REPLACEMENT PARTS AND PROCEDURES
AIR DRYER KS-16432, LIST 1

1. GENERAL

1.01 This section covers the information necessary for ordering parts to be used in the maintenance of the KS-16432, List 1 air dryer used to furnish dry compressed air to cable systems maintained under continuous gas pressure. It also covers approved procedures for replacing these parts.

1.02 Part 2 of this section covers the part numbers and names of parts which it is practicable to replace in the field in the maintenance of this apparatus. No attempt should be made to replace parts not designated. Part 2 also contains explanatory figures showing the different parts. This information is called Replacement Parts.

1.03 Part 3 of this section covers the approved procedures for the replacement of the parts covered in Part 2. This information is called Replacement Procedures.

2. REPLACEMENT PARTS

2.01 The figures included in this part of the section show various parts in their proper relation to other parts of the appartus. The part numbers and names given are those assigned by the Puregas Equipment Corporation and listed by the Western Electric Company's Merchandise Department. When the part names differ from those in general use in the field, the latter names, in some instances are shown in parentheses.

2.02 When ordering a replacement part, state the part number and name, specify for the KS-16432, List 1 air dryer, and give the Western Electric Company's serial number. For example: "7378B Heater for KS-16432, List 1 Air Dryer, WECo Ser. No. ...." Do not refer to the BSP number or to any information given in parentheses.

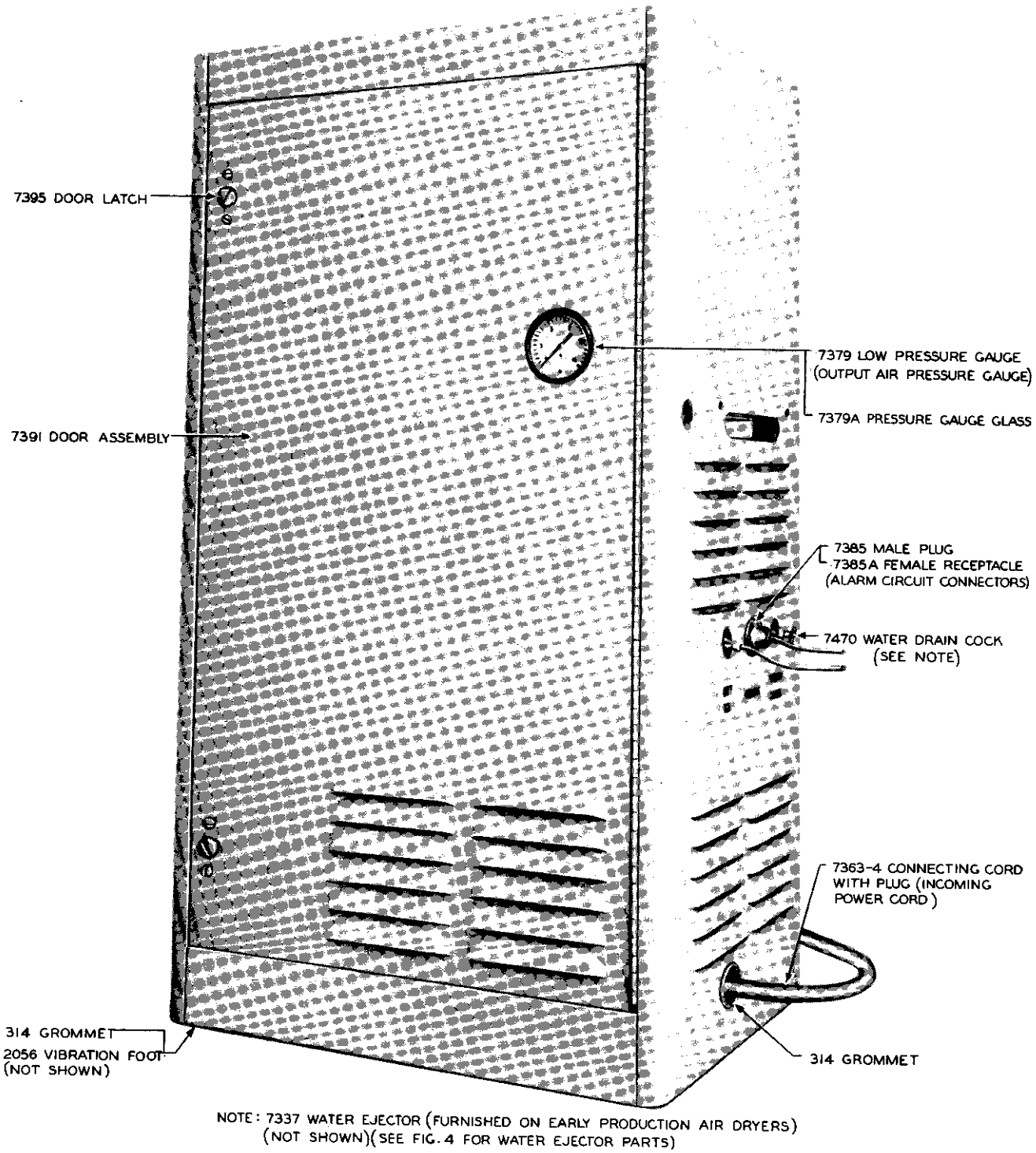

Fig. 1 – KS-16432, List 1 Air Dryer

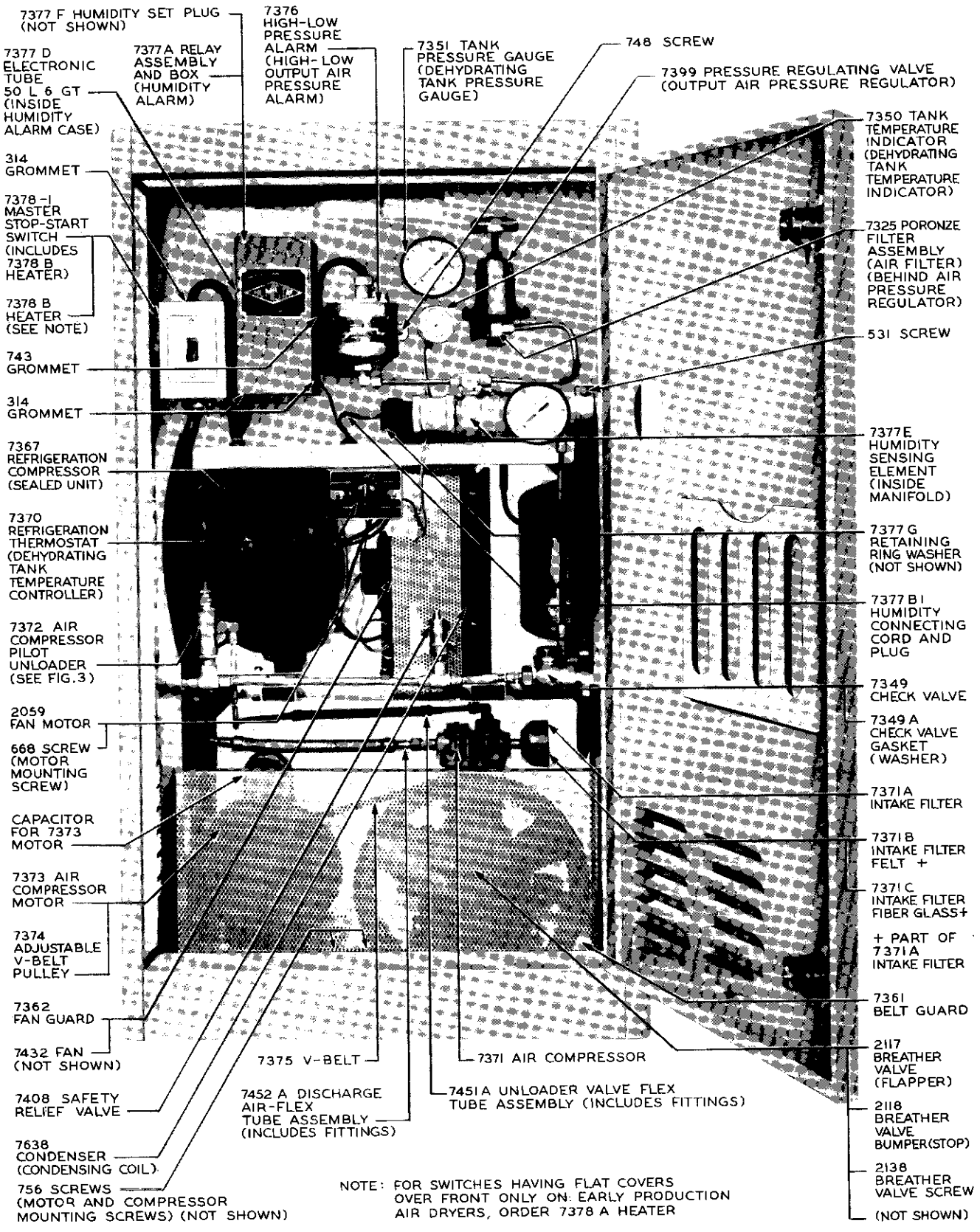

Fig. 2 – KS-16432, List 1 Air Dryer — Interior View

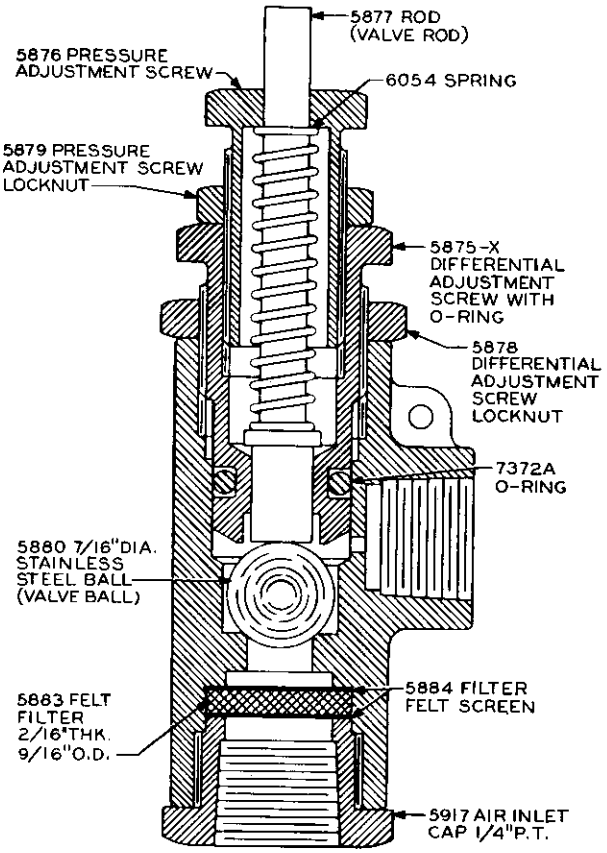

Fig. 3 — 7372 Air Compressor Pilot Unloader

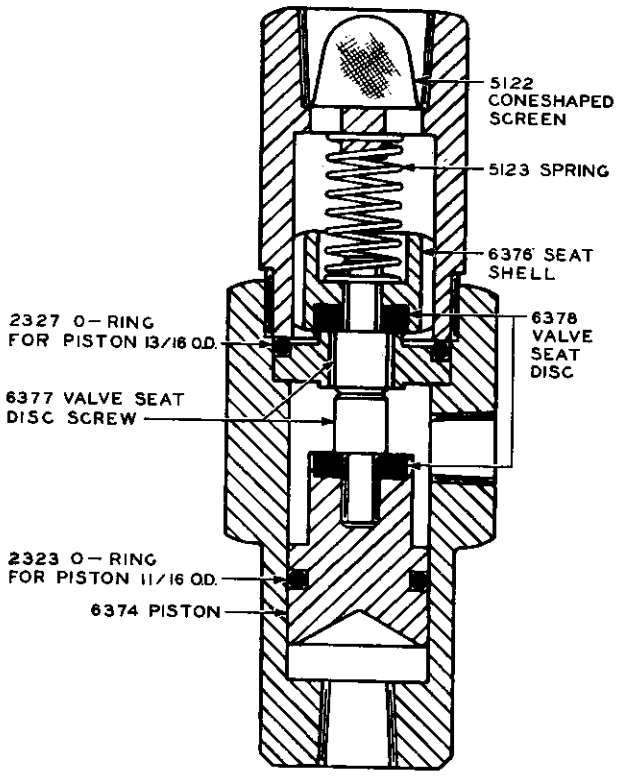

Fig. 4 — 7337 Water Ejector — Furnished on Early Production Air Dryers

3. REPLACEMENT PROCEDURES

3.01 *List of Tools, Gauges, and Materials*

CODE OR SPEC NO.	DESCRIPTION
TOOLS	
33	11/32-inch Hex. Single-end Socket Wrench
565A	90-degree Offset Screwdriver
566A	45-degree Offset Screwdriver
KS-14164	Red Sable Round Artist's Show Card Brush
R-1542	6-inch Adjustable Wrench
R-2485	5/32-inch Allen Socket-Screw Wrench
R-2512	8-inch Adjustable Wrench
R-2652	9-inch Thin Monkey Wrench
R-5850	5/8- and 3/4-inch Open Double-end Offset Flat Wrench
—	9/16- and 11/16-inch Special Socket Wrench and Crossbar, Stevens-Walden No. 2623
—	8-inch Pipe Wrench, Erie Tool Works
—	3/4- and 13/16-inch Open Double-end Flat Wrench, J. H. Williams & Co No. 731
—	15/16- and 1-inch Open Double-end Flat Wrench, J. H. Williams & Co No. 33C

CODE OR SPEC NO.	DESCRIPTION
TOOLS	
—	7/16- and 1/2-inch 12-point Offset Box Wrench, J. H. Williams & Co No. 8725
—	Spanner Wrench, American Instrument Co No. 4-4896A
—	4-ounce Riveting Hammer
—	Combination Pliers
—	P-Long-nose Pliers
—	1-1/4-inch Screwdriver, Stanley Tools No. 2012
—	3-inch Cabinet Screwdriver
—	4-inch Regular Screwdriver
—	No. 2 Phillips Type Screwdriver
—	Bearing Puller, Owatonna Tool Co No. 1002 With No. 1002-L1 Single-end Arms
GAUGES	
KS-6938	Feeler Gauge
MATERIALS	
KS-6824	Sealing Compound
—	Electricians Tape
—	Maintenance Kit, Puregas Equipment Corp. 500M. Consists of:
	2323 O-ring for Water Ejector (1)†
	2327 O-ring for Water Ejector (1)†

†Included only in kits ordered for air dryers having serial numbers indicating that they are equipped with water ejectors.

CODE OR SPEC NO.	DESCRIPTION
MATERIALS	
	5883 Felt Filter for Pilot Unloader (2)
	7349A Check Valve Gasket (2)
	7371B Intake Filter Felt (4) — Air Compressor
	7371C Intake Filter Fiber Glass (4) — Air Compressor
	7372A O-ring for Pilot Unloader (2)

3.02 Before making replacement of parts, shut off the air supply to the cable system, remove the alarm circuit connector from the right side of the cabinet, move the master start-stop control to the OFF position, and remove the plug of the power cord from the power supply. Completely release the air pressure in the air dehydrating tank by pulling up on the finger ring of the safety valve. When it is necesary to move the air dryer in order to work from the back of the cabinet, disconnect the cable system air line at the right side of the cabinet. Take care not to damage the air-line tubing while moving the cabinet.

3.03 When it is necessary to take the air dryer out of service, follow local instructions regarding the need for connecting a cylinder of nitrogen gas to the cable system.

3.04 Ordering information for the sealed refrigeration unit and the condensing coil is given in Fig. 2. However, no replacement procedures for these parts are covered in Part 3, since their replacement requires the services of personnel trained in the maintenance of refrigeration equipment.

3.05 No replacement procedures are specified for screws, pipe fittings, grommets, pressure gauge glasses, or other parts where the procedure consists of a simple operation.

3.06 When connecting the threaded fittings, except pressure fittings on copper tubing, apply a small amount of KS-6824 sealing compound to the male pipe thread using the KS-14164 brush. Take care to keep the compound away from the end of the fitting to avoid getting compound into the air system.

3.07 After completing work on the air dryer, check that any tubing disconnected has been reconnected and any guards removed, remounted. Connect the power cord to the power supply and move the master start-stop control to the ON position. When the pressure gauges and temperature indicator show correct pressures and temperature, reconnect the alarm circuit and open the air supply to the cable system.

3.08 After making any replacement of parts, the part or parts replaced shall meet the requirements involved as specified in Section A401.929/H51.330. Other parts whose adjustment may have been directly disturbed by the replacement operation shall be checked to applicable requirements.

3.09 ***Air Compressor: Fig. 2***

(1) Remove the drive belt as covered in 3.12. Disconnect the tubing from the fittings in the cylinder head using the R-1542 wrench. If the tubing does not have flexible sections, also disconnect the other end and remove the tubing to facilitate removal of the compressor. Remove the compressor mounting screws with the Williams No. 8725 wrench and remove the compressor. Transfer the fittings in the cylinder head to the corresponding ports in the cylinder head of the new compressor using the R-1542 wrench.

(2) Mount the compressor and connect the tubing. Mount the drive belt as covered in 3.12. Check the alignment of the compressor and motor pulleys with reference to the belt. If necessary, shift the pulley on the motor shaft. To do this, loosen the setscrew in the inner hub with the R-2485 wrench, reposition the pulley, and securely tighten the setscrew. Mount the belt guard.

3.10 ***Air Compressor Intake Filter Felt and Fiber Glass: Fig. 2***—Unscrew and remove the intake filter from the air compressor. Remove the retaining spring and the screen from the filter housing using the P-long-nose pliers. Remove the filter felt and fiber glass and substitute the new parts. Position the screen against the felt and snap the retaining spring into the groove in the housing. Mount the filter housing on the compressor.

3.11 ***Air Compressor Breather Valve: Fig. 2***—The breather valve is located behind the compressor pulley. To replace parts of the valve, first remove the belt guard mounting screws at each end of the guard using the 3-inch cabinet screwdriver and remove the guard. Remove the valve mounting screw with the Williams No. 8725 wrench and remove the valve stop and flapper. Substitute new parts as required and mount the parts. In order to obtain satisfactory operation of the valve, the clearance between the stop and the flapper at the outer end should be .030 to .035 inch. Use the KS-6938 gauge to check this clearance. If necessary, bend the stop at the mounting screw to obtain this clearance. Mount the belt guard.

3.12 ***Drive Belt: Fig. 2***—Remove the belt guard mounting screws at each end of the guard with the 3-inch cabinet screwdriver and remove the guard. Loosen the setscrew in the front hub of the motor pulley using the R-2485 wrench. Turn the front flange of the pulley counterclockwise and remove this part of the pulley from the shaft. Substitute the new belt. Remount the front flange of the pulley. Position the flange to meet the tension of drive belt requirement in Section A401.929/H51.330. Mount the belt guard.

3.13 ***Motor Capacitor: Fig. 2***—Remove the capacitor housing from the top of the motor using the 1¼-inch Stanley screwdriver. Remove the capacitor and unsolder the leads at the capacitor. Solder the leads to the terminals of the new capacitor. Position the capacitor on the motor and mount the housing.

3.14 ***Motor: Fig. 2***—To replace the motor, proceed as follows:

(1) Remove the drive belt as covered in 3.12. Loosen the setscrew in the rear hub of the pulley with the R-2485 wrench. Remove the pulley from the motor shaft using the bearing puller if necessary. Remove the key from the motor shaft with the combination pliers. Remove the mounting screws at the front of the motor using the Williams No. 8725 wrench.

(2) Loosen the motor terminal box cover screws with the 3-inch cabinet screwdriver and remove the cover. Remove the cord clamp nut from the clamp using the screwdriver and the 4-ounce riveting hammer. Tag and disconnect the external leads using the No. 33 wrench. Remove the nut from the ends of the leads and remove the leads and clamp from the terminal box. Remove the mounting screws at the rear of the motor with the Williams No. 8725 wrench. Remove the motor.

(3) Lubricate the new motor as covered in Section A401.929/H51.330. Remove the plug from the cord clamp hole in the side of the terminal box. Mount the motor and partially tighten the mounting screws at the front. Position the key in the slot in the motor shaft so that the key will be under the setscrew in the rear hub when the pulley is mounted. Mount the rear flange of the pulley. Mount the drive belt as covered in 3.12. Check the alignment of the compressor and motor pulleys with reference to the belt. If necessary, shift the motor on its mounting and the pulley on the shaft to obtain correct alignment and belt tension. Tighten the motor mounting screws and both setscrews in the pulley. Insert the external leads into the terminal box and mount the cord clamp. Connect the leads and mount the terminal box cover. Mount the belt guard.

(4) If, after replacing the motor, the compressor pulley does not rotate in the direction of the arrow on this pulley, reverse the direction of rotation of the motor. Instructions for doing this are given on the back of the terminal box cover or on the motor nameplate.

(5) If the motor speed varies noticeably while the compressor is pumping air, the wiring in the motor terminal box is probably connected for 230-volt instead of for the required 115-volt operation. Instructions for changing the motor to 115-volt operation are given on the back of the terminal box cover, on the nameplate, or on a tag attached to the motor.

3.15 *Master Start-Stop Control Heater*

(1) ***Heater in Control Having Flat Cover (7378A Heater):*** Remove the control cover with the 3-inch cabinet screwdriver. Disconnect the single lead at the bottom of the switch. Remove the switch mounting screws and remove the switch from the housing. Remove the rear cover of the switch. Remove the heater mounting screws and remove the heater. Substitute the new heater and remount the parts in reverse order of removal.

(2) ***Heater in Control Having U-shaped Cover (7378B Heater):*** Remove the control cover with the 3-inch cabinet screwdriver. Pull out the heater, which is located below the switch lever. Plug in the new heater and remount the control cover.

3.16 *Master Start-Stop Control*

(1) ***Control Having Flat Cover:*** Remove the control cover with the 3-inch cabinet screwdriver. Tag and disconnect the leads from the switch terminals. Remove the switch mounting screws and remove the switch from the housing. Remove the mounting nut from the cord clamp using the screwdriver and the 4-ounce riveting hammer. Pull the leads and the cord clamp from the housing. Remove the grommet from the side of the housing and, if satisfactory, use it in the new control. Remove the housing mounting screws using the 4-inch regular screwdriver and remove the housing. Mount the new control having the U-shaped cover as described in (2)(b).

(2) ***Control Having U-shaped Cover***

(a) Remove the control cover with the 3-inch cabinet screwdriver. Tag and disconnect the leads from the switch terminals. Remove the switch mounting screws and re-

move the switch from the housing. If the housing is satisfactory, mount the switch of the new control in it as covered in (c). If it is necessary to replace the housing, remove the mounting nut from the cord clamp using the screwdriver and the 4-ounce riveting hammer. Pull the leads and cord clamp from the housing. Remove the grommet from the top of the housing and, if satisfactory, use it in the new control. Remove the housing mounting screws with the 4-inch regular screwdriver and remove the housing.

(b) Remove the cover of the new control with the 3-inch cabinet screwdriver. Remove the switch mounting screws and remove the switch from the housing. If the housing of the switch being replaced is to be re-used, proceed as covered in (c). If the housing of the new control is to be used, open the knockout holes in the top and bottom and also those in the back needed for mounting using the 4-ounce riveting hammer. Mount the housing and place a grommet in the top knockout hole. Insert the leads held in the cord clamp through the bottom knockout hole and mount the clamp. Insert the other leads through the top of the housing.

(c) Mount the switch in the housing and connect the leads. Mount the control cover.

3.17 ***Check Valve Washer: Fig. 2***—Remove the check valve cap with the Williams No. 33C wrench while holding the valve body with the R-2652 wrench to avoid bending the tubing attached to the valve. Remove the plunger from the valve body. Remove the washer retaining nut from the bottom of the plunger with the No. 33 wrench. Substitute the new washer and securely tighten the nut. Place the plunger in the valve body and mount the cap.

3.18 ***Check Valve: Fig. 2***—Disconnect the tubing attached to the elbow in the inflow end of the valve using the R-2512 wrench. Hold the fitting in the outflow end of the valve with the R-2512 wrench and remove the valve from the fitting using the R-2652 wrench. Transfer the elbow from the valve being replaced to the inflow end of the new valve. The direction in which the valve passes air can be determined by holding the valve with the cap at the top and blowing through each end. Connect the outflow end of the valve to the fitting on the horizontal tubing with the cap at the top of the valve. Connect the other tubing to the elbow in the valve.

3.19 ***Safety Valve: Fig. 2***—Hold the pipe tee on which the valve is mounted with the 8-inch pipe wrench and remove the valve with the Williams No. 731 wrench. Mount the new valve on the pipe tee. Operate the valve at least once manually under pressure before checking for the requirement covering operation of the safety valve in Section A401.929/H51.330.

3.20 ***Air Compressor Unloader: Fig. 2***—Disconnect the tubing from the fitting in the side of the unloader using the R-2512 wrench. Remove the fitting with the wrench. Hold the pipe tee on which the unloader is mounted with the 8-inch pipe wrench and remove the unloader from the tee using the Williams No. 731 wrench applied to the air inlet cap at the bottom of the unloader. Mount the new unloader on the pipe tee. Mount the fitting in the side of the unloader and connect the tubing.

3.21 ***Air Compressor Unloader Parts***

(1) ***Spring: Fig. 3***—Loosen the pressure adjustment screw locknut with the R-2512 wrench. Remove the pressure adjustment screw with the wrench, taking care not to move the locknut on the screw in order to avoid appreciable change in the pressure setting when the unloader is reassembled. Remove the valve rod. Substitute the new spring on the rod and position the rod in the unloader. Mount the pressure adjustment screw so that its locknut is against the differential adjustment screw. Tighten the locknut.

(2) ***Valve Ball and O-ring: Fig. 3***—Loosen the differential adjustment screw locknut with the R-2512 wrench. Remove the differential adjustment screw with the wrench taking care not to move the locknut on the screw in order to avoid appreciable change in the differential pressure setting when the unloader is reassembled. If the valve ball is to be replaced,

remove the unloader body as covered in 3.20 but do not remove the fitting from the side of the unloader. Tilt the unloader body so that the ball rolls out. Carefully insert the new ball. Mount the unloader body on the pipe tee and reconnect the tubing. Examine the O-ring on the differential adjustment screw and, if it is cracked or shows other signs of deterioration, remove it and substitute a new O-ring. Mount the differential adjustment screw so that its locknut is against the unloader body. Tighten the locknut.

(3) ***Air Inlet Cap, Felt Filter, and Filter Screens: Fig. 3***—To replace any of these parts, remove the unloader as covered in 3.20 but do not remove the fitting from the side of the unloader. Place the unloader in a vise or hold it with the 8-inch pipe wrench and remove the air inlet cap with the Williams No. 731 wrench. Remove the two screens and the filter using a bent piece of wire as a hook. Discard the filter and replace the other parts if necessary. Assemble the new filter, the screens, and the air inlet cap in the unloader body. Remount the unloader and reconnect the tubing.

3.22 ***Water Ejector (Early Production Air Dryers Only): Fig. 4***—Disconnect all tubing from the fittings in the ejector with the R-2512 wrench. Remove the ejector and transfer the fittings to the corresponding ports of the new ejector using the R-2512 and R-2652 wrenches. Reconnect the tubing to the ejector.

3.23 ***Water Ejector Parts: Fig. 4***—Remove the ejector as covered in 3.22. Place the ejector in a vise or hold it with the R-2652 wrench and replace parts as covered below. After replacing parts, reconnect the ejector to the tubing.

(1) ***Screen:*** Remove the fitting from the hexagonal end of the ejector using the R-2512 wrench. Substitute the new screen and remount the fitting.

(2) ***Spring, Valve Seat Discs, Valve Seat Disc Screws, and O-rings:*** Remove the hexagonal end from the midsection of the ejector taking care not to drop the parts as the end is removed. Substitute new parts as required. If a valve seat disc screw is broken and cannot be removed, replace the part in which the screw is mounted. Assemble the parts in the ejector as shown in Fig. 4.

3.24 ***Humidity Alarm***

(1) Remove the alarm cover with the 3-inch cabinet screwdriver. Remove the sensing element cable plug from the receptacle in the alarm. Push out the grommet associated with this cable and withdraw the cable and plug from the alarm housing. Tag and disconnect the 115-volt ac leads from the L1 and L2 terminals and withdraw the leads from the housing. Tag and disconnect the remaining leads and withdraw them. Remove the panel which mounts the alarm parts from the housing by removing the panel mounting screws at each side of the housing using the No. 565A and 566A offset screwdrivers. Take care not to let the panel fall out of the housing when the screws are removed.

(2) Remove the cover of the new alarm and remove the panel which mounts the alarm parts using the 3-inch cabinet screwdriver. Mount the panel in the housing which was left in the air dryer using the No. 565A and 566A offset screwdrivers. Insert the leads into the housing and connect them to the proper terminals. Make sure that the 115-volt ac leads are connected to the L1 and L2 terminals. Insert the sensing element cable and place the plug in the receptacle. Mount the grommet on the cable in the housing. Set the alarm as covered in Section A401.929/H51.330. Mount the alarm cover.

3.25 ***Humidity Sensing Element: Fig. 2***—Using the spanner wrench, remove the ring nut in the end of the manifold. Remove the sensing element carefully from the manifold by pulling on the cable. Take care not to lose the washer behind the molded retaining ring on the cable. Remove the sensing element mounting screw from the bottom of the axial hole in the element using the 3-inch cabinet screwdriver. Remove the element from its socket and substitute the new element. Tighten the mounting screw. Carefully insert the element into the manifold, seat the washer on the cable retaining ring and push the retaining ring into the manifold. Mount and tighten the ring nut.

3.26 ***Humidity Sensing Element Cable: Fig. 2—*** To replace the cable, which includes the plug on one end and the socket on the other, proceed as follows:

(1) Remove the sensing element cable plug from the receptacle in the humidity alarm. To do this, remove the alarm cover with the 3-inch cabinet screwdriver. Push out the humidity alarm grommet and withdraw the cable and plug from the alarm housing. Remove this grommet from the cable.

(2) Remove the conduit cover mounting screws at each end of the conduit. Carefully move the temperature controller tubing away from the cover and swing the left end of the cover away from the panel. Remove the sensing element grommet from the U-shaped hole in the cover and remove the cable. Remove the tape from the cable, straighten the cable, and remove the grommet.

(3) Remove the sensing element from the manifold and the element from the cable socket as covered in 3.25. Remove the ring nut from the cable.

(4) Slide the ring nut over the plug end of the cable and position the nut adjacent to the molded retaining ring. Place a new retaining ring washer on the retaining ring from the socket end of the cable. Mount the sensing element in the cable socket and the element and socket in the manifold as covered in 3.25.

(5) Insert the plug and cable through the hole in the humidity alarm housing and mount the plug in the alarm receptacle. Mount the humidity alarm grommet. Remount the alarm cover.

(6) Loop the sensing element cable and slide the conduit grommet on the loop. Fold the looped portion of the cable and hold the folds together with electricians tape. Place the folded portion of the cable in the conduit, mount the grommet in the conduit cover, and remount the cover.

3.27 ***High-low Output Air Pressure Alarm: Fig. 2***

(1) To replace the pressure alarm, first remove the humidity alarm cover using the 3-inch cabinet screwdriver. Tag and disconnect the pressure alarm leads from terminals 1 and 2 and remove these leads from the humidity alarm. Disconnect the tubing attached to the elbow in the bottom of the pressure alarm using the R-1542 wrench. Remove the pressure alarm mounting screws with the 4-inch regular screwdriver and remove the alarm. Remove the elbow from the alarm with the wrench.

(2) Remove the sealing plug from the port in the bottom of the new alarm and mount the elbow in the port. Mount the alarm and connect the tubing to the elbow. Insert the pressure alarm leads into the humidity alarm. Referring to the tracer markings on the tagged leads of the alarm being replaced, connect the leads of the new alarm to the proper terminals in the humidity alarm. Mount the humidity alarm cover. Check the requirement for operation of high-low output air pressure alarms in Section A401.929/H51.330.

3.28 ***Dehydrating Tank Temperature Indicator:*** Grasp the indicator mounting bushing in the panel behind the indicator and carefully pull it out of the hole in the panel. In doing this, take care not to damage the temperature controller tubing which is inserted in the panel hole with the bushing. Slide the stem of the tank temperature indicator out of the coiled portion of the temperature controller tubing. Then slide the stem of the indicator out of the bushing. Mount the new tank temperature indicator by following the above procedures in reverse order.

3.29 ***Dehydrating Tank and Output Air Pressure Gauges: Fig. 1 and 2*** — To replace either gauge, apply the R-5850 wrench to the square section at the back of the gauge case and unscrew the gauge from its mounting. In removing or mounting a gauge, do not put any strain on the case in order to avoid damaging the mechanism. Mount the new gauge.

3.30 ***Output Air Pressure Regulator: Fig. 2 —*** To replace the regulator proceed as follows:

(1) Remove the dehydrating tank temperature indicator as covered in 3.28 and the tank pressure gauge as covered in 3.29.

(2) Remove the manifold as follows. Using the R-1542 wrench, remove the tubing between the manifold and output air pressure regulator and between the manifold and output air pressure alarm. Disconnect the tubing at the bottom of the manifold. Remove the manifold clamp mounting screws with the No. 2 Phillips screwdriver. Support the manifold by a piece of wire attached to the pressure alarm. Take care not to damage the sensing element cable or the pressure gauge on the manifold.

(3) Loosen the regulator handwheel locknut with the R-1542 wrench. Remove the handwheel and unscrew the regulator from its mounting using the Williams No. 33C wrench.

(4) Transfer the fitting in the regulator being replaced to the corresponding port of the new regulator. Remove the handwheel from the new regulator. Mount the new regulator and other parts removed by following the above procedures in the reverse order.

3.31 ***Air Filter: Fig. 2***—To replace the air filter which is part of the fitting on which the output air pressure regulator is mounted, proceed as follows. Remove the regulator as covered in 3.30. Remove the air filter using the Stevens-Walden socket wrench and crossbar. Mount the new air filter and other parts removed by following the above procedures in reverse order.

3.32 ***Refrigeration Fan: Fig. 2*** — Remove the fan motor bracket mounting screws and nuts using the R-1542 and the Williams No. 8725 wrenches. Shift the bracket so that the fan mounting nut is accessible. Remove the nut using the R-1542 wrench. Substitute the new fan and securely tighten the nut. Position the fan motor mounting bracket and tighten the mounting screws and nuts.

3.33 ***Refrigeration Fan Motor: Fig. 2***

(1) Using the 3-inch cabinet screwdriver disengage the mounting screw of the terminal cover on the refrigeration unit. Slide the cover back on the leads. Note the terminals to which the motor leads are connected. Disconnect these leads and withdraw them from the cover.

(2) Remove the fan motor bracket mounting screws and nuts using the R-1542 and the Williams No. 8725 wrenches. Remove the bracket and motor. Remove the fan mounting nut with the R-1542 wrench and remove the fan. Remove the motor mounting screws with the No. 2 Phillips screwdriver and remove the motor.

(3) Mount the new motor on the bracket and tighten the mounting screws. Mount the fan on the motor shaft and tighten the fan mounting nut. Position the fan motor mounting bracket and tighten the mounting screws and nuts. Pass the motor leads through the terminal cover and connect the leads to the proper terminals. Mount the terminal cover and tighten the cover screw.

3.34 ***Dehydrating Tank Temperature Controller: Fig. 2***

(1) Remove the tank temperature indicator and associated temperature controller tubing by grasping the mounting bushing in the panel behind the indicator and carefully pulling it out of the hole in the panel. Slide the stem of the indicator out of the coiled portion of the tubing.

(2) Pull the knob off the shaft of the temperature controller. Support the controller and remove the controller mounting screws at the front of the controller using the 3-inch cabinet screwdriver. Remove the controller. Remove the rear cover mounting screw and remove the cover. Disconnect the leads from the controller terminals.

(3) Remove the rear cover of the new controller and connect the leads to the terminals. Remount the cover. Mount the controller in the air dryer.

(4) Measure the uncoiled portion of the tubing of the controller being replaced. Lay off this length on the tubing of the new controller and starting at this point coil the

remainder of the tubing around the stem of the temperature indicator. Position the coiled portion of the tubing on the stem so that the outer end of the coil is in line with the end of the stem. Carefully insert the stem of the indicator with the coiled tubing through the hole in the panel and seat the indicator mounting bushing in the hole.