (6), keeps the coil energized for a short time even though the circuit is disconnected at (5). This additional time delay mutes the amplifier during the TONE ARM sit down and entry into the first record groove, thus eliminating undesirable noises.

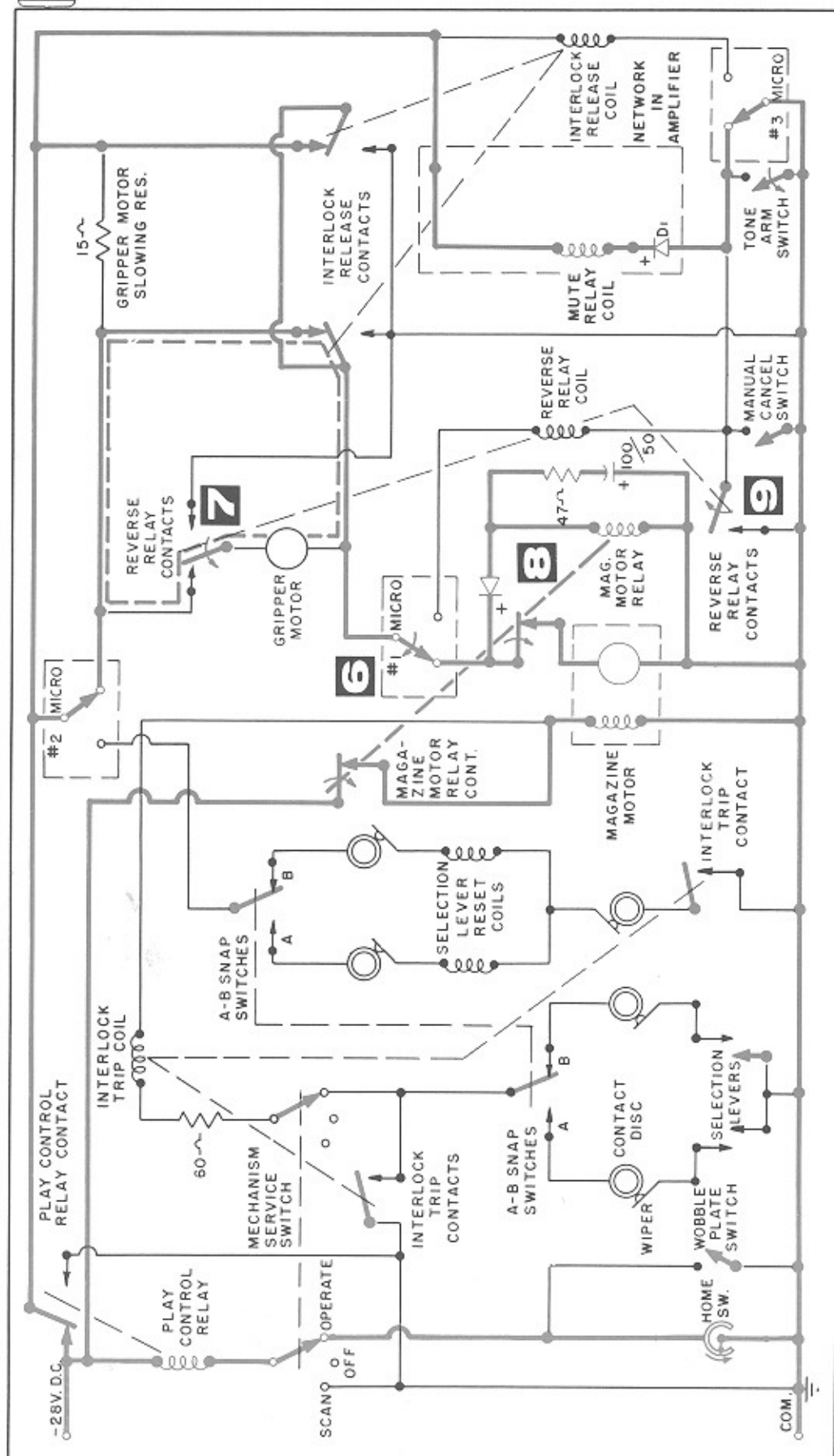


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SEQUENCE NO. 9 • MUSIC CYCLE ENDED

As record play is ended, the tone arm moves into the cutoff groove and operates the TONE ARM SWITCH (1). This completes circuits to the AMPLIFIER MUTE RELAY, and to the REVERSE RELAY COIL (3). This serves to close contact (2) and transfer contact (4). Contact (2) serves as a locking circuit for the REVERSE RELAY COIL, contact (4) completes the gripper motor circuit in such a manner that its direction

of rotation is reversed, closing the grip jaws on the record. At this point, NO.3 MICRO SWITCH is operated, closing a holding circuit to the REVERSE RELAY COIL in parallel with the locking contact (2). As the gripper proceeds to return the record to the magazine, NO.2 MICRO SWITCH (5) is operated by the MICRO SWITCH CAM CLUSTER.

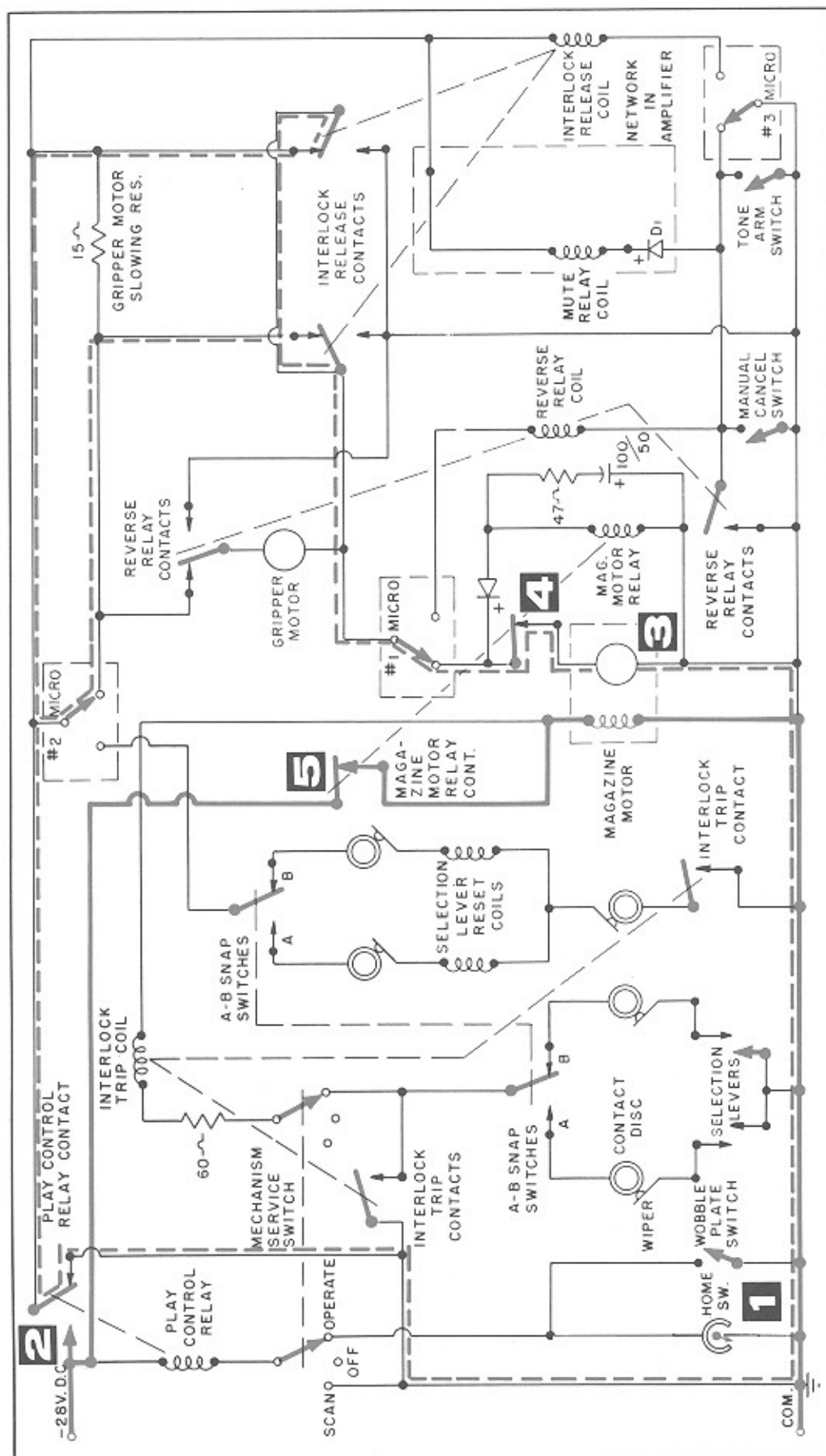


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SEQUENCE NO. 10 - RECORD RETURNED TO THE MAGAZINE

As the grip jaws begin to release the record into the magazine, the continued operation of the cam shaft operates the NO.1 MICRO SWITCH at (6). This opens the circuit to the REVERSE RELAY COIL, transferring contact (7) and causes REVERSE RELAY CONTACT (9) to relax. The transferring

of contact (7) places a short circuit on the gripper motor (dotted lines). Simultaneously, a circuit is completed to the MAGAZINE MOTOR RELAY (8), which closes its contacts, thereby completing MAGAZINE MOTOR field and armature, which causes the record magazine to begin rotating.



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SEQUENCE NO. 11 - SCAN CYCLE COMPLETED

The rotation of the magazine is completed when the "Home" wiper (1) on the printed circuit disc enters the ring opening. This breaks the circuit to the PLAY CONTROL RELAY which opens the AMPLIFIER and TURNABLE circuits and transfers contact (2). This results in a short circuit across the MAGAZINE MOTOR armature (3) and dynamically brakes the magazine, thus bringing it to a

quick stop. Note that the MAGAZINE MOTOR RELAY CONTACTS (4) and (5) remain closed due to the discharge current from the R-C network through the relay coil. After a short interval (1/3 second), this current becomes too small to hold in the relay which relaxes and interrupts the MAGAZINE MOTOR field coil thru the opening of contact (5). This completes the mechanism cycle.