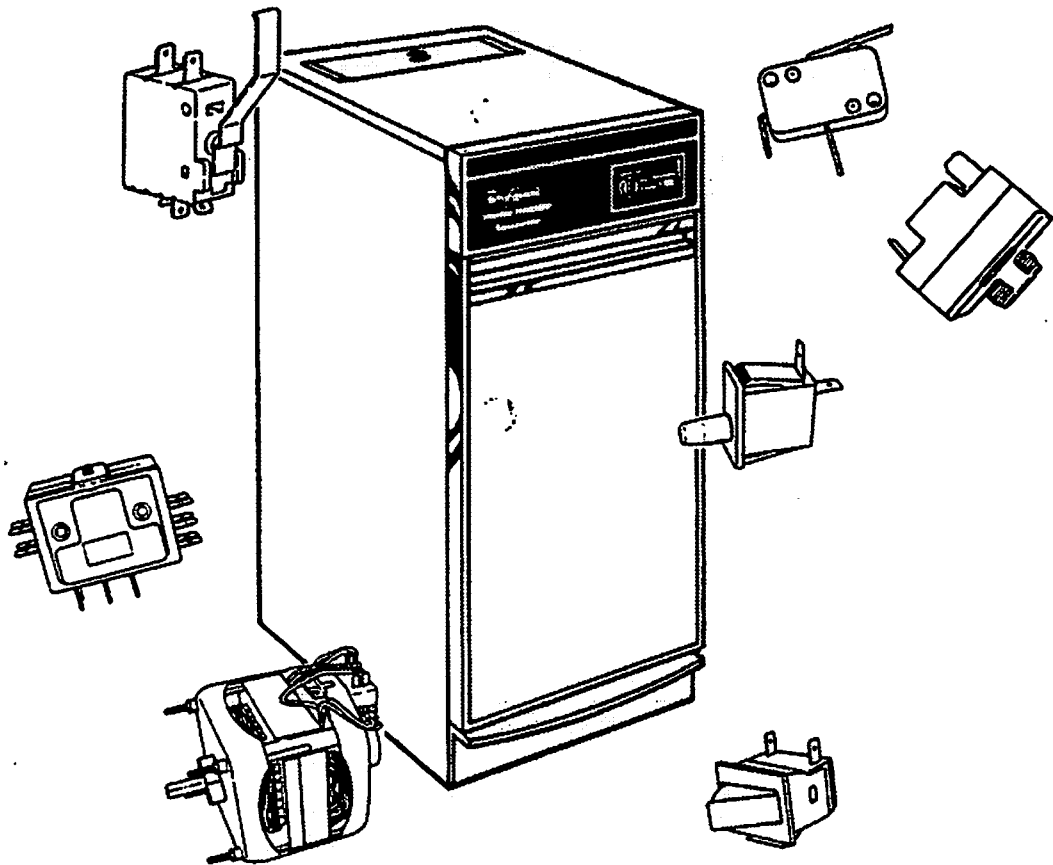


DISHWASHER & COMPACTOR

STUDY COURSE

UNDERSTANDING COMPACTOR:

- ELECTRICAL COMPONENTS and CHECKING PROCEDURES

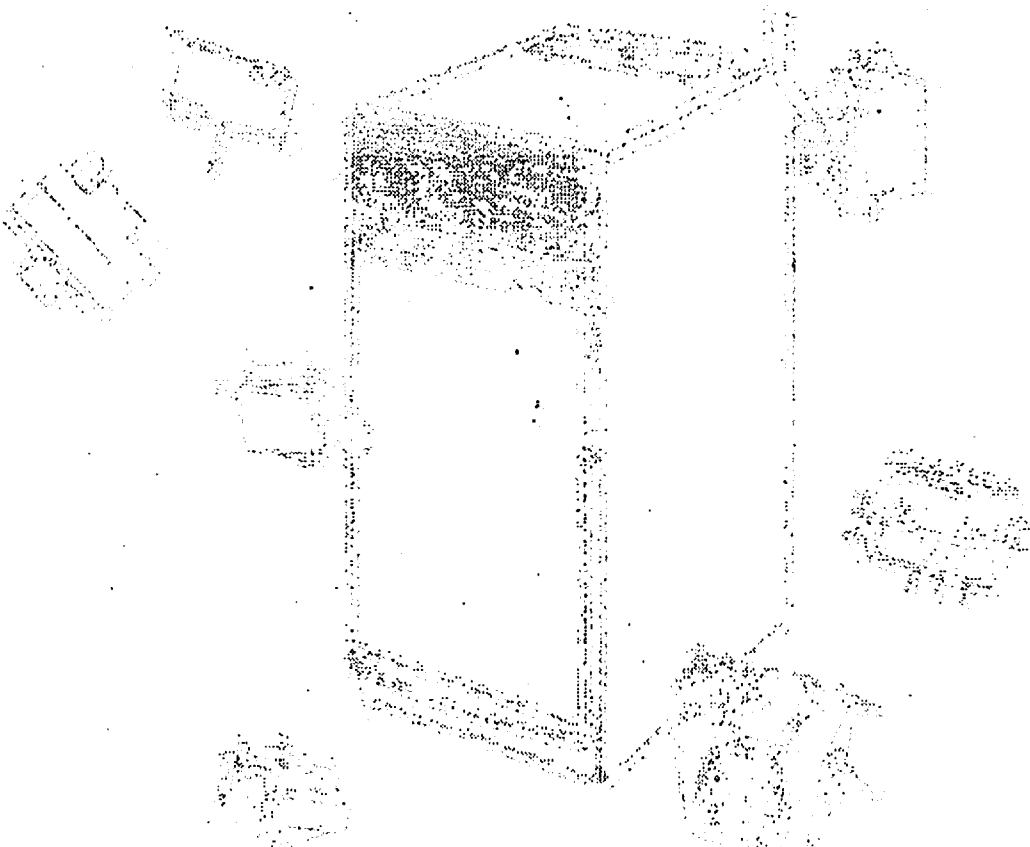


MODULE 5

LIT4314193

REPAIR PARTS

FOR THE REPAIR OF THE
MOTOR VEHICLE
ELECTRICAL SYSTEM



INTRODUCTION

The material presented in this module is intended to provide you with an understanding of the fundamentals of dishwasher and trash masher® compactor servicing.

Major appliances have become more sophisticated, taking them out of the screwdriver and pliers category. Their electrical circuits include several different types of automatic controls, switches, heaters, valves, etc.. Semiconductors, solid-state controls, and other components usually associated with radio and television electronic circuits are being engineered into automatic washers, dryers, dishwashers and refrigerators.

The appliance technician is emerging into a professional status of his own. He must prepare himself now to be able to perform his duties today as well as to retain his professionalism in the future.

No longer is on-the-job training sufficient to prepare technicians for the complicated procedures required for today's sophisticated appliances. This training can best be obtained through organized classroom study and application. However, much of the knowledge necessary to service today's appliances can be obtained through study courses. Completion of this and other courses will provide you with sufficient understanding of appliances and their operation to enable you to do minor service. It will also serve as a valuable stepping stone to more advanced study and on-the-job training to improve your servicing skills.

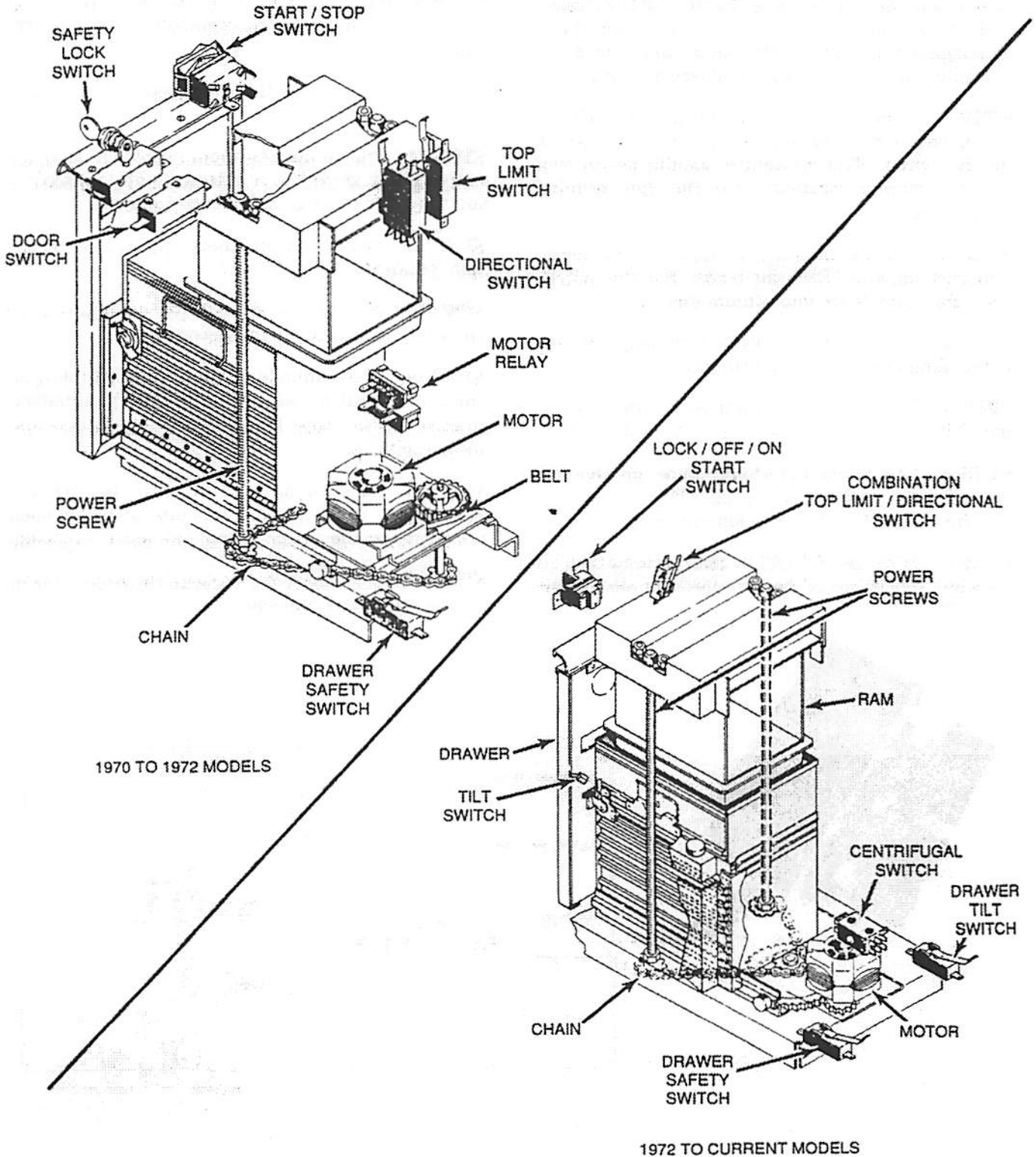
Information contained in this module is used on WHIRLPOOL® appliances.

TABLE of CONTENTS

| | PAGE |
|--|---------------------------------|
| CHAPTER 1 | 3 |
| ELECTRICAL COMPONENTS | |
| *TEST | See Test Book LIT4314204 |
| *NOTE: | |
| <i>We recommend taking the TEST for MODULE 5, right after studying it.</i> | |

CHAPTER 1

ELECTRICAL COMPONENTS



PUSHBUTTON SWITCH

This switch, located on the console escutcheon, is used to start and stop the compactor.

CHECKING PROCEDURE

Obtain a properly working ohmmeter from your local store. We will be doing RESISTANCE checks. This is the safest way because the compactor is unplugged from the power source and avoids the possibility of you receiving an electrical shock.

STEP 1 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the switch. This procedure should assure that the right wire is reconnected to the right terminal after checking or replacement.

STEP 2 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter. See the instructions that came with your ohmmeter.

STEP 3 With the STOP button pressed, touch one of the ohmmeter probes to terminal P.

STEP 4 Touch the other ohmmeter probe to terminal V.

STEP 5 The ohmmeter should show an open circuit with the pushbutton in the STOP position. If not, the switch is bad and needs replacing.

STEP 6 With the START button pressed (not all the way), touch one of the ohmmeter probes to terminal P.

STEP 7 Touch the other ohmmeter probe to terminal V.

STEP 8 The ohmmeter should show ZERO resistance (continuity) with the START pushbutton slightly pressed. If not, the switch is bad and needs replacing.

STEP 9 With the START button pressed (not all the way), touch one of the ohmmeter probes to terminal P.

STEP 10 Touch the other ohmmeter probe to terminal Y.

STEP 11 The ohmmeter should show an open circuit with the START pushbutton slightly pressed. If not, the switch is bad and needs replacing.

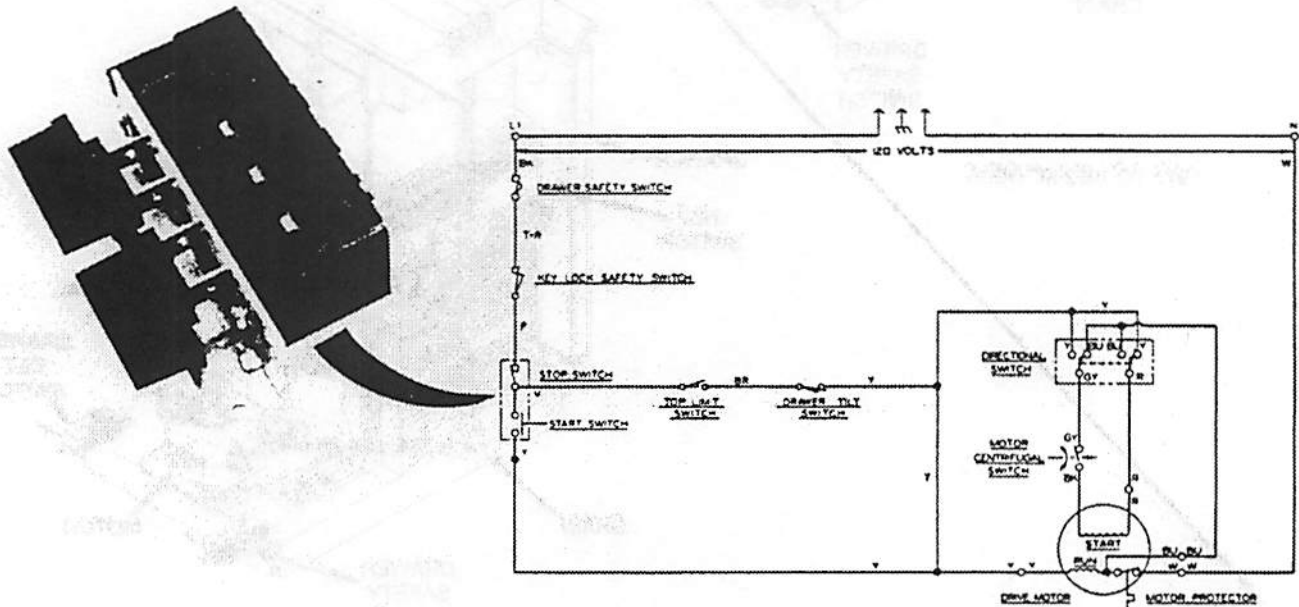
STEP 12 Leave the ohmmeter probes on terminals P and Y.

STEP 13 Now press the START pushbutton all the way in and hold for two seconds.

STEP 14 The ohmmeter should show ZERO resistance (continuity) with the START pushbutton pressed all the way. If not, the switch is bad and needs replacing.

STEP 15 As soon as you let go of the START pushbutton, the ohmmeter should show an open circuit. If not, the switch is bad and needs replacing.

STEP 16 Reconnect the wires to the proper terminals as previously marked.



LOCK & KEY SWITCH

This switch located on the console turns the compactor ON or OFF when the key is turned. Earlier models, the lock (key) switch was separate from the start/stop switch, Now its all in one, that is; you have the Lock, Off, On and Start in one switch.

CHECKING PROCEDURE

Obtain a properly working ohmmeter from your local store. We will be doing RESISTANCE checks. This is the safest way because the compactor is unplugged from the power source and avoids the possibility of you receiving an electrical shock.

STEP 1 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the switch. This procedure should assure that the right wire is reconnected to the right terminal after checking or replacement.

STEP 2 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter. See the instructions that came with your ohmmeter.

STEP 3 With the key lock in the OFF position, touch one of the ohmmeter probes to one of the terminals.

STEP 4 Touch the other ohmmeter probe to the other terminal.

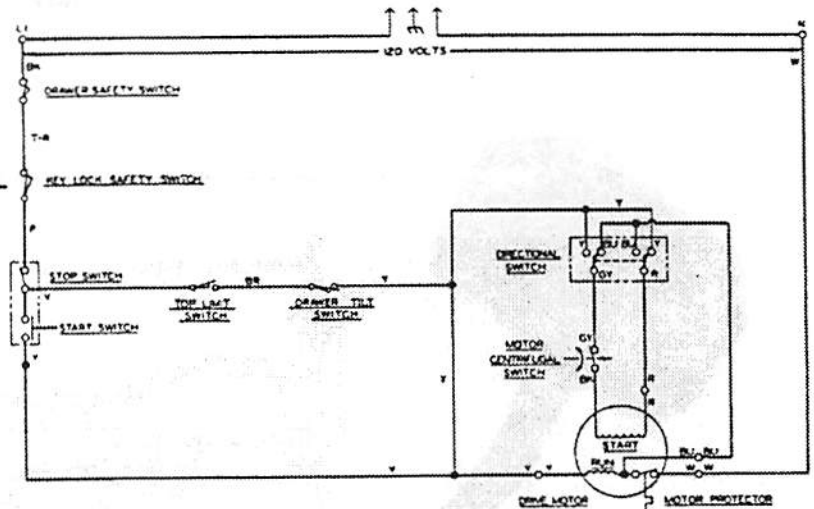
STEP 5 The ohmmeter should show an open circuit with the key lock in the OFF position. If not, the switch is bad and needs replacing.

STEP 6 With the key lock in the ON position, touch one of the ohmmeter probes to one of the terminals.

STEP 7 Touch the other ohmmeter probe to the other terminal.

STEP 8 The ohmmeter should show ZERO resistance (continuity) with the key lock in the ON position, If not, the switch is bad and needs replacing.

STEP 9 Reconnect the wires to the proper terminals as previously marked.



DENSE PACK SWITCH

This rocker type switch, located in the console, causes the ram to put constant pressure on trash keeping it from springing back.

This ram will stay in the down position. Remember, the drawer can not be opened with the ram down.

To raise the ram, either turn the key knob to START or move the cycle selector back to the NORMAL position.

CHECKING PROCEDURE

Obtain a properly working ohmmeter from your local store. We will be doing RESISTANCE checks. This is the safest way because the compactor is unplugged from the power source and avoids the possibility of you receiving an electrical shock.

STEP 1 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the switch. This procedure should assure that the right wire is reconnected to the right terminal after checking or replacement.

STEP 2 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter. See the instructions that came with your ohmmeter.

STEP 3 Push-in on the rocker switch so the dense switch is ON (red showing).

STEP 4 Touch one ohmmeter probe to terminal O/B or O-BK (1).

STEP 5 Touch the other ohmmeter probe to terminal O (2).

STEP 6 The ohmmeter should show ZERO resistance (continuity). If not, the switch is bad and needs replacing.

STEP 7 There should be an open circuit between O (2) and Y (3) and between Y (3) and O/B or O-BK (1).

STEP 8 Push-in on the rocker switch so the dense switch is OFF (red not shown).

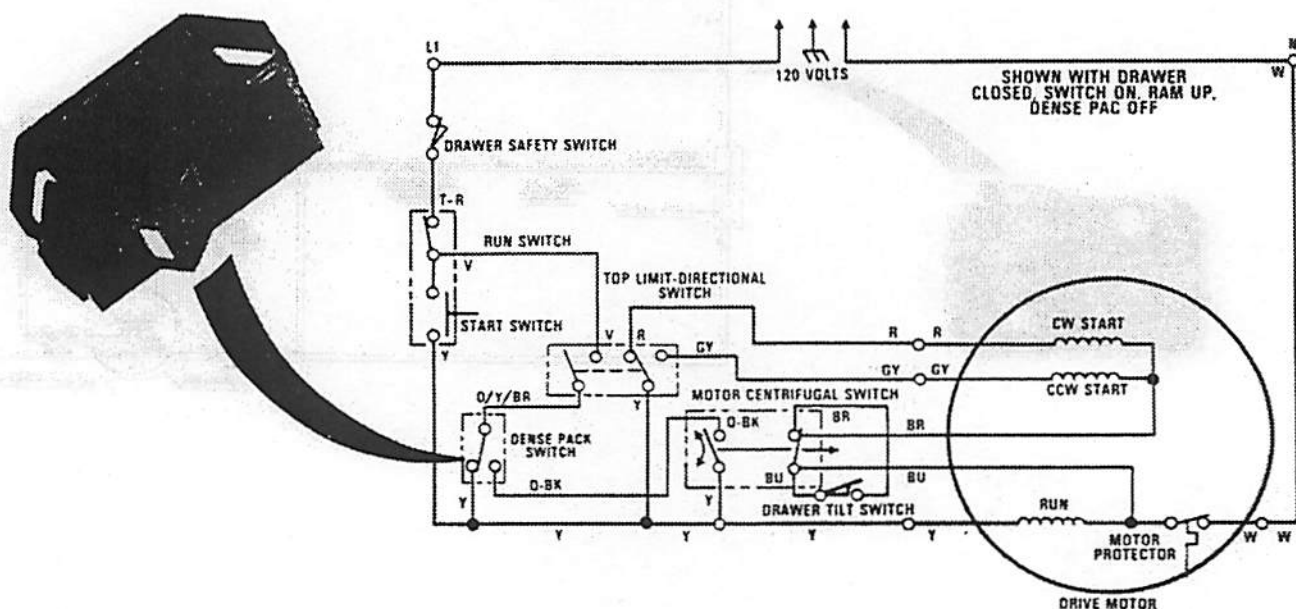
STEP 9 Touch one ohmmeter probe to terminal O (2).

STEP 10 Touch the other ohmmeter probe to terminal Y (3).

STEP 11 The ohmmeter should show ZERO resistance (continuity). If not, the switch is bad and needs replacing.

STEP 12 There should be an open circuit between O (2) and O/B or O-BK (1) and between Y (3) and O/B or O-BK (1).

STEP 13 Reconnect the wires to the proper terminals as previously marked.



TOP LIMIT SWITCH

This top limit switch has only one button and lever and is located in the console escutcheon area. As the ram travels up the power screws, the ram comes in contact with the lever pushing the button in, shutting the compactor OFF.

CHECKING PROCEDURE

Obtain a properly working ohmmeter from your local store. We will be doing RESISTANCE checks. This is the safest way because the compactor is unplugged from the power source and avoids the possibility of you receiving an electrical shock.

STEP 1 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the switch. This procedure should assure that the right wire is reconnected to the right terminal after checking or replacement.

STEP 2 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter. See the instructions that came with your ohmmeter.

STEP 3 With the button (lever) out, touch one of the ohmmeter probes to one of the terminals.

STEP 4 Touch the other ohmmeter probe to the other terminal.

STEP 5 The ohmmeter should show ZERO resistance (continuity) with the button (lever) out. If not, the switch is bad and needs replacing.

STEP 6 Press the button (lever) all the way, then touch one of the ohmmeter probes to one of the terminals.

STEP 7 Touch the other ohmmeter probe to the other terminal.

STEP 8 The ohmmeter should show an open circuit with the button (lever) pressed all the way. If not, the switch is bad and needs replacing.

STEP 9 Reconnect the wires to the proper terminals as previously marked.

ADJUSTMENT

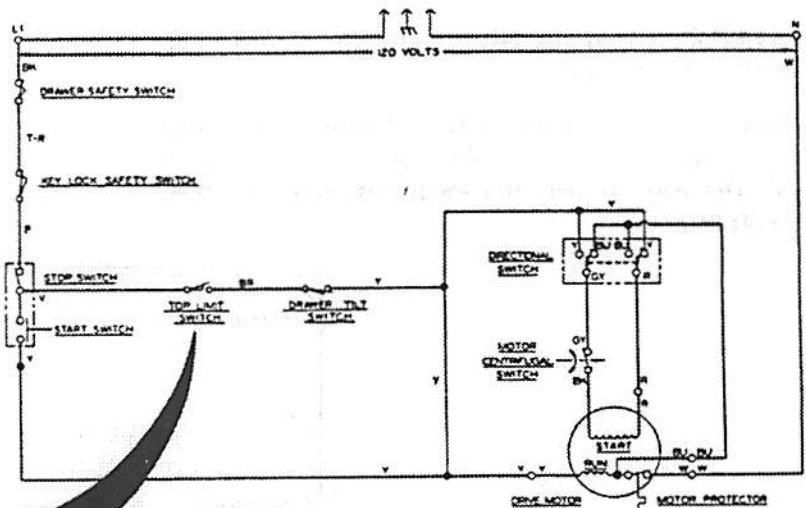
STEP 10 Turn the compactor on and run it through a complete cycle.

STEP 11 Open the drawer and measure the distance from the top of the drawer to the bottom of the ram cover. You should have a 1/4 -inch clearance.

Slide the bottom of the switch to readjust.

A. Toward front of compactor will cause the ram to stop in a lower position.

B. Toward back of compactor will cause the ram to stop in a higher position.



DIRECTIONAL SWITCH

This directional switch (double pole, double throw) has only one button and lever and is located in the console escutcheon area. As the ram travels approx. 3/4 inches down the power screws, the switch contacts change position. When the ram bottoms and the motor stalls or the circuit is interrupted, the motor will reverse and the ram will start traveling up the power screws. As the ram comes in contact with the switch lever, the lever pushes the button in, the contacts once again change the direction of electrical flow through the motor windings.

CHECKING PROCEDURE

Obtain a properly working ohmmeter from your local store. We will be doing RESISTANCE checks. This is the safest way because the compactor is unplugged from the power source and avoids the possibility of you receiving an electrical shock.

STEP 1 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the switch. This procedure should assure that the right wire is reconnected to the right terminal after checking or replacement.

STEP 2 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter. See the instructions that came with your ohmmeter.

STEP 3 Press the button (lever) all the way, then touch one of the ohmmeter probes to terminal R.

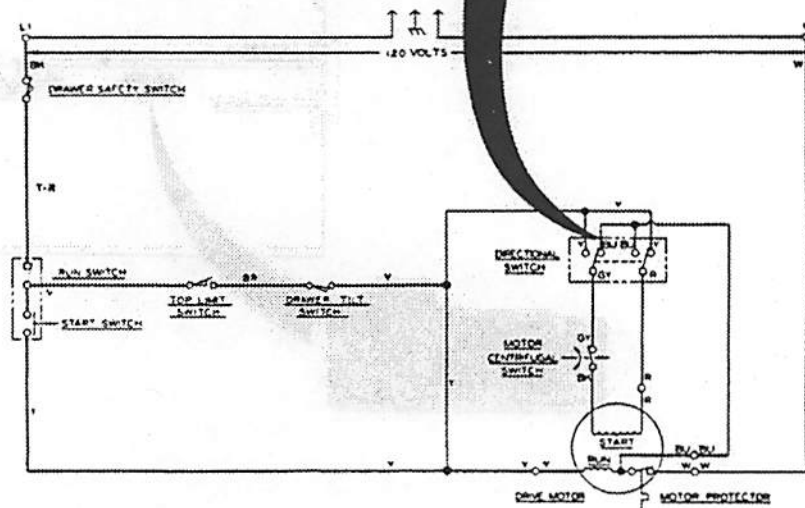
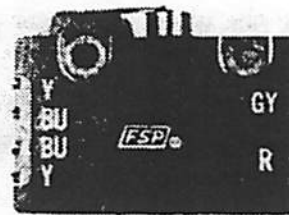
STEP 4 Touch the other ohmmeter probe to the bottom Y terminal.

STEP 5 The ohmmeter should show ZERO resistance (continuity) with the button (lever) pressed all the way. If not, the switch is bad and needs replacing.

STEP 6 Leave the ohmmeter probe on terminal R. With the button (lever) pressed all the way, touch the other ohmmeter probe to the rest of the terminals (not bottom Y). They should show an open circuit; if not, the switch is bad and needs replacing.

STEP 7 Press the button (lever) all the way, then touch one of the ohmmeter probes to terminal GY.

STEP 8 Touch the other ohmmeter probe to the top BU terminal.



STEP 9 The ohmmeter should show ZERO resistance (continuity) with the button (lever) pressed all the way. If not, the switch is bad and needs replacing.

STEP 10 Leave the ohmmeter probe on terminal GY. With the button (lever) pressed all the way, touch the other ohmmeter probe to the rest of the terminals (not top BU). They should show an open circuit; if not, the switch is bad and needs replacing.

STEP 11 With the button (lever) out, touch one of the ohmmeter probes to terminal R.

STEP 12 Touch the other ohmmeter probe to the bottom BU terminal.

STEP 13 The ohmmeter should show ZERO resistance (continuity) with the button (lever) out. If not, the switch is bad and needs replacing.

STEP 14 Leave the ohmmeter probe on terminal R. With the button (lever) out, touch the other ohmmeter probe to the rest of the terminals (not bottom BU). They should show an open circuit; if not, the switch is bad and needs replacing.

STEP 15 With the button (lever) out, touch one of the ohmmeter probes to terminal GY.

STEP 16 Touch the other ohmmeter probe to the top Y terminal.

STEP 17 The ohmmeter should show ZERO resistance (continuity) with the button (lever) out. If not, the switch is bad and needs replacing.

STEP 18 Leave the ohmmeter probe on terminal GY. With the button (lever) out, touch the other ohmmeter probe to the rest of the terminals (not top Y). They should show an open circuit; if not, the switch is bad and needs replacing.

STEP 19 Reconnect the wires to the proper terminals as previously marked.

COMBINATION SWITCH (Top Limit & Directional)

This type combination switch has only one button and lever and is located in the console escutcheon area. As the ram travels up the power screws, the ram comes in contact with the lever pushing it in somewhat changing the direction of electricity flow through the drive motor windings. As the ram travels farther up the power screws, it pushes the lever in all the way and shuts the compactor OFF. As the ram travels downward 1/2 inch, the top limit switch closes a parallel circuit to the start switch. At 3/4 inch the centrifugal switch opens and the combination switch changes the circuit to the reverse start windings in the motor.

CHECKING PROCEDURE

Obtain a properly working ohmmeter from your local store. We will be doing RESISTANCE checks. This is the safest way because the compactor is unplugged from the power source and avoids the possibility of you receiving an electrical shock.

STEP 1 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the switch. This procedure should assure that the right wire is reconnected to the right terminal after checking or replacement.

STEP 2 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter. See the instructions that came with your ohmmeter.

POSITION 1

STEP 3 Touch one ohmmeter probe to terminal Y.

STEP 4 Touch the other ohmmeter probe to terminal GY.

STEP 5 The ohmmeter should show ZERO resistance (continuity). If not, the switch is bad and needs replacing.

STEP 6 Touch one ohmmeter probe to terminal BR.

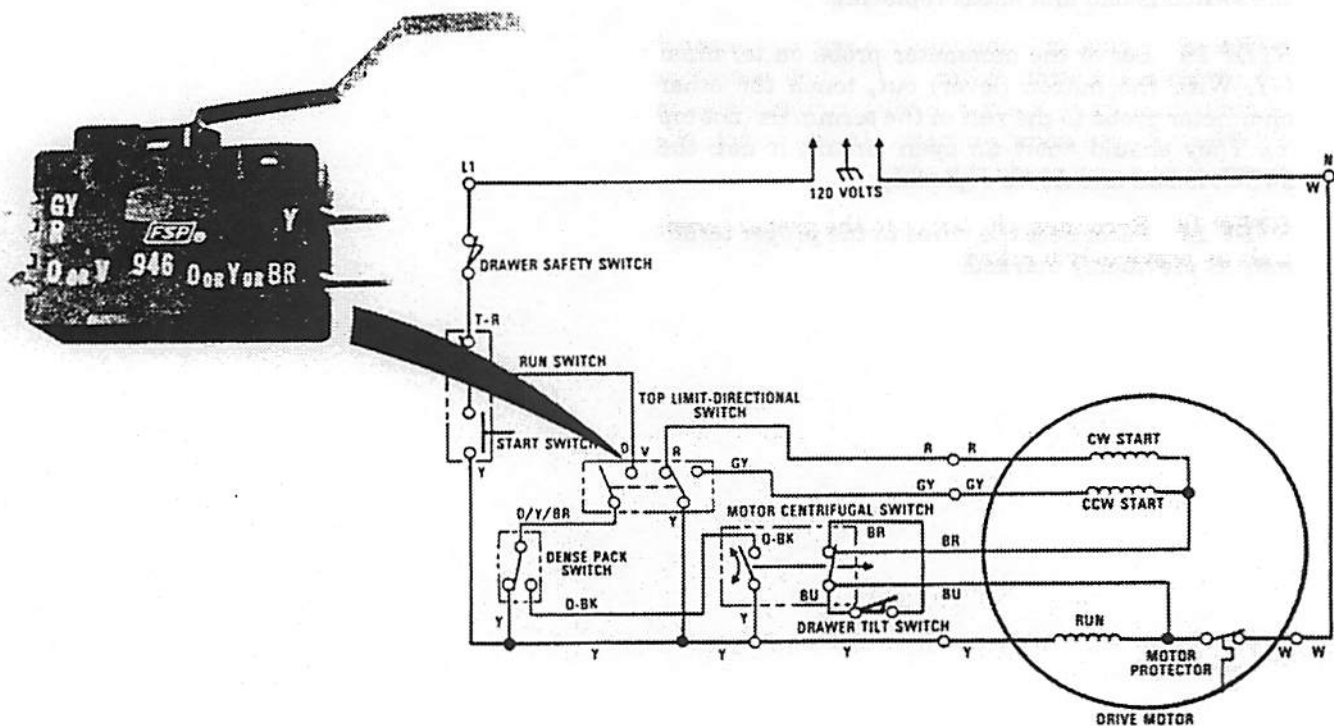
STEP 7 Touch the other ohmmeter probe to terminal O or V.

STEP 8 The ohmmeter should show ZERO resistance (continuity). If not, the switch is bad and needs replacing.

STEP 9 Touch one ohmmeter probe to terminal R.

STEP 10 Touch the other ohmmeter probe to terminal Y.

STEP 11 The ohmmeter should show an open circuit. If not, the switch is bad and needs replacing.



POSITION 2

STEP 12 Press the button (lever) somewhat or until you here the first click, then touch one of the ohmmeter probes to terminal Y.

STEP 13 Touch the other ohmmeter probe to terminal R.

STEP 14 The ohmmeter should show ZERO resistance (continuity) with the button (lever) pressed somewhat or to the first click. If not, the switch is bad and needs replacing.

STEP 15 Touch one ohmmeter probe to terminal O or V.

STEP 16 Touch the other ohmmeter probe to terminal BR.

STEP 17 The ohmmeter should show ZERO resistance (continuity) with the button (lever) pressed somewhat or to the first click. If not, the switch is bad and needs replacing.

STEP 18 Touch one ohmmeter probe to terminal GY.

STEP 19 Touch the other ohmmeter probe to terminal Y.

STEP 20 The ohmmeter should show an open circuit with the button (lever) pressed somewhat or to the first click. If not, the switch is bad and needs replacing.

POSITION 3

STEP 21 With the button (lever) pressed all the way, touch one of the ohmmeter probes to terminal R.

STEP 22 Touch the other ohmmeter probe to terminal Y.

STEP 23 The ohmmeter should show ZERO resistance (continuity) with the button (lever) pressed all the way. If not, the switch is bad and needs replacing.

STEP 24 With the button (lever) pressed all the way, touch one of the ohmmeter probes to terminal GY.

STEP 25 Touch the other ohmmeter probe to terminal Y.

STEP 26 The ohmmeter should show an open circuit with the button (lever) pressed all the way. If not, the switch is bad and needs replacing.

STEP 27 With the button (lever) pressed all the way, touch one of the ohmmeter probes to terminal BR.

STEP 28 Touch the other ohmmeter probe to terminal O or V.

STEP 29 The ohmmeter should show an open circuit with the button (lever) pressed all the way. If not, the switch is bad and needs replacing.

STEP 30 Reconnect the wires to the proper terminals as previously marked.

DRAWER SAFETY SWITCH

This drawer safety switch is located in the back right side, and prevents the ram from operating if the drawer is removed or pulled out somewhat.

CHECKING PROCEDURE

Obtain a properly working ohmmeter from your local store. We will be doing RESISTANCE checks. This is the safest way because the compactor is unplugged from the power source and avoids the possibility of you receiving an electrical shock.

STEP 1 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the switch. This procedure should assure that the right wire is reconnected to the right terminal after checking or replacement.

STEP 2 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter. See the instructions that came with your ohmmeter.

STEP 3 With the button (lever) out, touch one of the ohmmeter probes to one of the terminals.

STEP 4 Touch the other ohmmeter probe to the other terminal.

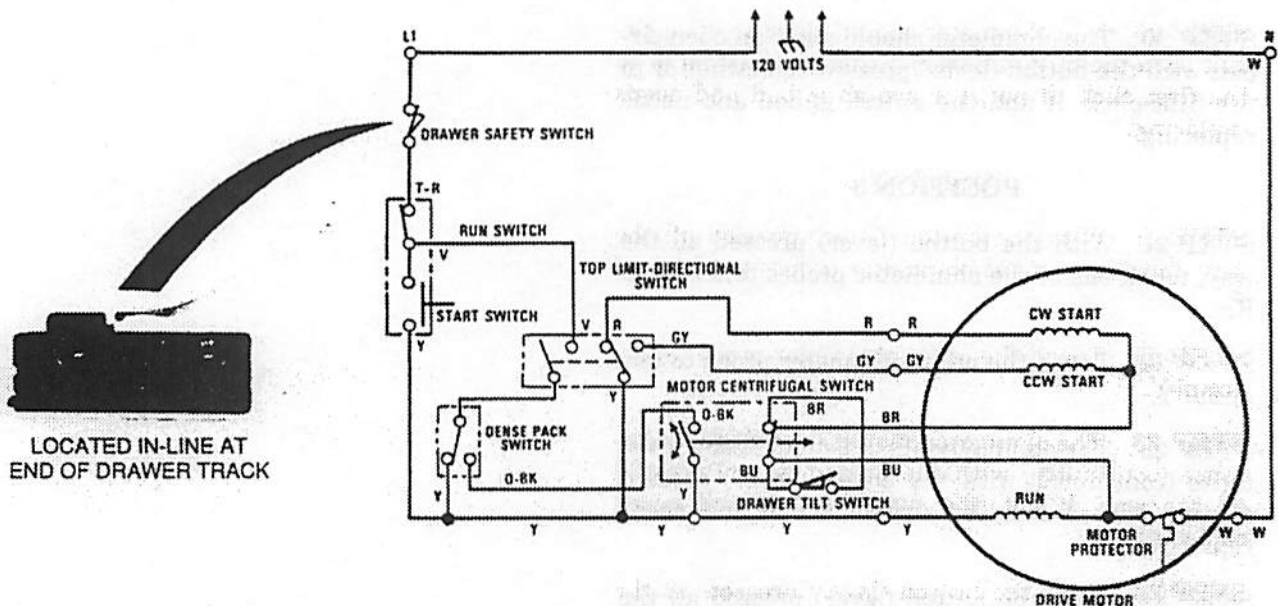
STEP 5 The ohmmeter should show an open circuit with the button (lever) out. If not, the switch is bad and needs replacing.

STEP 6 Press the button (lever) all the way, then touch one of the ohmmeter probes to one of the terminals.

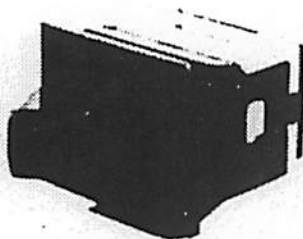
STEP 7 Touch the other ohmmeter probe to the other terminal.

STEP 8 The ohmmeter should show ZERO resistance (continuity) with the button (lever) pressed all the way. If not, the switch is bad and needs replacing.

STEP 9 Reconnect the wires to the proper terminals as previously marked.



LOCATED IN-LINE AT
END OF DRAWER TRACK



LOCATED INSIDE AND
LOWER BACK OF FRAME

DRAWER TILT SWITCH (Lever)

This drawer tilt switch is located in the back left side, and in-line with the end of the drawer track. If the drawer is open or tilted during compaction because of improper loading, the compactor will stop. To restart the compactor the start switch must be restarted. When the ram comes to the top, open drawer and redistribute the trash.

CHECKING PROCEDURE

Obtain a properly working ohmmeter from your local store. We will be doing RESISTANCE checks. This is the safest way because the compactor is unplugged from the power source and avoids the possibility of you receiving an electrical shock.

STEP 1 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the switch. This procedure should assure that the right wire is reconnected to the right terminal after checking or replacement.

STEP 2 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter. See the instructions that came with your ohmmeter.

STEP 3 With the button (lever) out, touch one of the ohmmeter probes to one of the terminals.

STEP 4 Touch the other ohmmeter probe to the other terminal.

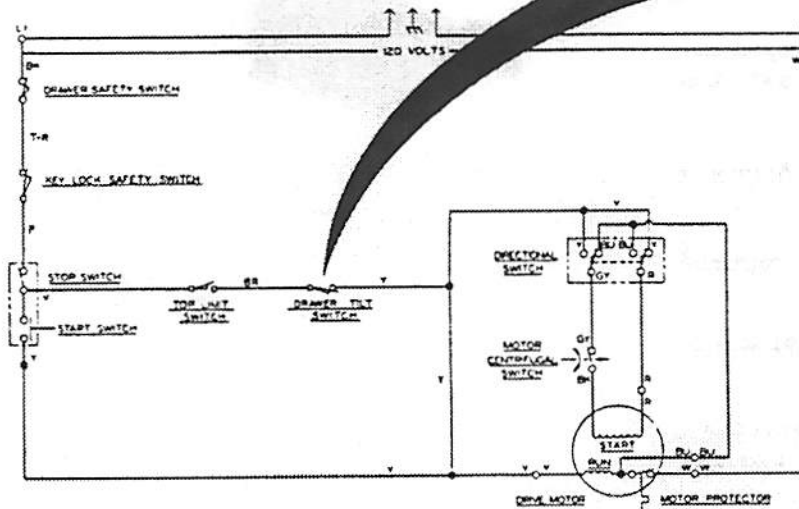
STEP 5 The ohmmeter should show an open circuit with the button (lever) out. If not, the switch is bad and needs replacing.

STEP 6 Press the button (lever) all the way, then touch one of the ohmmeter probes to one of the terminals.

STEP 7 Touch the other ohmmeter probe to the other terminal.

STEP 8 The ohmmeter should show ZERO resistance (continuity) with the button (lever) pressed all the way. If not, the switch is bad and needs replacing.

STEP 9 Reconnect the wires to the proper terminals as previously marked.



ROTARY SWITCH (Lock/Off/On/Start)

This switch, located on the right side behind the console escutcheon, is used on current models in place of the old system lock & key and pushbutton switch. This new switch starts, stops and locks the compactor.

A safety knob is also used with this switch. The knob can be removed when the compactor is locked and not in use.

CHECKING PROCEDURE

Obtain a properly working ohmmeter from your local store. We will be doing RESISTANCE checks. This is the safest way because the compactor is unplugged from the power source and avoids the possibility of you receiving an electrical shock.

STEP 1 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the switch. This procedure should assure that the right wire is reconnected to the right terminal after checking or replacement.

STEP 2 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter. See the instructions that came with your ohmmeter.

OFF POSITION

STEP 3 Touch one ohmmeter probe to terminal V.

STEP 4 Touch the other ohmmeter probe to terminal T-R.

STEP 5 The ohmmeter should show an open circuit. If not, the switch is bad and needs replacing.

STEP 6 Touch one ohmmeter probe to terminal V.

STEP 7 Touch the other ohmmeter probe to terminal Y.

STEP 8 The ohmmeter should show an open circuit. If not, the switch is bad and needs replacing.

ON POSITION

STEP 9 Touch one ohmmeter probe to terminal V.

STEP 10 Touch the other ohmmeter probe to terminal Y.

STEP 11 The ohmmeter should show an open circuit. If not, the switch is bad and needs replacing.

STEP 12 Touch one ohmmeter probe to terminal V.

STEP 13 Touch the other ohmmeter probe to terminal T-R.

STEP 14 The ohmmeter should show ZERO resistance (continuity). If not, the switch is bad and needs replacing.

START POSITION

STEP 15 Touch one ohmmeter probe to terminal V.

STEP 16 Touch the other ohmmeter probe to terminal Y.

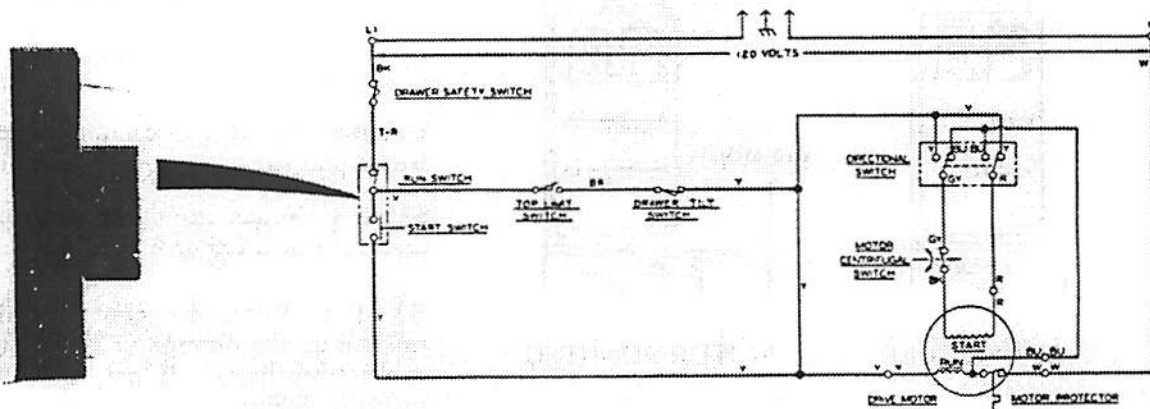
STEP 17 The ohmmeter should show ZERO resistance (continuity). If not, the switch is bad and needs replacing.

STEP 18 Touch one ohmmeter probe to terminal V.

STEP 19 Touch the other ohmmeter probe to terminal T-R.

STEP 20 The ohmmeter should show ZERO resistance (continuity). If not, the switch is bad and needs replacing.

STEP 21 Reconnect the wires to the proper terminals as previously marked.



CENTRIFUGAL SWITCH

This part is located on the drive motor. It is used in getting voltage to the drive motor start and run windings at the same time. As the drive motor increases in speed, an actuating arm inside the drive motor drops, causing the button on the centrifugal switch to pop out, dropping the voltage to the start windings.

Because of different drive motor brands used, it is necessary when replacing the drive motor centrifugal switch, that you use the same brand as your drive motor.

CHECKING PROCEDURE

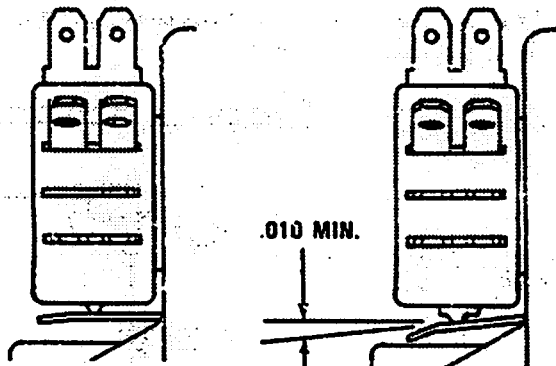
Obtain a properly working ohmmeter from your local store. We will be doing **RESISTANCE** checks. This is the safest way because the compactor is unplugged from the power source and avoids the possibility of you receiving an electrical shock.

STEP 1 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the switch. This procedure should assure that the right wire is reconnected to the right terminal after checking or replacement.

STEP 2 Set the ohmmeter scale to the lowest ohms setting and **ZERO** the meter. See the instructions that came with your ohmmeter.

For drive motors with 1 start winding, see steps 3-10.

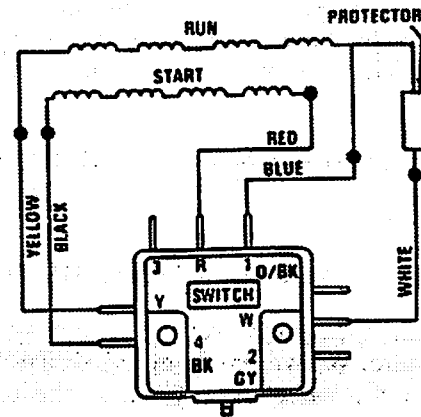
For drive motors with 2 start windings, see steps 11-18



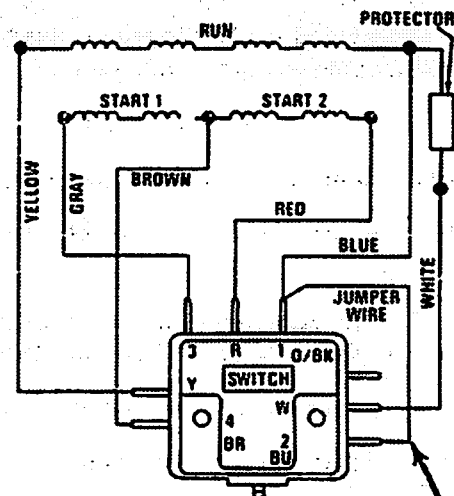
MOTOR IDLE

MOTOR RUNNING

MOTOR WITH SINGLE START WINDING



MOTOR WITH DUAL START WINDING



NOTE: Leave Jumper Wire Intact

STEP 3 Touch one ohmmeter probe to terminal BK or number 4.

STEP 4 Touch the other ohmmeter probe to terminal GY or number 2.

STEP 5 With the centrifugal switch button pushed in, the ohmmeter should show **ZERO** resistance (continuity). If not, the switch is bad and needs replacing.

STEP 6 Terminal Y to O/BK should be open.

STEP 7 Touch one ohmmeter probe to terminal BK or number 4.

STEP 8 Touch the other ohmmeter probe to terminal GY or number 2.

STEP 9 With the centrifugal switch button out, the ohmmeter should show an open circuit. If not, the switch is bad and needs replacing.

STEP 10 Terminal Y to O/BK should show ZERO resistance (continuity).

STEP 11 Touch one ohmmeter probe to terminal BR or number 4.

STEP 12 Touch the other ohmmeter probe to terminal BU or numbers 1 or 2.

STEP 13 With the centrifugal switch button pushed in, the ohmmeter should show ZERO resistance (continuity). If not, the switch is bad and needs replacing.

STEP 14 Terminal Y to O/BK should be open.

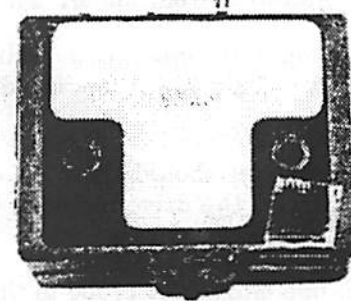
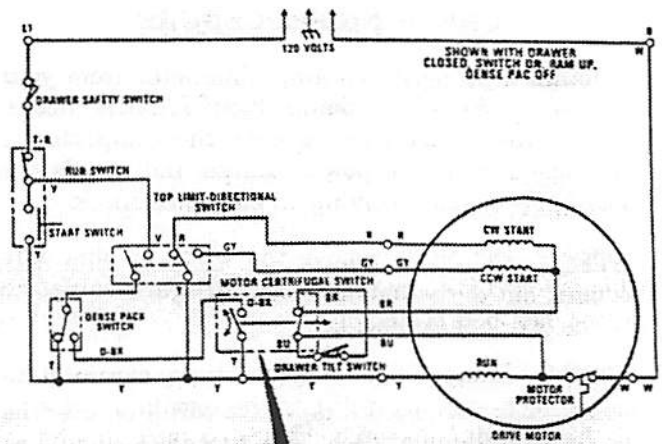
STEP 15 Touch one ohmmeter probe to terminal BR or number 4.

STEP 16 Touch the other ohmmeter probe to terminal BU or numbers 1 or 2.

STEP 17 With the centrifugal switch button out, the ohmmeter should show an open circuit. If not, the switch is bad and needs replacing.

STEP 18 Terminal Y to O/BK should show ZERO resistance (continuity).

STEP 19 Reconnect the wires to the proper terminals as previously marked.



DRIVE MOTOR

This motor, located in the lower back, is used to drive the power screws, causing the ram to move up or down.

CHECKING PROCEDURE

Obtain a properly working ohmmeter from your local store. We will be doing RESISTANCE checks. This is the safest way because the compactor is unplugged from the power source and avoids the possibility of you receiving an electrical shock.

STEP 1 DO NOT remove the white or blue wire coming out of the motor. These wires are connected to the overload protector.

STEP 2 Remove one wire at a time, carefully labeling each wire according to the terminal marking on the centrifugal switch. This procedure should assure that the right wire is reconnected to the right terminal after checking or replacement.

STEP 3 Set the ohmmeter scale to the lowest ohms setting and ZERO the meter. See the instructions that came with your ohmmeter.

STEP 4 Touch one ohmmeter probe to the terminal on the (BU) blue wire, from the drive motor.

STEP 5 Touch the other ohmmeter probe to the terminal on the (Y) yellow wire, from the drive motor.

STEP 6 The ohmmeter should show 3-5 ohms on the ohms scale. If not, the drive motor is bad and needs replacing.

STEP 7 Touch one ohmmeter probe to the terminal on the (Y) yellow wire, from the drive motor.

STEP 8 Touch the other ohmmeter probe to the terminal on the (W) white wire, from the drive motor protector.

STEP 9 The ohmmeter should show 3-5 ohms on the ohms scale. If not, the drive motor is bad and needs replacing.

STEP 10 Touch one ohmmeter probe to the terminal on the (BU) blue wire, from the drive motor.

STEP 11 Touch the other ohmmeter probe to the terminal on the (W) white wire, from the drive motor protector.

STEP 12 The ohmmeter should show ZERO resistance (continuity). If not, the drive motor is bad and needs replacing.

STEP 13 Touch one ohmmeter probe to the terminal on the (R) red wire, from the drive motor.

STEP 14 Touch the other ohmmeter probe to the terminal on the (GY) gray wire, from the drive motor.

STEP 15 The ohmmeter should show 3-7 ohms on the ohms scale. If not, the drive motor is bad and needs replacing.

STEP 16 Touch one ohmmeter probe to the terminal on the (R) red wire, from the drive motor.

STEP 17 Touch the other ohmmeter probe to the terminal on the (BK) black, (BR) brown or (O) orange wire, from the drive motor.

STEP 18 The ohmmeter should show 1-4 ohms on the ohms scale. If not, the drive motor is bad and needs replacing.

STEP 19 Touch one ohmmeter probe to the terminal on the (GY) gray wire, from the drive motor.

STEP 20 Touch the other ohmmeter probe to the terminal on the (BK) black, (BR) brown or (O) orange wire, from the drive motor.

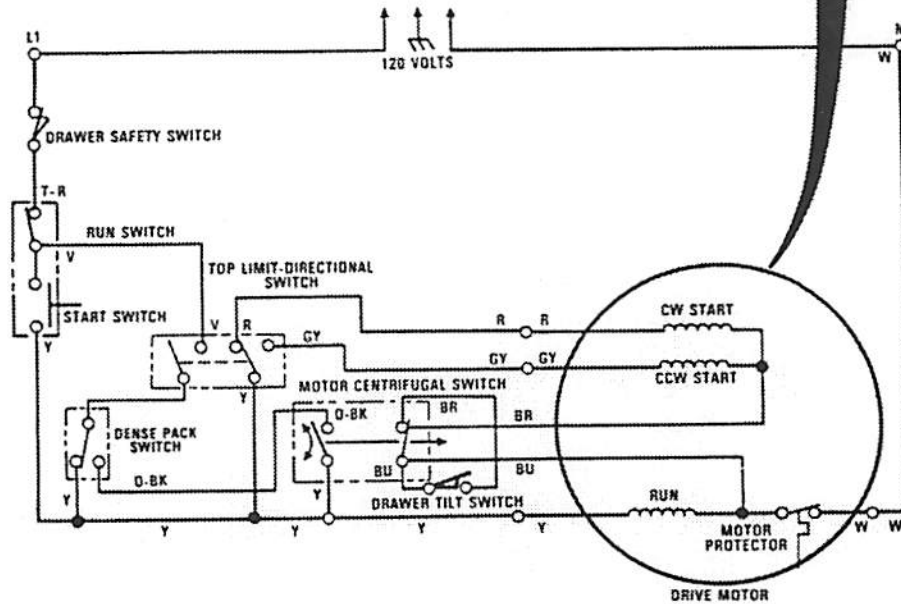
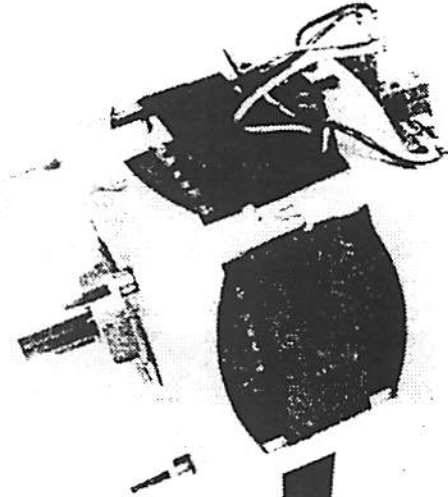
STEP 21 The ohmmeter should show 1-4 ohms on the ohms scale. If not, the drive motor is bad and needs replacing.

GROUNDING CHECK

STEP 22 Touch one ohmmeter probe to the metal frame of the drive motor.

STEP 23 One at a time, touch the other ohmmeter probe to all the terminals on the wires coming out of the drive motor.

STEP 24 The ohmmeter should show an open circuit when touching these terminals. If not, the drive motor is bad and needs replacing.



NOTES

Modeling of the ...

The first part of the model is ...

The second part of the model is ...

The third part of the model is ...

