CLASS 141

Hypro Flatwork Ironer

INSTRUCTION AND ILLUSTRATED PARTS MANUAL

JULY 1973

AMERICAN®
5050 Section Avenue
Cincinnati, OH 45212-2099

INSTALLATION · OPERATION · MAINTENANCE INSTRUCTIONS and REPAIR PARTS

American HYPRO Flatwork Ironer

CONTENTS

IMPORTANT

The purpose of this manual is to acquaint you fully with this equipment, and to tell briefly and clearly how it should be installed, operated and maintained. The machinery is built according to highest manufacturing standards and has been thoroughly inspected and tested at the factory before shipment. *It will give you years of efficient, trouble free service if the instructions herein are followed.* Therefore, this manual should always be kept available for those who may need it.

The special maintenance section includes parts illustrations with listings of individual machine parts. When ordering repair parts use the item number identification and follow the instructions for "How to Order". Some items, such as standard nuts, bolts, washers, etc., are not listed because it will be faster and more economical to obtain them locally.

READ THIS MANUAL—FOLLOW THE INSTRUCTIONS

DESCRIPTION

The Hypro ironer is furnished with 4, 6 or 8 rolls, depending upon your requirements. The standard machine is furnished with the drive mounted outside the R. H. frame. As an optional extra, the drive can be positioned inside the R. H. frame (under the machine).

The ironer illustrated in figures 1, 2, 3 and 4 is a standard six roll machine. The purpose of these illustrations is to acquaint personnel with the names and locations of the various parts of the machine. These illustrations should also be very helpful during the initial installation.

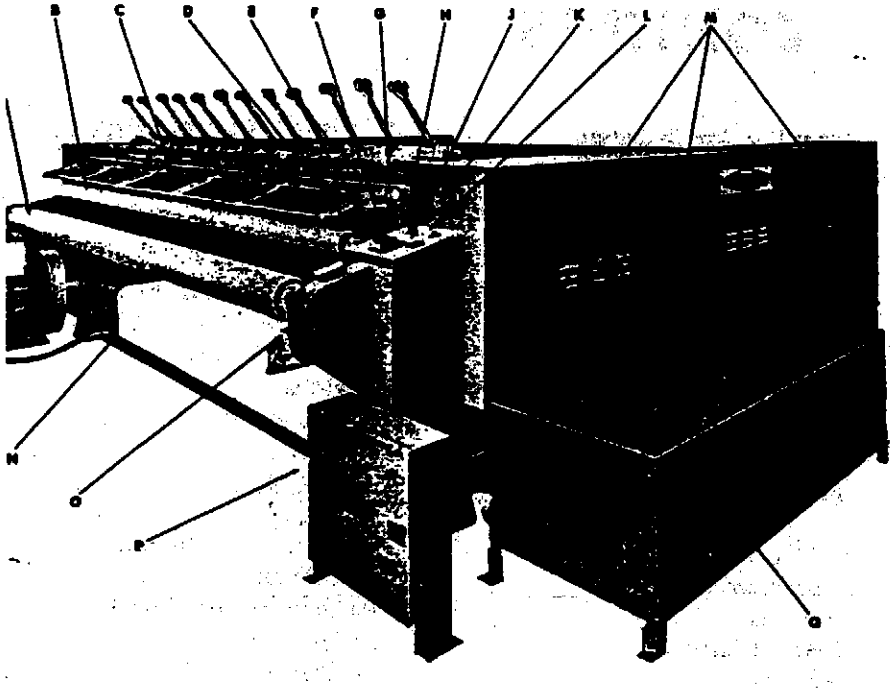


FIGURE 1
R. H. VIEW OF FEED END, 6 ROLL FLATWORK IRONER

ITEM	DESCRIPTION
A	Ribbon feed drive roll
B	Doffer roll
C	Safety guard
D	Control panel
E	"START INCH - STOP" button
F	Speed control
G	Pressure gauge, Bijur lubrication system
H	Roll raising control
J	"OFF-ON" button
K	Speedometer
L	Emergency signal light
M	R. H. end guards
N	Tie-rod
O	Control support
P	Motor control switch
Q	Drive guard

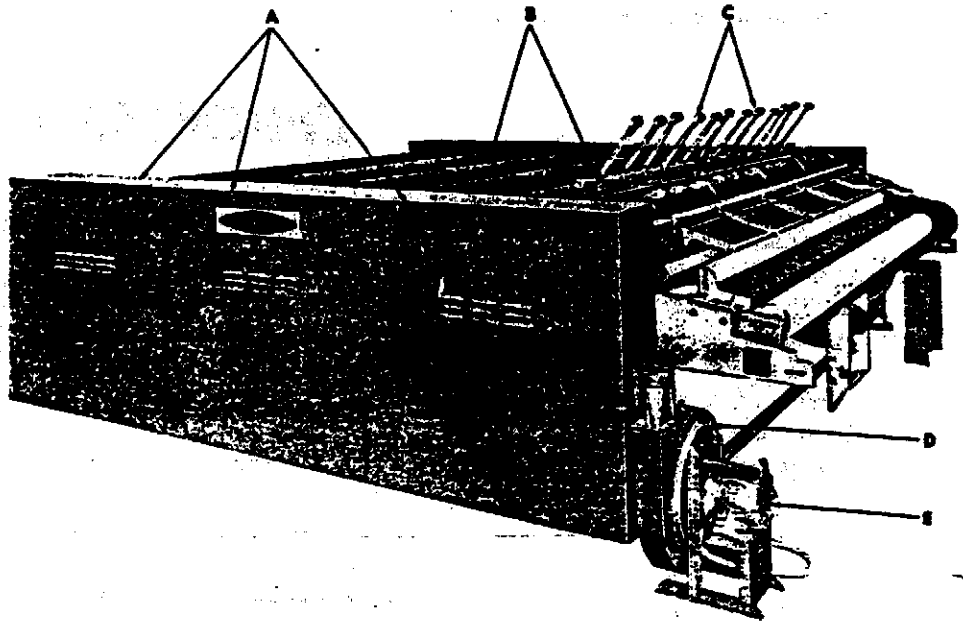


FIGURE 2
L. H. VIEW OF FEED END, 6 ROLL FLATWORK IRONER

ITEM	DESCRIPTION
A	L.H. end guards
B	Ironer rolls
C	Spool arm assem.
D	Vacuum fan
E	Vacuum fan motor

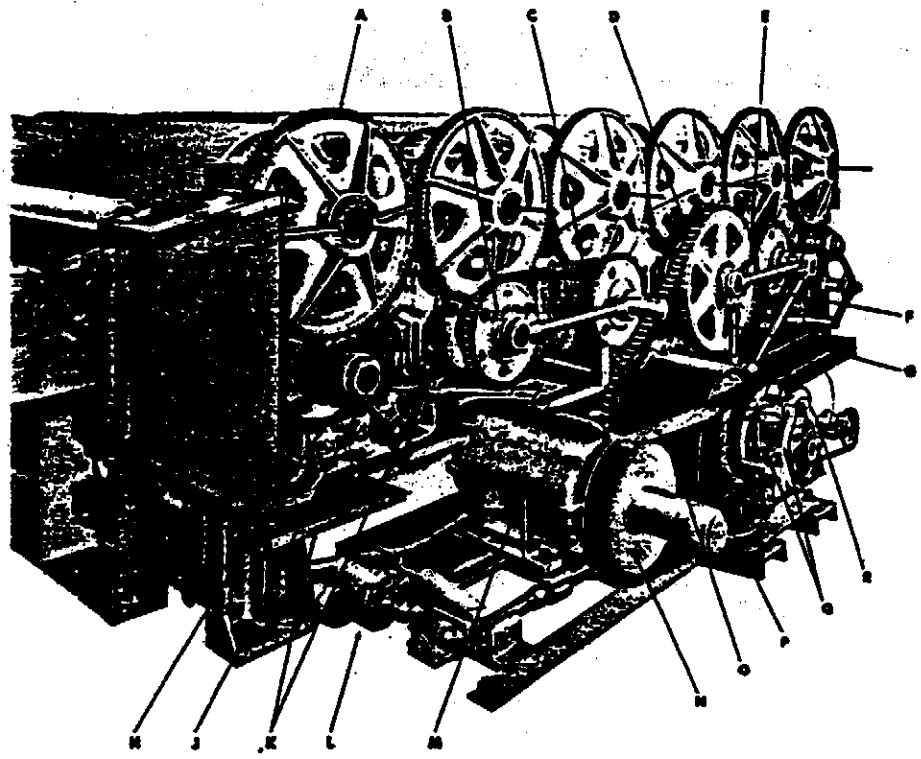
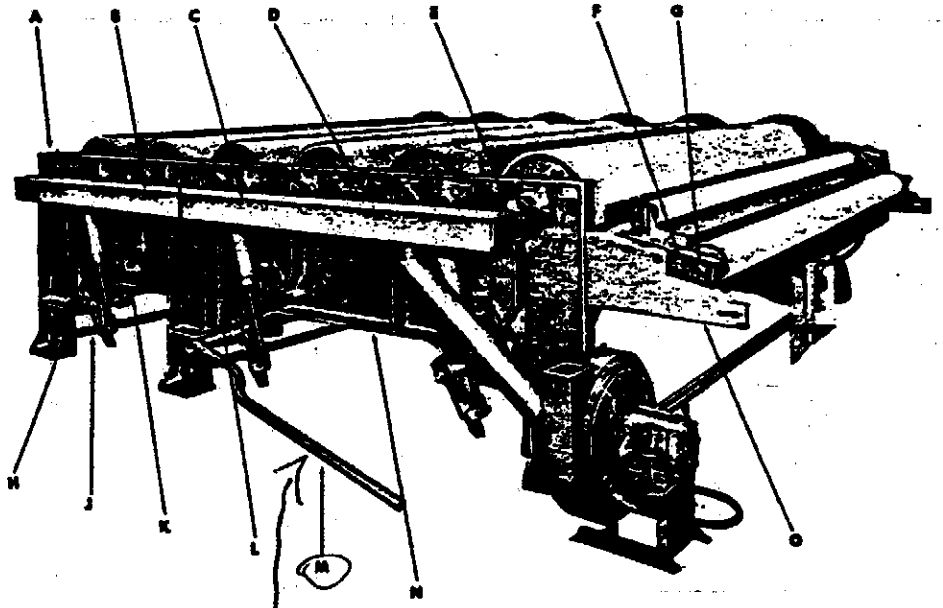


FIGURE 3
R. H. SIDE VIEW, 6 ROLL FLATWORK IRONER (WITHOUT GUARDS)

ITEM	DESCRIPTION
A	Bearing & gear assem., main drive
B	Drive sprocket assem.
C	Strut
D	Main drive chain
E	Strut
F	Long strut
G	Short strut
H	Junction block, Bijur lubrication system
J	Idler sprocket
K	Oil drip pans
L	Remote control motor
M	Drive motor
N	Roto-cone pulley
O	Vari-speed V-belt
P	Gear reducer
Q	Brake assembly
R	Speedometer drive head

FIGURE 4
L. H. SIDE VIEW, 6 ROLL FLATWORK IRONER (WITHOUT GUARDS)

ITEM	DESCRIPTION
A	Stud for squaring frames and lubricating vacuum adaptor
B	Vacuum duct, roll 5 & 6
C	Vacuum duct, rolls 1, 2, 3 & 4
D	Hose assembly
E	Vacuum adaptor assem.
F	L.H. grease shield
G	Pillow block (Inside grease shield)
H	Roll raising shaft
J	Lever, air cylinder end, raising rig.
K	L.H. frame, 2 roll
L	Air cylinder, roll raising mechanism
M	Hand crank, raising rig
N	L.H. frame, 4 roll
O	Feed table bracket



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ARM

DATA and SPECIFICATIONS

MODEL DATA

	4 Roll Ironer	6 Roll Ironer	8 Roll Ironer
Floor Space Requirements:			
Depth	125"	175"	225"
Height	56"	56"	56"
Width (With Drive Outside Machine)	195"	195"	195"
Width (With Drive Inside Machine)	170"	170"	170"
Shipping Weight	26,600 lbs.	38,200 lbs.	53,200 lbs.
Machine Weight	22,000 lbs.	32,900 lbs.	43,900 lbs.
Floor Load Requirements	210 lbs./sq.ft.	210 lbs./sq.ft.	210 lbs./sq.ft.
Air Service:			
Inlet Size	1/4" I.P.S.	1/4" I.P.S.	1/4" I.P.S.
Pressure	70 PSI	70 PSI	70 PSI
Steam Service:			
Inlet Size	2-1/2" I.P.S.	2-1/2" I.P.S.	3" I.P.S.
Pressure	125 PSI	125 PSI	125 PSI
Return Size	3/4" I.P.S.	3/4" I.P.S.	3/4" I.P.S.
Steam Consumption	650 lbs./hr. (Max.)	1000 lbs./hr. (Max.)	1300 lbs./hr. (Max.)
Boiler Horsepower Requirements	16 B.H.	24 B.H.	32 B.H.
Vacuum Size	6"	6"	6"
Ironing Speed	27 to 81 ft./min.	42 to 126 ft./min.	50 to 150 ft./min.
Ironing Surface (Per Chest – 3,635 sq.in.)	14,540 sq.in.	21,810 sq.in.	29,080 sq.in.
Pressure Area Under Rolls (Per Chest – 2,265 sq.in.)	9,060 sq.in.	13,590 sq.in.	18,120 sq.in.
Diameter of Padded Roll – Nominal	19-5/8"	19-5/8"	19-5/8"

ELECTRICAL SPECIFICATIONS

Standard A.C. Service 208-240 440 or 550 Volts, 50 or 60 Cycles, 3 Phase

	4 Roll Ironer	6 Roll Ironer	8 Roll Ironer
Drive Motor	7-1/2 H.P.	15 H.P.	15 H.P.
Vacuum Motor	3 H.P.	3 H.P.	3 H.P. (2 Req'd.)
Variable Speed Control Motor	1/4 H.P.	1/4 H.P.	1/4 H.P.
Feed Line Wire Size (50 Ft. Max.)	#8	#4	#2
Circuit Breaker	50 Amp.	125 Amp.	150 Amp.
Fuses or Disconnect Switch	100 Amp.	150 Amp.	175 Amp.
	100 Amp., 3 Pole 250 Volt, Single Throw Switch	200 Amp., 3 Pole, 250 Volt, Single Throw Switch	200 Amp., 3 Pole, 250 Volt, Single Throw Switch

EXTRA EQUIPMENT (OPTIONAL)

Revolite Roll Padding
Hamilton Spring Padded Roll
Drive Positioned Inside Frame of Machine
Canopy
Spare Parts Kit
6 Roll Drive on 4 Roll Ironer
Electric Heated Tape Welding Device

INSTALLATION

CHECKING SHIPMENT

The ironer is dismantled into large assemblies prior to shipment. These assemblies are packed into wooden crates.

As soon as the shipment is received, check the shipping papers to see that the correct number of crates have been received. If any crates are damaged, it is advisable to have the carrier make a note of the damage on the shipping papers before receipt is acknowledged.

The boxes containing the frames, reducer, shafts, small parts and motor are required on the initial part of the installation and should be moved to the erection site. Uncrate the parts carefully, and make a thorough inspection to see if any damage has occurred during transit. Claims should be filed immediately with the freight forwarding agency.

LOCATION

If the ironer is to be applied to an existing machine in your plant, its location is predetermined. If you are purchasing a new machine to use in conjunction with this ironer, before deciding upon a location, access to steam, air and electrical supply lines should be considered. Sufficient space should be allowed on all sides for cleaning, lubrication and maintenance.

FOUNDATION

The floor on which the ironer is mounted should be able to withstand a minimum load of 210# per square foot. Floors of lighter construction should be strengthened by suitable reinforcements.

It is suggested that structural steel channels be placed under the feet of the ironer to distribute the load and maintain the level of the ironer. These steel channels should be placed at RIGHT ANGLES to the floor joists. This means that depending on the floor in your building, the channels will run in the direction of the feed, or at 90° to the direction of the feed. Figure 5 shows these channels and the following paragraph lists the channel requirements for the 4, 6 and 8 roll machines.

NOTE: When the channels are placed in the direction of the feed, the inside flange of the channel must be partially cut out at spots for tie-rod clearance.

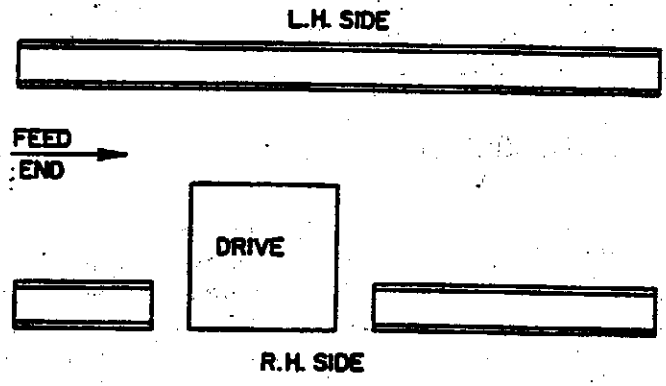


FIGURE 5A
CHANNELS PLACED IN DIRECTION OF FEED

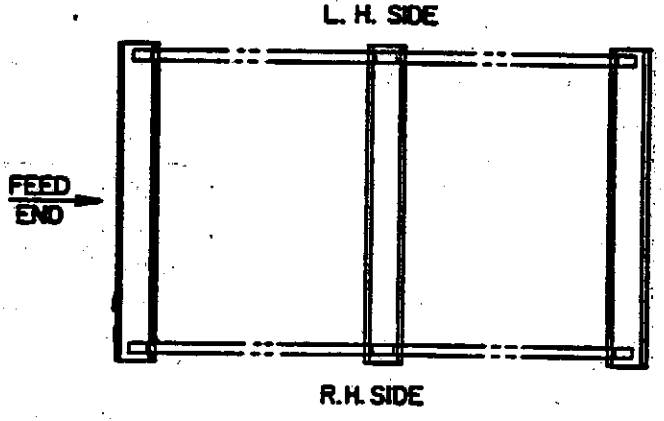


FIGURE 5B
CHANNELS PLACED AT 90° TO DIRECTION OF FEED

CHANNEL SPECIFICATIONS

4 ROLL MACHINE

In direction of Feed
- 1 Channel, 9" - 20#, 1'3" Lg.
- 1 Channel, 9" - 20#, 3'0" Lg.
- 1 Channel, 9" - 20#, 9'4" Lg.

90° to direction of Feed
- 2 Channels, 12"–30#, 13'4" Lg.

6 ROLL MACHINE

In direction of Feed
- 1 Channel, 9" - 20#, 1'3" Lg.
- 1 Channel, 9" - 20#, 7'3" Lg.
- 1 Channel, 9" - 20#, 13'6" Lg.

90° to direction of Feed
- 3 Channels, 12"–30#, 13'4" Lg.

8 ROLL MACHINE

In direction of Feed
- 1 Channel, 9" - 20#, 5'0" Lg.
- 1 Channel, 9" - 20#, 4'5" Lg.
- 1 Channel, 9" - 20#, 16'8" Lg.

90° to direction of Feed
- 4 Channels, 12"–30#, 13'4" Lg.

ERECTING IRONER

This instruction will cover the erection of a six roll ironer. The four roll and the eight roll ironer are assembled in the same manner. Before proceeding with the installation, study the photos and drawings in this manual in order to familiarize yourself with the machine and its components.

ASSEMBLING FRAME

See figure 6.

Stand the right and left four roll frames (A) on the channels. Fasten the frames together by means of the five tie-rods (D). At the same time the tie-rods are inserted, the roll raising shafts (E) should be inserted into the frames. The end with the key is on the left side. The lifting levers (F) should be mounted on the shaft so they are located between the frames. The upper tie-rod (B) is put in place only after the chests and rolls are in position.

Stand the right and left two roll frames (G) on the channels. Insert the tie-rods (H) and the roll raising shaft (E) with lifting levers (F) attached in the frames, and fasten the frames together by means of the tie-rods. Fasten the two roll frame to the four roll frame.

SQUARING FRAME

See figure 6.

Before the chests and rolls are installed, the frame must be square. Use the studs (J) on the top of the frame and measure diagonally as shown in figure 6. When the diagonal measurements are equal, the frames are square.

LEVELING

See figure 6.

The ironer must be level in both the longitudinal and the transverse direction. Longitudinal level may be determined by placing a spirit level on the finish pad on top of the frames (A and G) and leveling by means of the jack screws (K). Transverse level may be determined by placing a spirit level on the roll raising shaft (E) and leveling by means of the jack screws.

LOCATING DRIVE

See figures 21 and 22.

To position the drive assembly, use a straight edge and line up the drive sprocket on the reducer and the driven sprocket on the ironer. Make certain there will be enough adjustment of the reducer on the base to

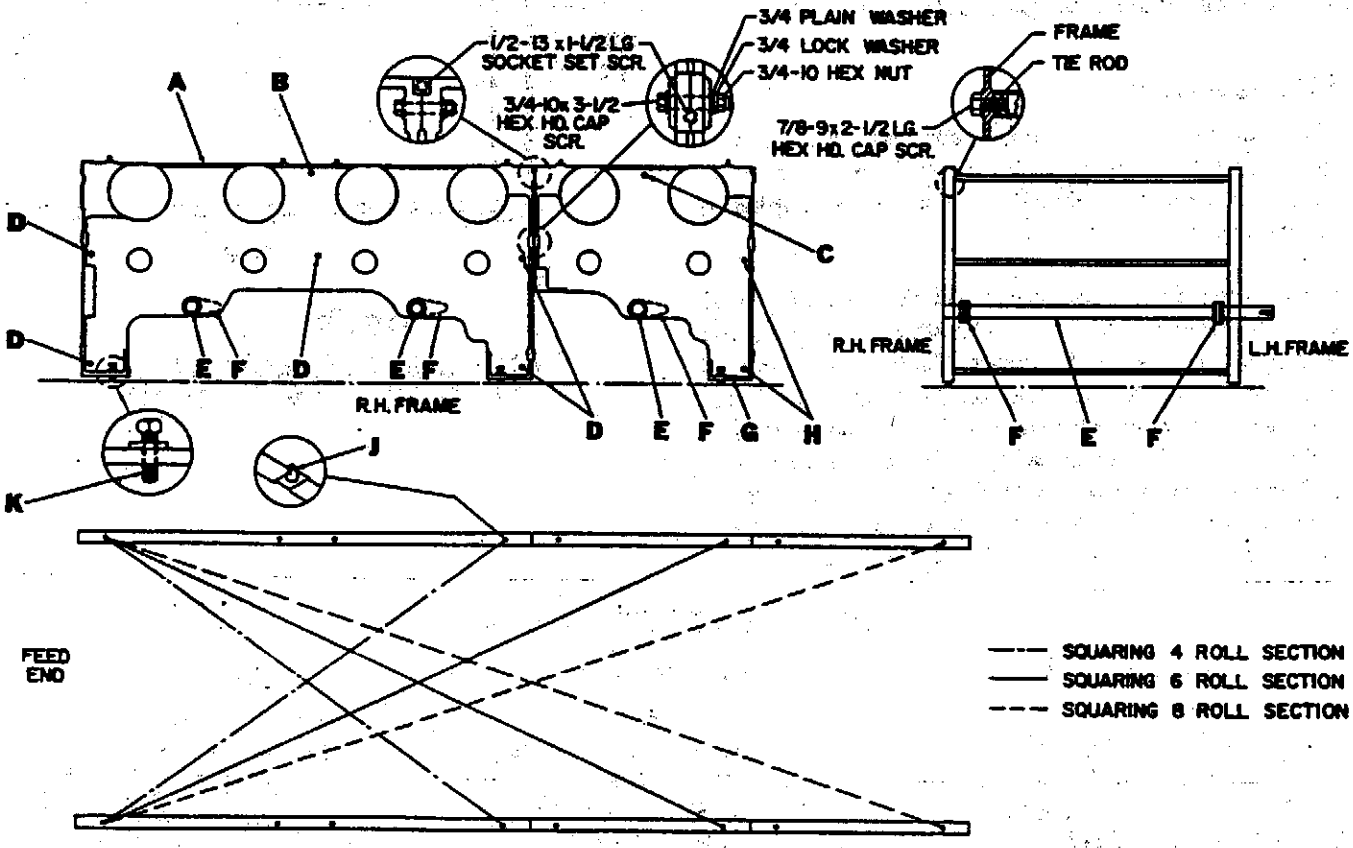


FIGURE 6 - ASSEMBLING, SQUARING AND LEVELING FRAME

apply and relieve tension on the drive chain. Then bolt the base to the floor and adjust the reducer to obtain the proper chain tension.

On some machines, the motor and reducer are on separate bases, while on others they are on the same base. The 8 roll ironer with the drive positioned outside the frame and all models where the drive is positioned inside the frames are mounted on separate bases.

DRIVE POSITIONED OUTSIDE FRAME – Move the motor to the forward position on the motor base and wedge open the roto-cone pulley to allow the belt sufficient space to pass easily into the pulley and on the driven sheave of the reducer. Avoid prying the belt. Adjust tension on the roto-cone belt and fasten the motor securely to the base.

ALL INSIDE DRIVE MACHINES AND 8 ROLL OUTSIDE DRIVE – Move the motor to the forward position on the motor base, and slip the roto-cone belt over the roto-cone pulley and the drive sheave. Avoid prying the belt. Then using a piece of timber, exert pressure between the reducer and the motor. This will automatically spread open the roto-cone pulley to the proper position and width.

Then while still exerting pressure on the timber, line the pulleys up with a straight edge and mark the holes for the motor base. These holes should be marked, bearing in mind that the motor must be adjusted forward and backward when the reducer is adjusted. The motor base is on slotted holes so it can be adjusted at the same time, or at any other time the belt requires adjusting. It is recommended that the holes be marked in the center of the slot, or somewhat past center toward the front of the machine.

CONDUIT INSTALLATION

See figure 7.

Conduit going from the main junction box to the right rear leg of the ironer should be installed at this time.

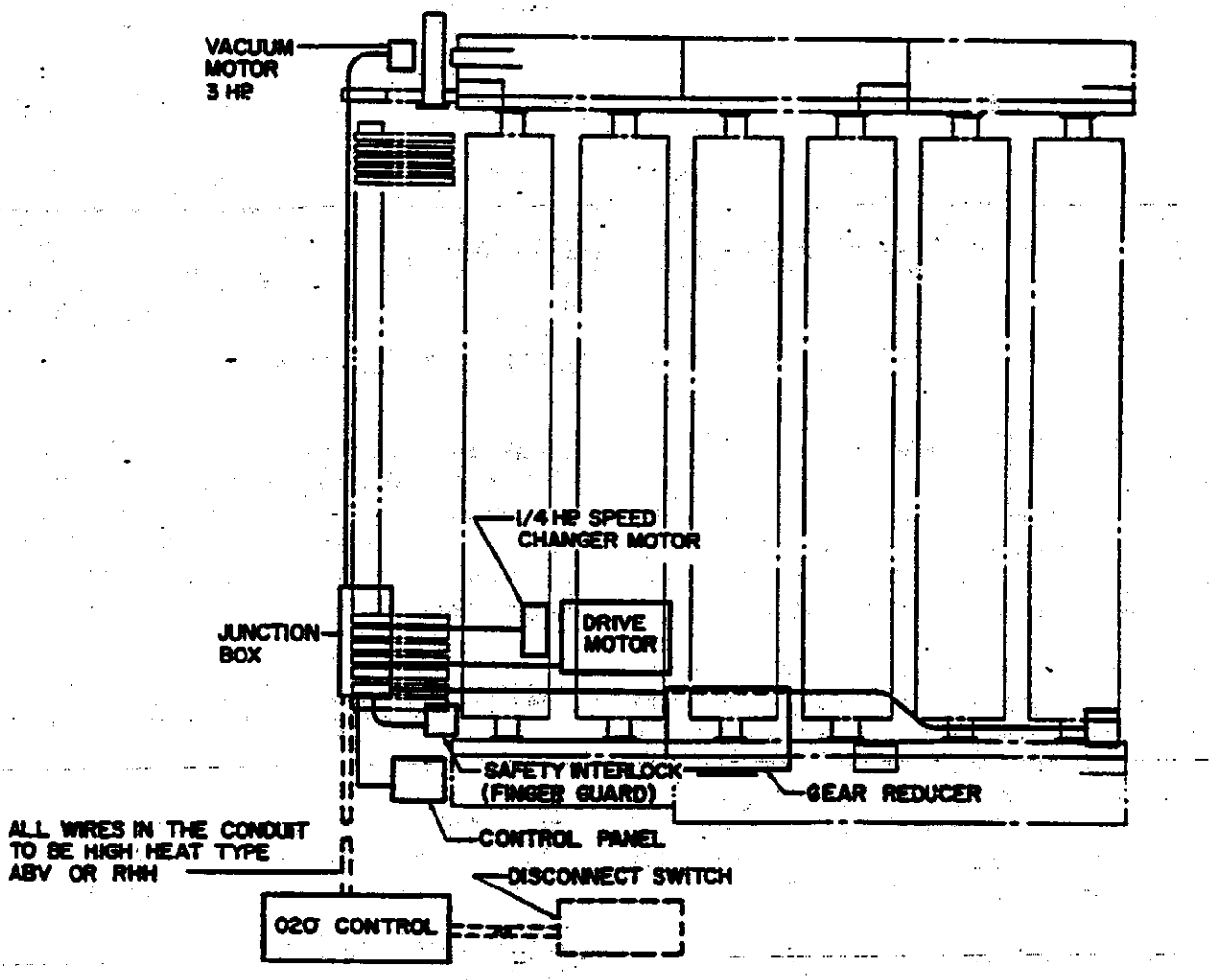


FIGURE 7 - CONDUIT INSTALLATION

CHEST INSTALLATION

See figures 8 and 19.

The chests are identical except that the end chest (delivery end) has a row of bolt holes for attaching the folder bridging strip. As each pair of chests is mounted, the raising rig rods (19-D) should be installed before mounting the next pair of chests. Each pair of chests has only one raising rig rod at each side of the machine as shown in figure 19.

After all chests are installed, remove the protective coating from them.

At this point it is advisable to re-check the frames for being level and square as previously described. Since the drive has been located in relation to the right hand frame, any further squaring should be done on the left hand frame.

INSTALLING ROLLS

The rolls are weighed prior to shipment and the weight of each roll is stamped on the roll. The heaviest roll should be installed in no. 1 position (feed end), the second heaviest roll should be installed in no. 2 position, the third heaviest roll in no. 3 position, etc. The rolls should be installed with the flanged drive gudgeon on the right side, and positioned WITH THE PIPE PLUG ON THE LEFT END OF THE ROLL AT THE TOP OF THE VERTICAL CENTER LINE. In this way, the keyway on the right end is in the vertical position for the installation of the universal drive shaft. Install the tie-rods (Items B and C, figure 6).

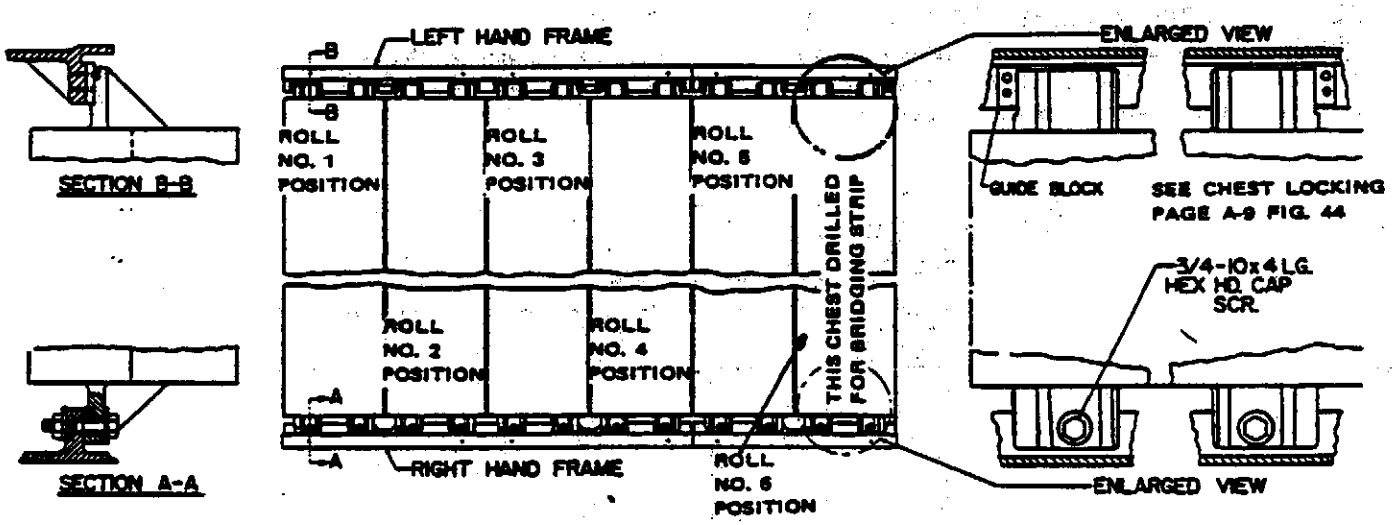


FIGURE 8 - STEAM CHEST INSTALLATION

INSTALLING UNIVERSAL DRIVE SHAFT

See figure 9.

When installing the universal drive shaft (D) have the padded roll gudgeon (C) in place against drive sleeve of bearing and gear assembly (A). Have the gudgeon and drive sleeve keyways in vertical alignment.

With installation tool (E) fastened to the outside of the universal drive shaft, and guide needle (F) in inside pin (B), insert universal drive shaft thru drive sleeve and just start the drive shaft into the gudgeon keyway. Withdraw the guide needle and turn the large gear 90° manually, to line drive sleeve keyway with the outside drive shaft pin (G). Advance drive shaft to drive position and remove installation tool.

INSTALLING GREASE RETAINER IN UNIVERSAL DRIVE

See figure 10.

the grease retainer seal (B) and the spacer (A) in the drive sleeve (C). Then insert the tru-arc ring (D) in the drive sleeve using a pair of #7 tru-arc internal ring pliers. Screw in the grease retainers (E). Ironer rolls 1 and 2 use grease retainers with short nipples and rolls 3, 4, 5 and 6 use grease retainers with the longer nipples.

INSTALLING AIR CYLINDERS AND OUTSIDE LIFTING LEVERS

See figure 19.

Install the air cylinders (P) and the outside lifting levers (J) as shown on illustration. Make sure arrow on flow control valve (C) points in direction shown.

INSTALLING VACUUM SYSTEM

See figures 11, 23 and 24.

Fasten the vacuum adaptor assemblies (B) on the L. H. frame for each roll. Fasten the vacuum ducts (A) to the

vacuum adaptors, remembering install the gaskets between ...ese items. Assemble piping and fasten vacuum fan to floor.

...e discharge connection on the vacuum fan is 11" from the center line of the fan. The transition adaptor furnished with the machine increases this distance to 19" and provides a 6" diameter connection. It is recommended that the exhaust connection be piped outside the building, and that the piping extend about 6 ft. vertically with a rotating elbow on top to prevent back draft.

Mount air tubing brackets on vacuum ducts as shown on figure 4, page 3.

INSTALLING STEAM PIPING

See figures 12 and 13.

Install steam piping as shown on illustration. Install steam adaptors (A) in chests making sure they are ...n the position shown on illustration. ...he recommendations for the steam traps are listed following this

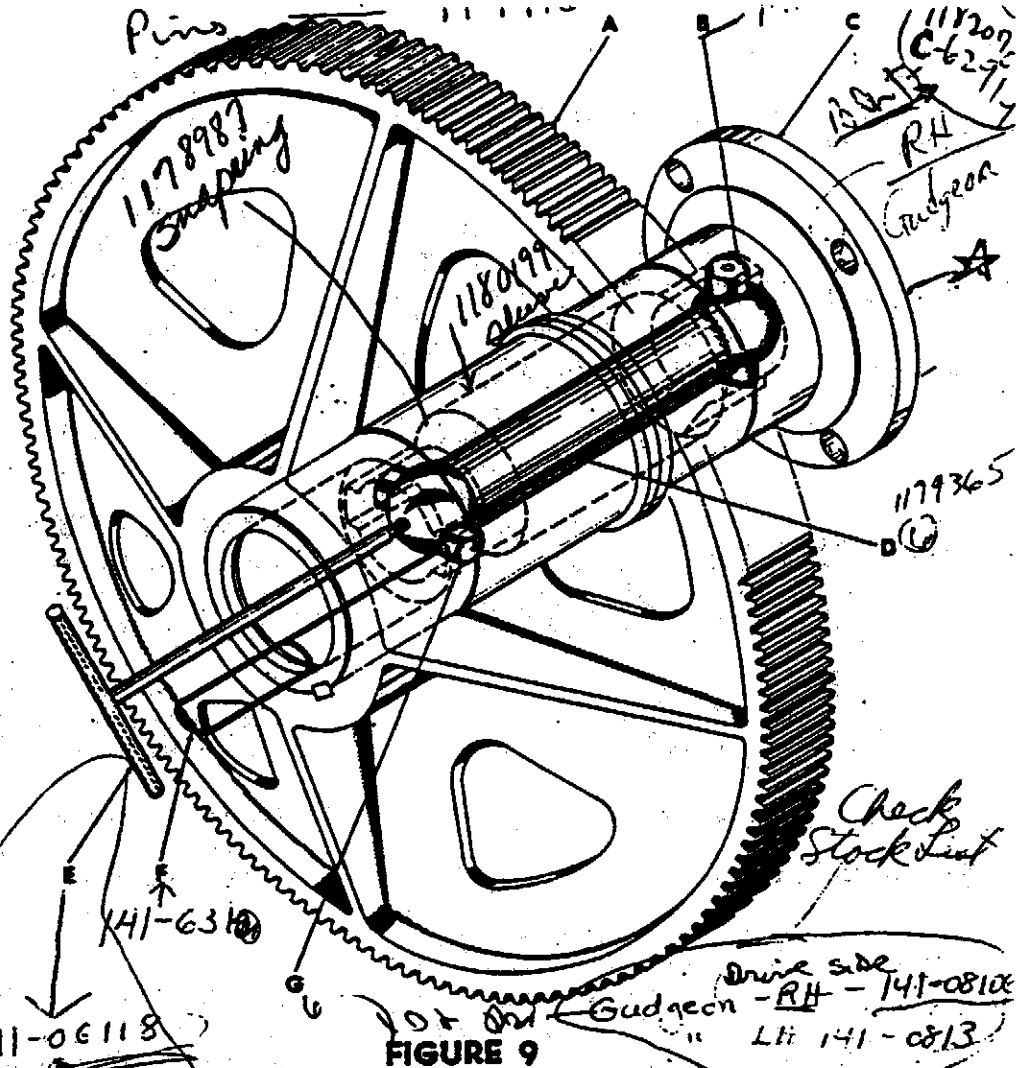


FIGURE 9
INSTALLING UNIVERSAL DRIVE SHAFT

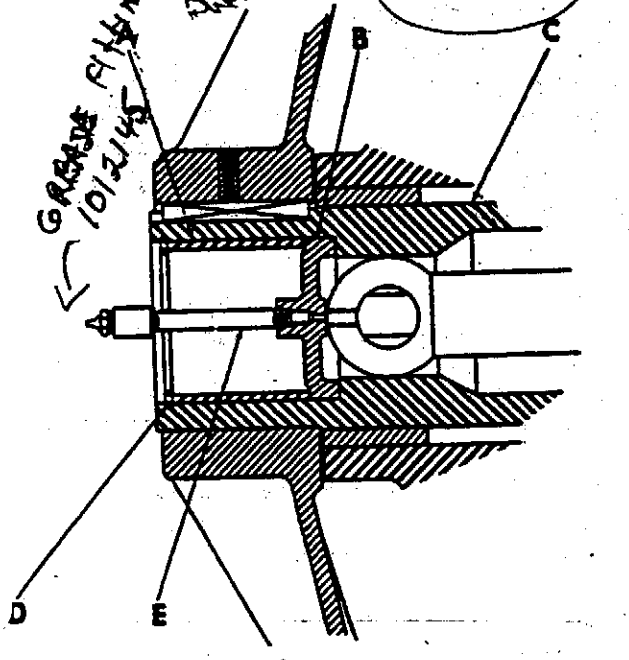
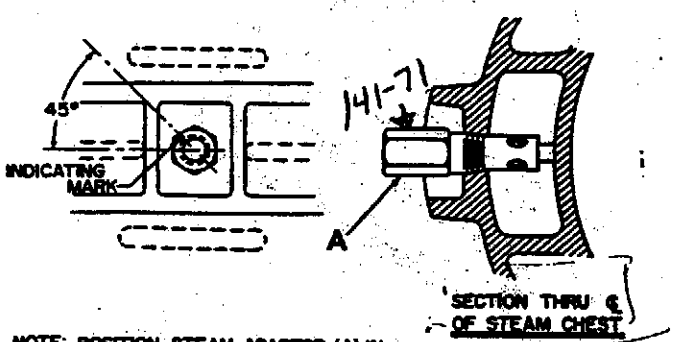


FIGURE 10 - INSTALLING GREASE RETAINER IN UNIVERSAL DRIVE

FIGURE 11
VACUUM SYSTEM INSTALLATION

paragraph. A.L.M.I. does not furnish traps with the machine, they are to be supplied by the Individual Laundry Owners.



NOTE: POSITION STEAM ADAPTOR (A) IN BOTTOM OF CHEST WITH INDICATING MARK 45° FROM EITHER CENTER LINE. THIS POSITION WILL DIRECT THE ENTERING STEAM BETWEEN THE INTERNAL RIBS OF THE CHEST.

FIGURE 12
STEAM ADAPTER INSTALLATION

STEAM TRAP RECOMMENDATION

4 ROLL IRONER

Steam inlet (one) 1/2" #800-LV* Armstrong trap** C72824
Steam return (two) 3/4" #812-LV* Armstrong trap**
(1 each for chests #1 & #2) C72825
(two) 3/4" #811-LV* Armstrong trap**
(1 each for chests #3 & #4)

6 ROLL IRONER

Steam inlet (one) 1/2" #800-LV* Armstrong trap**
Steam return (three) 3/4" #812-LV* Armstrong trap**
(1 each for chests #1, #2 & #3)
(three) 3/4" #811-LV* Armstrong trap**
(1 each for chests #4, #5 & #6)

8 ROLL IRONER

Steam inlet (one) 1/2" #800-LV* Armstrong trap**
Steam return (three) 3/4" #812-LV* Armstrong trap**
(1 each for chests #1, #2 & #3)
(five) 3/4" #811-LV* Armstrong trap**
(1 each for chests #4, #5, #6, #7 & #8)

* "LV" - Indicates trap with enlarged air vent
** Or Equivalent

NO TRAPS ARE SUPPLIED BY A.L.M.I.

See figure 3.

Mount struts (C and E) on intermediate drive sprocket stud between rolls 2 and 3 and rolls 4 and 5. Mount long strut (F) and short strut (G) beneath rolls 4 and 5.

BIJUR LUBRICATION SYSTEM

See figure 27.

Mount the Bijur pump and reservoir on the drive base. Connect the pump to the R. H. four roll frame as shown. Connect the tubing between the four roll frame and the two roll frame as shown.

DRIVE CHAINS

See figure 3.

Install all drive chains and adjust for proper tension as described on page 19.

FINAL ASSEMBLY

Mount control support (Item 0, figure 1) and control panel (Item D, figure 1) as shown. Install lower guard support angles.

Connect air tubing from air cylinders to control valve under control panel. See figure 4 and figure 18. Connect hose assembly (Item D, figure 4).

Make all conduit connections as shown on figure 7, and all electrical connections as shown on electrical diagram furnished with the machine.

Install all oil drip pans as shown on figure 25 or 26.

Attach speedometer head (Item R, figure 3) and connect the flexible speedometer cable (Not Shown) between the speedometer head and the speedometer (Item K, figure 1). Mount right and left hand end guards.

SERVICE CONNECTIONS

AIR – The air line connection is for 1/4" pipe and is located at the front of the machine on the R. H. side. The air supply should be 70 psi gauge pressure. If the pressure exceeds 70 psi, an air pressure regulator should be installed in the supply line. A 1/4" globe valve should be installed in supply line, so air can be shut off when the ironer is not in use.

STEAM – The ironer is designed to use dry saturated steam at 125 psi guage pressure. The steam inlet is located at the front of the machine. For pipe size, see Data and Specifications, page 4. The steam inlet and returns should be piped as shown on figure 13.

ELECTRICAL – Connect wires in accordance with the electrical diagram attached to the machine. For wire size, etc., see Data and Specifications, page 4.

If machine is equipped for 3 phase current, when facing sprocket on reducer, it should rotate in a clockwise direction. If the direction of rotation is incorrect, it can be reversed by changing any two lead-in wires to the drive motor. DO NOT make this check until all

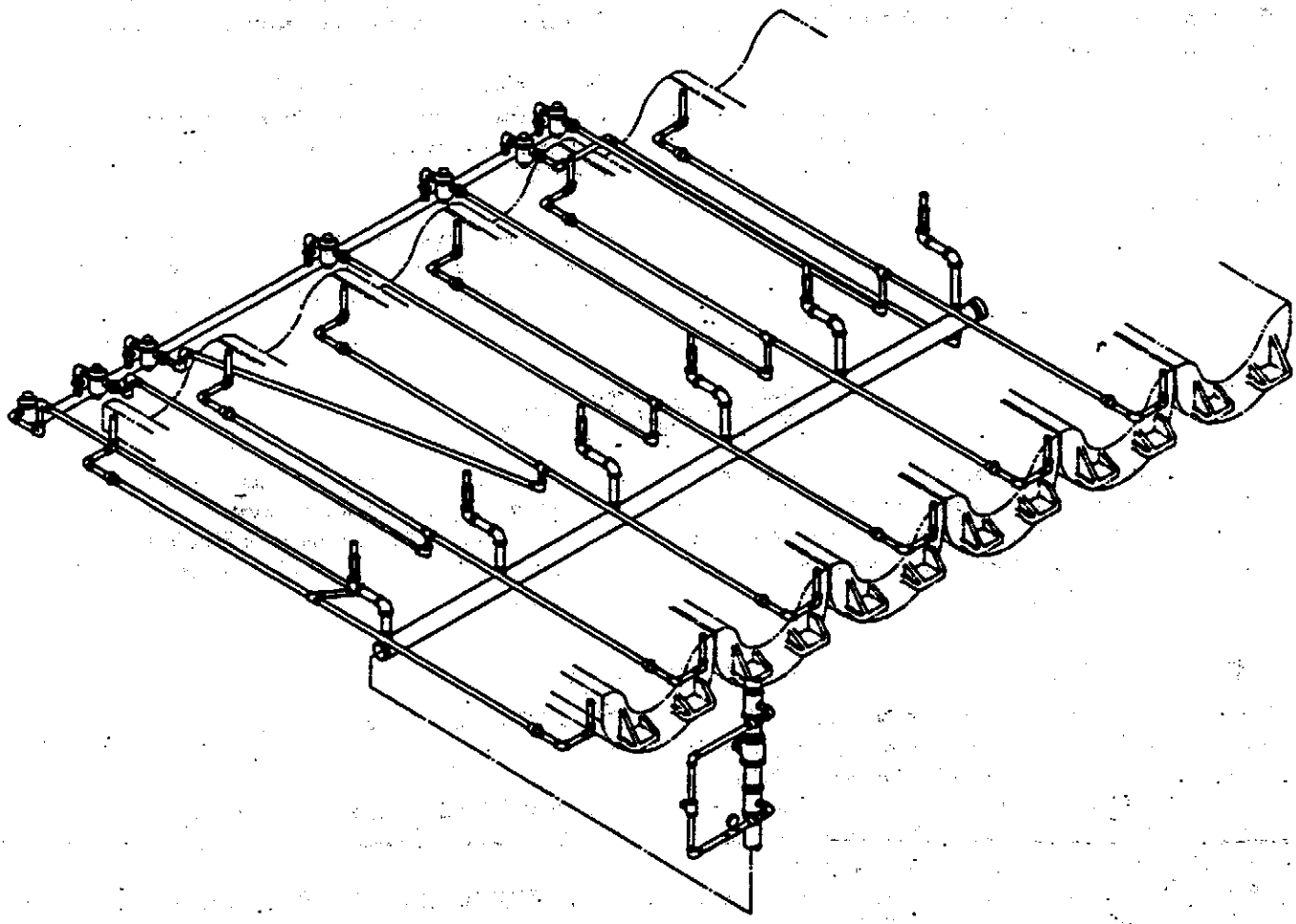


FIGURE 13
STEAM PIPING INSTALLATION

items mentioned under final preparations have been checked.

The electrical circuit diagram furnished with the machine should be filed so it will be available for electrical maintenance.

INSTALLING FEED ASSEMBLY

See figure 14.

Bolt feed table brackets (J) to frame. Fasten feed table assembly (D) to feed table brackets. Install feed ribbons (E), pillow blocks (K) feed roll (F), doffer roll (A) and grease guards (G). Install finger guard (B) and tape device (C).

Thread stripping tapes one at a time, and fasten the ends together. As an Optional Extra, an electric heated tape welding device can be furnished.

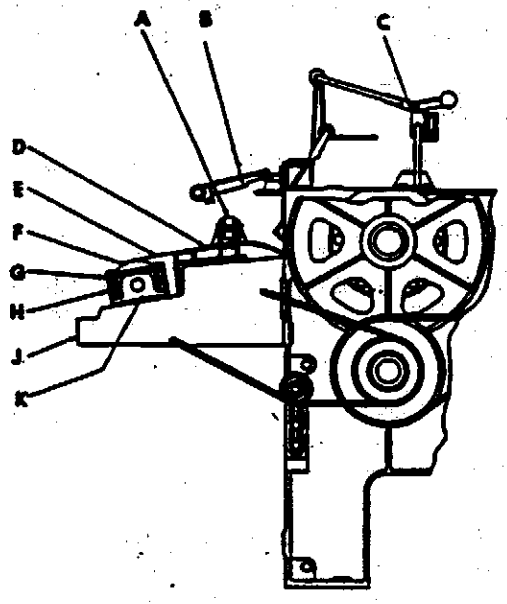


FIGURE 14
INSTALLING FEED ASSEMBLY

FINAL PREPARATIONS

Check lubrication before starting ironer, see page 15. Fill reservoir of automatic lub. system and prime pump as described on page 31.

Inspect the following items in accordance with the instructions in the Special Maintenance Section:

Check adjustment of all roller chains as described on page 19.

Adjust cam on safety bar so any slight movement of the bar will actuate the micro-switch and stop the ironer.

Before placing the ironer rolls in the down position momentarily start the machine and check that the direction of rotation is correct. (See ELECTRICAL, page 10.)

Using compressed air, blow off any dirt which may have accumulated on the various parts of the machine. Wipe all exposed surfaces with a damp cloth.

OPERATION

The ironer is now ready for operation, but before putting it into production, careful attention should be given to the following features, in order to be familiar with the functions of the various attachments and methods of operation.

FEED CONVEYOR

Flatwork is fed into the ironer by placing the leading edge on the full-width ribbon feed. A padded doffer roll rests on the ribbon feed, and the travel of the feed ribbons causes it to rotate. The doffer roll keeps work stretched taut between ribbon feed and first padded roll. Specially designed fingers are provided to guide the work into the pinch between the first roll and the chest. A panel is provided, extending close to the surface of the feed ribbons to prevent contact of operators hands with roll and chest. The doffer roll lies ahead of this panel. The panel is provided with a safety bar in accessible position over the doffer roll for stopping the ironer in case of an emergency.

FEEDING

See your folder manual for feeding instructions.

HEATING CHESTS

WORK SHOULD NEVER BE RUN THROUGH THE IRONER UNTIL THE CHESTS ARE THOROUGHLY HEATED.

1. Check steam pressure to be sure it is 125 psi. To heat chests, open valve in by-pass line around main steam supply valve.

2. For approximately ten minutes, open valve in condensate line, by-passing steam trap. Then close by-pass valve in condensate line. Steam trap is now operative.

3. After thirty to forty-five minutes, open the main steam supply valve and close the valve in the by-pass line. The steam should be fully turned on for at least one-half hour before work is run through the ironer.

STARTING

AIR PRESSURE – Turn on air and check pressure, it should be 70 psi.

OIL PRESSURE – Check oil pressure of automatic lub system, it should be at least 35 psi.

STARTING IRONER ATTACHED TO HYPRO FOLDER
After the chest is hot and the ironer is ready for operation, push the roll raising knob on the control panel down to lower the rolls. The lowering requires a few seconds. The rolls do not lower all at once, but successively in pairs.

Press the "ON" button on the control panel. This sets up the electrical circuits. Then press the "START-INCH" button. This starts the ironer drive motor and the vacuum motor.

The starting operation just mentioned is subject to the following conditions. The "RUN" – "OFF – INCH" switch on the folder control panel must be in the "RUN" position. If the switch is in the "OFF – INCH" position, the ironer will run only while the "START-INCH" button on the ironer control panel is held in. This facilitates an "INCHING" operation for emergency purposes. This emergency condition established by the folder receiving operator is indicated to the ironer feed operator by a red light on the ironer control panel. As long as this red light is illuminated, the ironer feed operator can only obtain "INCHING" operation of the ironer, when pressing the "START-INCH" button. This is used to clear work

from the ironer and to correct any conditions with respect to the folder. When the lamp is extinguished, the ironer feed operator can restart the ironer for normal running by pressing the "START" button.

STARTING IRONER ATTACHED TO TRUMATIC FOLDER OR FOLESTAK FOLDER-STACKER – After the chest is hot and the ironer is ready for operation, push the roll raising knob on the control panel down to lower the rolls. The lowering requires a few seconds. The rolls do not lower all at once, but successively in pairs.

Press the "ON" button on the control panel. This sets up the electrical circuits. Then press the "START-INCH" button. This starts the ironer drive motor and the vacuum motor.

The starting operation just mentioned is subject to the following conditions. The "RUN" "OFF - INCH" selector switch located on the folder must be in the "RUN" position. If the switch is in the "OFF-INCH" position, the ironer will run only while the "START-INCH" button on the ironer control panel is held in. This facilitates an "INCHING" operation for emergency purposes. This emergency condition established by the folder receiving operator is indicated to the ironer feed operator by a red light on the ironer control panel. As long as this red light is illuminated, the ironer feed operator can only obtain "INCHING" operation of the ironer, when pressing the "START-INCH" button. This is used to clear work from the ironer and to correct any conditions with respect to the folder. When the lamp is extinguished, the ironer feed operator can restart the ironer for normal running by pressing the "START" button.

SPEED CONTROL

Ironer speed is controlled by a drum switch on the ironer control panel. The desired speed is obtained by operating the drum switch, and observing the reading on the speedometer.

STOPPING

NOTE

RAISE THE IRONER ROLLS WHENEVER THE IRONER IS STOPPED. TO RAISE THE IRONER ROLLS PULL THE ROLL RAISING CONTROL OUT.

NORMAL STOP – Decrease the ironer speed to a minimum with the speed control. Stop the ironer by pressing the "STOP" button. If the ironer is to be shut down for any period of time press the "OFF" button.

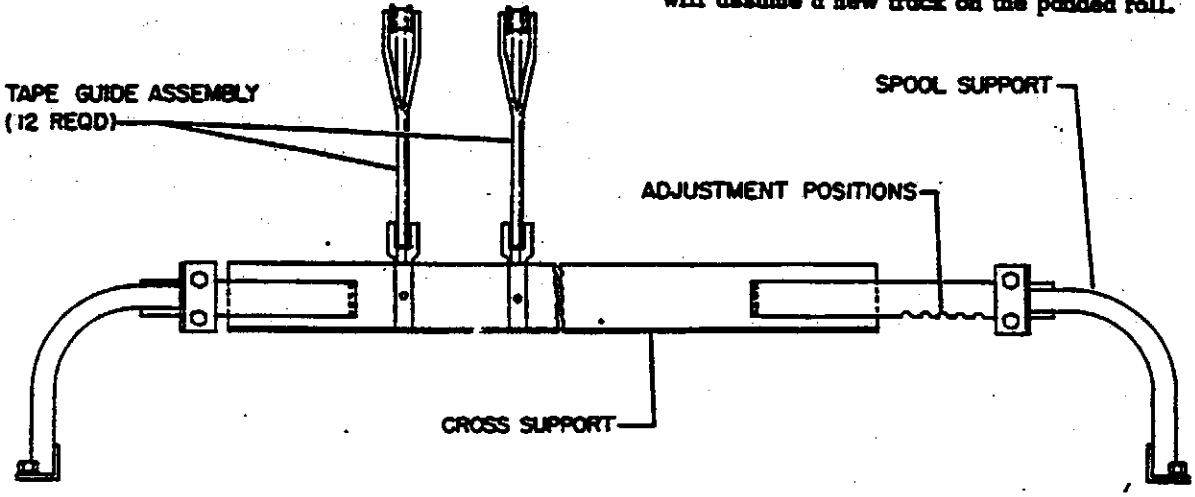
EMERGENCY STOP - In event of emergency, the ironer may be stopped regardless of the operating speed. Stop the ironer by pressing the "STOP" button or the safety guard rod located in front of and above the doffer roll. If the ironer is to be shut down for any period of time, press the "OFF" button.

STRIPPING TAPE CONTROL

The stripping tape control assembly determines the path the stripping tapes will track on the padded rolls. To prevent the tapes from causing excessive wear at any one point on the rolls, it is recommended the assembly be repositioned daily.

The stripping tape control assembly can be easily moved either right or left. The bottom of the plate on the left side is flat, whereas the bottom of the right side plate has seven serrations ¼ inch apart. These serrations permit adjustment to seven positions. Assume the control assembly has been moved to the extreme left position.

1. Lift the right side of the control assembly about ¼ inch and slide the entire assembly to the right, stopping at the next serration. Lower the assembly at this position.
2. After the stripping tape control assembly has been moved to the extreme right, reverse the direction of movement. Make further repositioning to the left until the extreme left position has been reached. Another cycle of repositioning can then be started.
3. Start the ironer. The stripping tapes automatically will assume a new track on the padded roll.



STRIPPING TAPE CONTROL

ROUTINE MAINTENANCE

iis ironer is built to give many years of efficient id trouble free service. Regular cleaning, inspection id lubrication are essential for maximum life and ficiency.

LEANING

ipe all exposed surfaces daily with a damp cloth.

LEANING CHESTS – It is important that the ironer iests be kept clean and the ironing surface bright. ue to the fire hazard, kerosene or a kerosene soaked oth should never be used to clean the chests.

ieck with the padding supplier for the proper cleaner use, the recommended time interval at which the iests should be cleaned and the method of application.

UBRICATING CHESTS – Check with the padding upplier for the proper lubricant to use, the recommended me interval at which the chests should be lubricated id the method of application.

LEANING ROTO-CONE PULLEY – The faces of the iscs and belt should be kept clean and free from rease or other liquids.

t least every 6 months, or whenever the pulley acts uggish, (that is, it does not close fast enough) it hould be flushed out with kerosene. Make sure the oner is cold before performing this flushing operation.

ith the belt removed and the pulley mounted on the otor shaft or on an arbor press, force kerosene from grease gun thru the grease fittings (Item H, figure 6) until the kerosene flows from the various openings the pulley. Open and close the pulley several times make sure the kerosene reaches all gummy or caked rease. Remove pulley from shaft and drain all kerosene. elubricate with the proper lubricant as described n page 17.

UTOMATIC LUBRICATION SYSTEM – Clean the oil pplication points of the automatic lub system every ionth. Make certain none of the copper tubes are logged. Replace the filter assembly of the oil pump ach year, see page 31.

NSPECTION

very thirty days inspect the air connections for leaks, uts and bolts for tightness, and feed ribbons for roper tension and wear. Check all steam and drain etween the fan housing and the condensate container. connections for leaks and be sure all steam traps are working properly.

Every week remove drain plug from the bottom of the vacuum system exhaust fan housing and drain the condensate into a suitable container. If constant drainage of the housing is desired, connect a suitable drain hose

LUBRICATION

The ironer is equipped with an automatic lubrication system as shown on page 31, fig. 27. It provides automatic oil lubrication to the roll drive gear bearings, chain drive sprockets, idler sprockets and chain.

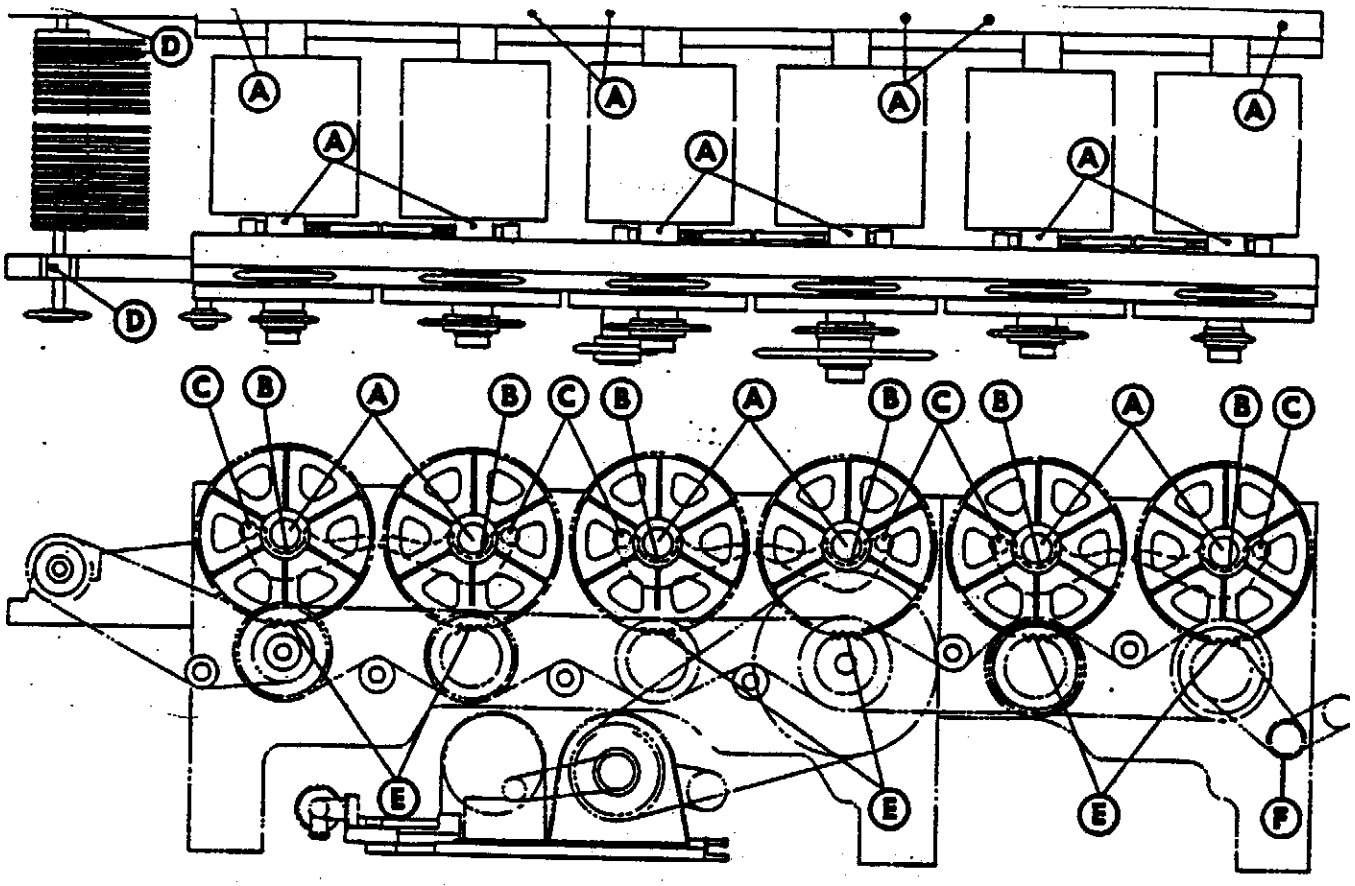
For location of the lubrication points which are not covered by the automatic lubrication system, see figures 15 and 16. Refer to lubrication chart for recommended lubricants. Be sure all oil holes and grease fittings are clean and take lubricants freely.

OIL RESERVOIR – The oil level in the reservoir of the automatic lubrication system should be checked daily, and refilled when required.

ROTO-CONE PULLEY – Whenever possible, the pulley should be run through its speed range each day in order to renew the lubricant on all working surfaces.

Once a week, position outer edge of belt flush with the outside diameter of pulley disc. Lubricate through fittings (H) until sufficient lubricant has been applied. Run belt to minimum pitch diameter and return. If sufficient lubricant has been applied, a film of grease will show on motor end of pulley shaft. If grease does not show, repeat until grease is present.

VACUUM ADAPTER – The vacuum adapter seal consists of a rotating disc attached to the roll and a stationary disc attached to the frame. Both discs are grooved, and the grooves in the two discs mate to form a sealed running connection. Lubricant provides lubrication for the discs and completes the seal between the discs. Both discs are lubricated through a single lubrication fitting. The discs should be lubricated after each 200 hour period of operation with one shot of grease from a hand operated pressure gun. Applying excessive lubricant to the adapter will result in the excess lubricant being drawn into the vacuum duct and possibly causing the duct to become clogged.

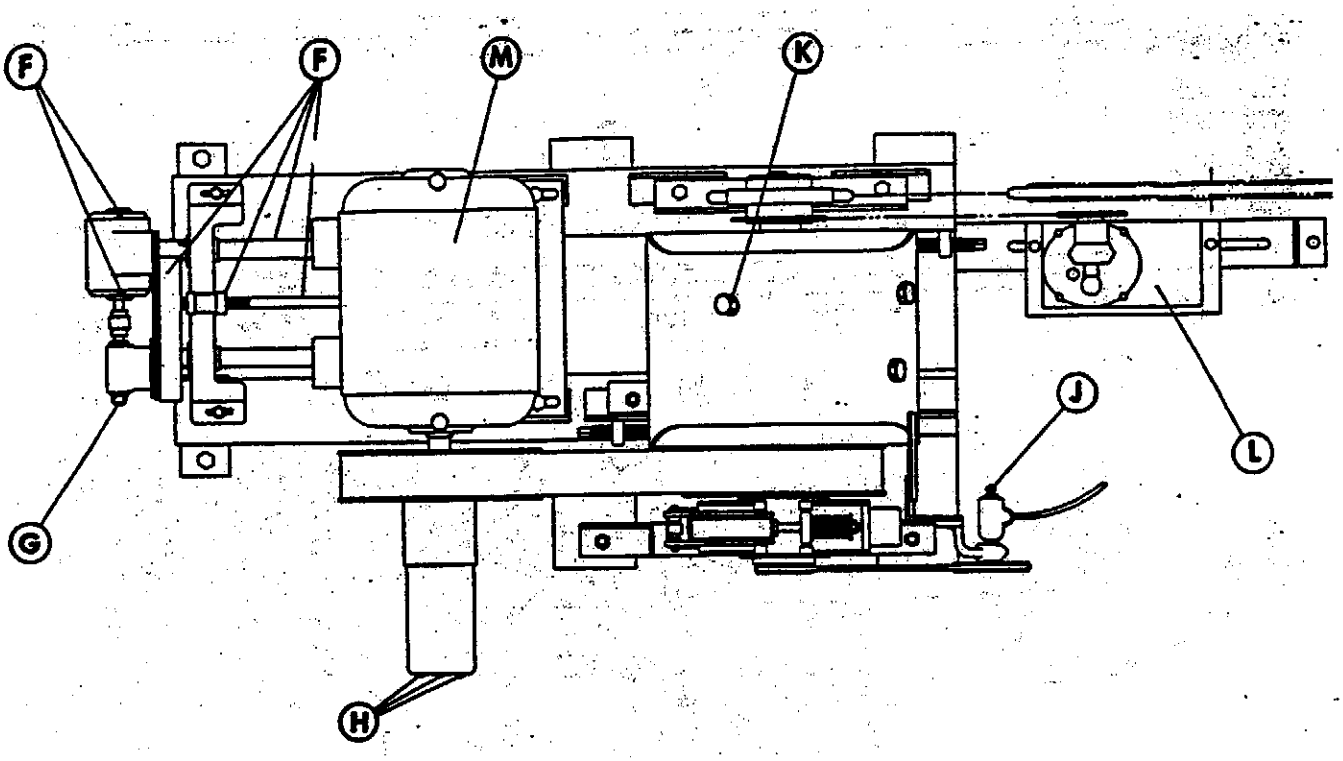


TIME INTERVAL	LUBRICATION POINT AND APPLICATION	RECOMMENDED LUBRICANT *	
Weekly	(A) Universal Drive & Vacuum Adaptors	(1) Mobilplex EP #1 (3) Regal Starfak P Premium #2	(2) Alvania EP #2 (4) No. 81 Light
Weekly	(B) Lifting arm socket - raise roll, apply light coating	(1) Mobilplex EP #1 (3) Regal Starfak Premium #2	(2) Alvania EP #2 (4) No. 81 Light
Weekly	(C) Raising rig lifting lever,	(1) Mobil DTE Heavy-Medium (3) Regal PC (R&O)	(2) Tellus Oil #33 (4) No. 49 Light
Six months	(D) Bearing, Feed roll	(1) Mobilplex EP #1 (3) Regal Starfak Premium #2	(2) Alvania EP #2 (4) No. 81 Light
Weekly	(E) Drive gears	(1) Mobil Dorcia #150 (3) Crater 2X Fluid	(2) Cardium Compound D (4) No. 29 X-Light
Monthly	(F) Sprocket, compound - apply 1 shot with handgun	(1) Mobilplex EP #1 (3) Regal Starfak Premium #2	(2) Alvania EP #2 (4) No. 81 Light

*The number enclosed in parenthesis preceding the type lubricant is intended to identify the lubricant manufacturer and is not an order of recommended lubricant.

(1) Mobil Oil Company, (2) Shell Oil Company, (3) Texaco Inc., (4) Keystone Lubricating Company

FIGURE 15 - IRONER LUBRICATION



TIME INTERVAL	LUBRICATION POINT AND APPLICATION	RECOMMENDED LUBRICANT *	
Weekly	(F) Oil holes, shafts, and chains	(1) Mobil DTE Oil Light (3) Regal Oil A	(2) Tellus Oil 27 (4) No. 49 Light
Monthly	(G) Gear head†, check level add as required	(1) Mobil 600W (3) Thuban 90	(2) Valvata Oil J78 (4) WG No. 1
Weekly	(H) Roto-Cone Pulley	(1) Mobilplex EP #1 (3) Regal Starfak Premium #2	(2) Alvania EP #2 (4) No. 81 Light
Six months	(J) Speedometer	(1) Mobilplex EP #1 (3) Regal Starfak Premium #2	(2) Alvania EP #2 (4) No. 81 Light
Monthly	(K) Gear reducer† (2-5/8 Gal. capacity), check lever, add as required	(1) Mobil DTE Oil "BB" (3) Regal G (R&O)	(2) Tellus Oil 69 (4) WG No. 1
Daily	(L) Bijur lubrication system reservoir (six pint capacity)	(1) Mobil DTE Oil "AA" (3) Regal G (R&O)	(2) Shell Vitrea Oil 74 (4) WG No. 1
Weekly	(M) Drive Motor	(1) Mobilplex EP #1 (3) Regal Starfak Premium #2	(2) Alvania EP #2 (4) No. 81 Light

†Drain, flush, and add fresh oil after first month's service and every six months or 2500 hours thereafter.
*The number enclosed in parenthesis preceding the type lubricant is intended to identify the lubricant manufacturer and is not an order of recommended lubricant.

(1) Mobil Oil Company, (2) Shell Oil Company, (3) Texaco Inc., (4) Keystone Lubricating Company

FIGURE 16 - DRIVE LUBRICATION

SPECIAL MAINTENANCE and [illegible]

All adjustments for proper operation of this ironer have been made at the factory, or you have been instructed how to make them in this manual. Use, abuse and unpredictable causes may make readjustments or repairs necessary. To keep these to a minimum, instructions for Operation and Routine Maintenance should be followed closely.

All machine parts are identified on the illustrations by individual NUMBERS, which should be used when replacement parts are ordered. However, some standard parts, such as nuts, bolts, washers, etc., are not identified because it generally will be both faster and more economical to purchase them from a local supplier.

Parts, which through continuous service are likely to require replacement, are available in a "First Aid" kit. It is recommended that you keep such a kit on hand in order to avoid prolonged and costly shut-downs while obtaining parts.

TROUBLE SHOOTING

Most of the difficulties encountered in operating this machine can be traced to outside causes, or minor mechanical malfunctions caused by wear or continuous use. In order to assist you, this trouble shooting section lists the most commonly encountered difficulties and their possible causes, with reference to where instructions for their remedy may be found:

SYMPTOM	POSSIBLE CAUSE	REMEDY
PADDED ROLL COVERS WRINKLE	1. Improper feeding of work to the ironer.	1. See feeding instructions on page 13.
	2. Steam chests dirty or insufficiently lubricated.	2. Clean and lubricate chests as described on page 15.
	3. Rolls padded improperly.	3. Not enough care excercised in winding the padding and covers square. A few wrinkles allowed to remain will cause more. Also check circumference of padded rolls, it should be 61-21/32".
LINENS BUCKLE OR DO NOT LIE FLAT WHEN PASSING FROM ROLL TO ROLL	1. Steam chests insufficiently heated.	1. Heat steam chests thoroughly, see page 13.
	2. Steam chests dirty or insufficiently lubricated.	2. Clean and lubricate chests as described on page 15.
	3. Flatwork improperly rinsed.	3. Rinse work thoroughly.
	4. Excessive sour used.	4. Use correct amount of sour.
	5. Insufficient extracting.	5. Increase extracting time. It is more economical to remove excess water by extracting.
	6. Rolls improperly padded.	6. Add padding to bring rolls to proper circumference (61-21/32").

SYMPTOM	POSSIBLE CAUSE	REMEDY
LINENS STICKING TO ROLL	1. Steam chests insufficiently heated.	1. Heat steam chests thoroughly, see page 13.
	2. Insufficient extracting.	2. Increase extracting time. It is more economical to remove excess water by extracting.
BROWN SPOTS APPEAR ON PADDED ROLL AND STAIN LINEN	1. Poor quality steam, (Wet or low pressure).	1. Check steam supply system. Ironer is designed to operate on dry, saturated steam at 125 pounds per square inch pressure (gage).
	2. Insufficient extracting.	2. Increase extracting time. It is more economical to remove excess water by extracting.
	3. External source such as dripping of condensation or leakage from overhead pipes.	3. Remove or cover pipes.
	4. Leak in ironing surface of steam chest.	4. Plug or replace chest.
	5. Feeding goods before ironer is thoroughly heated.	5. Instruct operator to heat steam chests thoroughly, see page 13.
IRONER NOT DELIVERING RATED CAPACITY	1. Poor quality steam (Wet or low pressure).	1. Check steam supply system. Ironer is designed to operate on dry saturated steam at 125 pounds per square inch pressure (gage).
	2. Steam return system not functioning properly.	2. Inspect return system and remedy any defects.
	3. Insufficient extracting.	3. Increase extracting time. It is more economical to remove excess water by extracting.
	4. Improper shaking.	4. Have shakers "shake out" work properly.
	5. Improper feeding of work to the ironer.	5. See feeding instructions on page 13.

SERVICING ELECTRICAL CIRCUIT

Trouble may be caused by split or broken conduit and loose conduit connectors at the various closures. Loose closure lids may let in dust, dirt and oil which can affect the contact points. Oil will also deteriorate the insulation.

Be sure current to the machine is on. Check for blown fuses. Push "RESET" buttons in junction box mounted on floor at the right hand side of the machine. Then push "ON" and "START-INCH" buttons at control panel. If "RESET" buttons will not stay in, check heater coils in junction box. If they are faulty, they should be replaced. Check for loose or broken wires at all terminal points. If these checks do not indicate the trouble, see the wiring diagram furnished with the machine.

DRIVE CHAINS

See figure 17.

All roller chains on this machine are replaced and adjusted in the same manner.

REPLACING – The ends of the roller chains are held together by means of a connecting link. To replace chain, back off idler sprocket to relieve tension, remove spring clip, take out connecting link and remove the chain. If chain is worn excessively, it may be necessary to replace the sprockets as well as the chain. Remount in reverse order.

ADJUSTING – Chain tension is adjusted by means of idler sprockets. To adjust, loosen screws which hold idler sprocket bracket to frame, and move idler in or out until chain has a minimum of slack but is not taut.

STRIPPING TAPE

Stripping tapes are available woven of cotton, nylon, or dacron material. Tension on the stripping tapes is automatically maintained by a weight attached to the spool arm assembly.

After new tapes are installed, the ends should never be tied or knotted together. The ends of cotton tapes should be overlapped approximately one inch and secured with staples. The ends of nylon or dacron tapes should be overlapped and heat fused with a suitable heating iron.

FEED RIBBONS

ADJUSTING – Tension on feed ribbons (item 23, figure 20) should be taut, but not tight enough to stretch the ribbons. If they are too tight, strain in the lacing and deflection of the rolls may result. If they are too loose, the ribbons may slip. To adjust ribbon tension:

a. Loosen bracket and stud assembly, RH and LH, (item 41, figure 17).
b. Slide idler sprockets, RH and LH (item 39) upward.
c. Loosen carriage bolts attaching pillow blocks, RH and LH, (item K, figure 14).
d. Slide pillow blocks toward the feed end of inner to tighten ribbons.
e. Turn square head bolt, RH and LH sides, CCW to maintain the pillow blocks in position for correct tension.
f. Turn lock nut CW to secure the square head bolts.

NOTE

MAINTAIN FEED ROLL AXIS AT RIGHT ANGLES TO FEED TABLE BRACKETS.

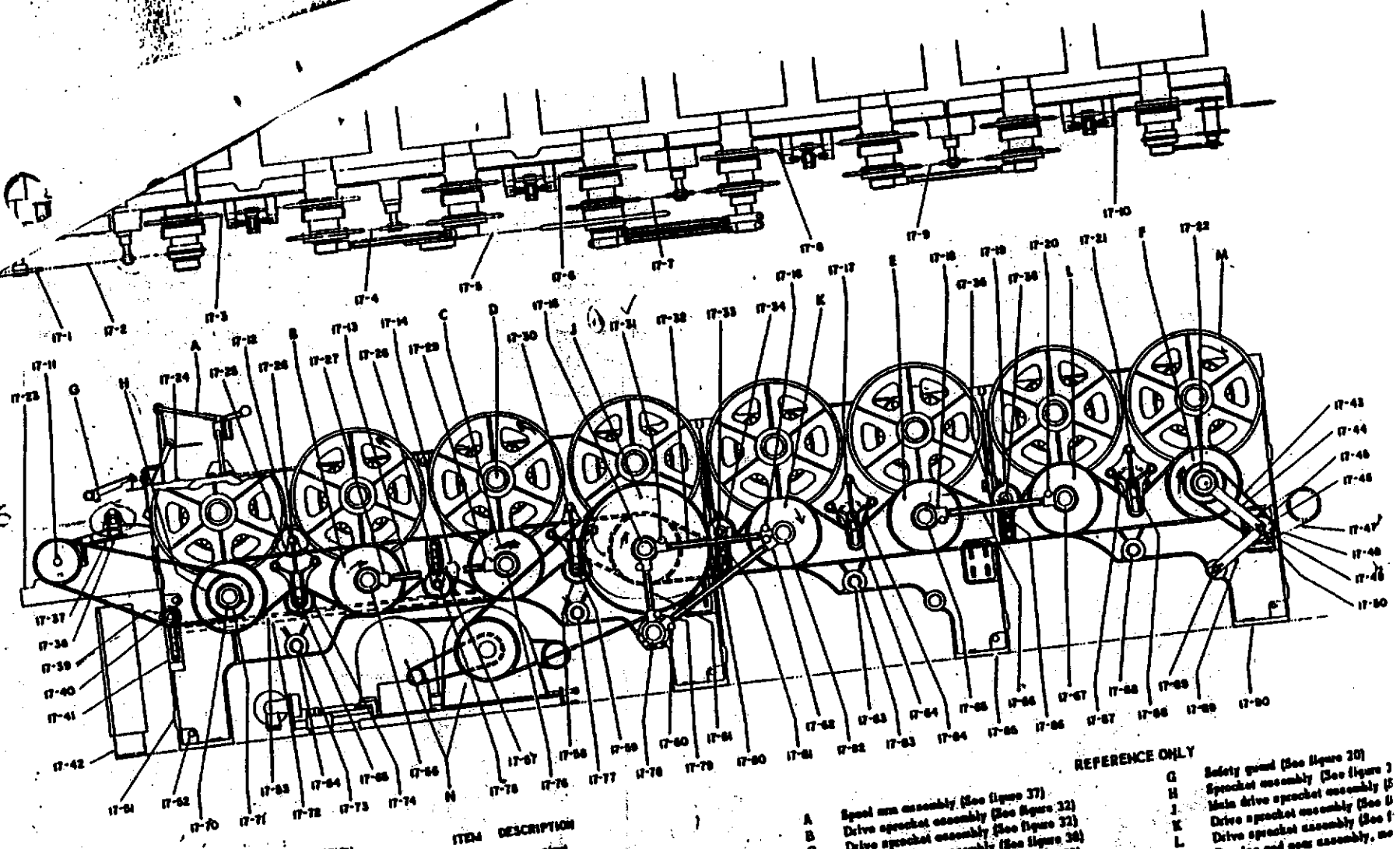
g. Tighten carriage bolts attaching pillow blocks, RH and LH, (item K, figure 14).
h. Slide idler sprockets, RH and LH, (item 39, figure 17) downward to attain correct chain tension, (see page 19).
i. Tighten bracket and stud assembly, RH and LH, (item 41, figure 17).

REPLACING – Release tension on feed ribbons. Pull ribbons around until joints are accessible. Push out rawhide pin at joining point and remove the ribbon. Replace ribbons and adjust tension as described above.

FIGURE 17

RIGHT SIDE VIEW WITH GUARDS REMOVED

ITEM	DESCRIPTION
17-1	Sprocket
17-2	Chain
17-3	Chain
17-4	Chain
17-5A	Chain (Motor mounted outside frame)
17-5B	Chain (Motor mounted inside frame)
17-6	Chain
17-7	Chain (6&8 roll only)
17-8	Chain
17-9	Chain
17-10	Chain
17-11	Key
17-12	Bracket, speedometer cable
17-13	Strut
17-14	Band hanger
17-15	Stud, main drive, roll 4
17-16	L. H. strut clamp
17-17	Bracket for chain idler
17-18	Collar for R. H. strut clamp
17-19	Idler sprocket
17-19A	Bearing, Oilite #A-1156-1
17-20	Collar for L. H. strut clamp
17-21	Bracket for chain idler
17-22	Collar
17-23	R. H. ribbon feed bracket
17-24	Pin
17-25	Bracket for chain idler
17-26	Jiffy clip #115
17-27	Collar for R. H. strut clamp
17-28	Bracket & stud assembly
17-29	Collar for L. H. strut clamp
17-30	Bracket for chain idler
17-31	Collar & strut clamp, main sprocket
17-32	Strut
17-33	Stud
17-34	Idler sprocket
17-34A	Bearing, Oilite #A-1156-1
17-35	Washer
17-36	Stud
17-37	Support angle
17-38	Dowel pin (Not shown)
17-39	Idler sprocket
17-40	Stud
17-41	Bracket & stud assembly
17-42	Leg for electrical control box
17-43	*Roller chain
17-44A	*Upper strut (6 & 8 roll ironer)
17-44B	*Upper strut (4 roll ironer)
17-45	*Support bracket
17-46	Sprocket
17-47	*Roller chain
17-48	*Needle bearing, Torrington #GB2020 (Not shown)
17-49A	*Stud (6 & 8 roll ironer) (Not shown)
17-49B	*Stud (4 roll ironer) (Not shown)
17-50A	Washer, compound sprocket (Used on 4 roll ironer only)
17-50B	Set collar, 1-1/4" stud (Used on 6 & 8 roll ironer only)
17-51	R. H. frame, 4 roll
17-52	Tie-rod
17-53	Motor insulation
17-54	Cross shaft
17-54A	Key, 1/2" x 1/2" x 4-1/2"
17-54B	Key, 1/2" x 1/2" x 2"
17-55	Shaft for inter-drive idler support
17-56	Stud, main drive, roll 2
17-57	Idler sprocket
17-57A	Bearing, Oilite #A-1156-1
17-58	Idler sprocket
17-58A	Bearing, Oilite #A-1156-1
17-59	Shaft for inter-drive idler support
17-60	R. H. strut clamp
17-61	Short strut for clamp collar
17-62	L. H. strut clamp
17-63	Cross shaft
17-63A	Key, 1/2" x 1/2" x 4-1/2"
17-63B	Key, 1/2" x 1/2" x 2"
17-64	Shaft for inter-drive support
17-65	Stud, main drive, roll 6
17-66	Strut
17-67	Stud, main drive, roll 7
17-68	Cross shaft
17-68A	Key, 1/2" x 1/2" x 4-1/2"
17-68B	Key, 1/2" x 1/2" x 2"
17-69	*Stud for lower strut (6 & 8 roll ironer only)
17-70	Stud, main drive, roll 1
17-71	Collar
17-72	Frame for motor insulation
17-73	Bearing, Oilite #AA-2306
17-74	Idler sprocket
17-74A	Bearing, Oilite #A-1156-1
17-75	Stud



ITEM	DESCRIPTION
	ain drive, roll 3
	belt
	x 1/2" x 4-1/2"
	" x 1/2" x 2"
	strut, roll 4
	rut clamp
	strut for clamp roller
	et & stud assembly
	otor, main drive, roll 5
	Bearing, Ollite #AA-2206

ITEM	DESCRIPTION
17-84	Idler sprocket
17-84A	Bearing, Ollite #A-1156-1
17-85	R. H. frame, 2 roll
17-86	Bracket & stud assembly
17-87	Idler sprocket
17-87A	Bearing, Ollite #A-1156-1
17-88	Shaft for inter-drive
	Idler support
17-88A	*Lower strut
	(8 & 9 roll inner)

ITEM	DESCRIPTION
17-88B	*Lower strut
	(4 roll inner only)
17-90	R. H. frame, 2 roll
17-91	Chain connecting link
	(Not shown)
17-92	Guide needle (Not shown)
17-93	Installation tool, universal
	drive chain (Not shown)
17-94	Hand crank (Not shown)

A	Spool arm assembly (See figure 37)
B	Drive sprocket assembly (See figure 32)
C	Drive sprocket assembly (See figure 32)
D	Universal drive assembly (See figure 38)
E	Drive sprocket assembly (See figure 32)
F1	Sprocket assembly (When inner is used with "Hypro" Folder, see figure 33)
F2	Sprocket assembly (When inner is used with "Transtar" Folder or "Telestar" Folder-Stacker, see figure 34)

REFERENCE ONLY

G	Safety guard (See figure 20)
H	Sprocket assembly (See figure 3
J	Main drive sprocket assembly (S
K	Drive sprocket assembly (See f
L	Drive sprocket assembly (See f
M	Bearing and gear assembly, se (See figure 35)
M1	Drive assembly, outside drive
M2	Drive assembly, inside drive

*These parts required only when inner is applied to Hypro Folder.

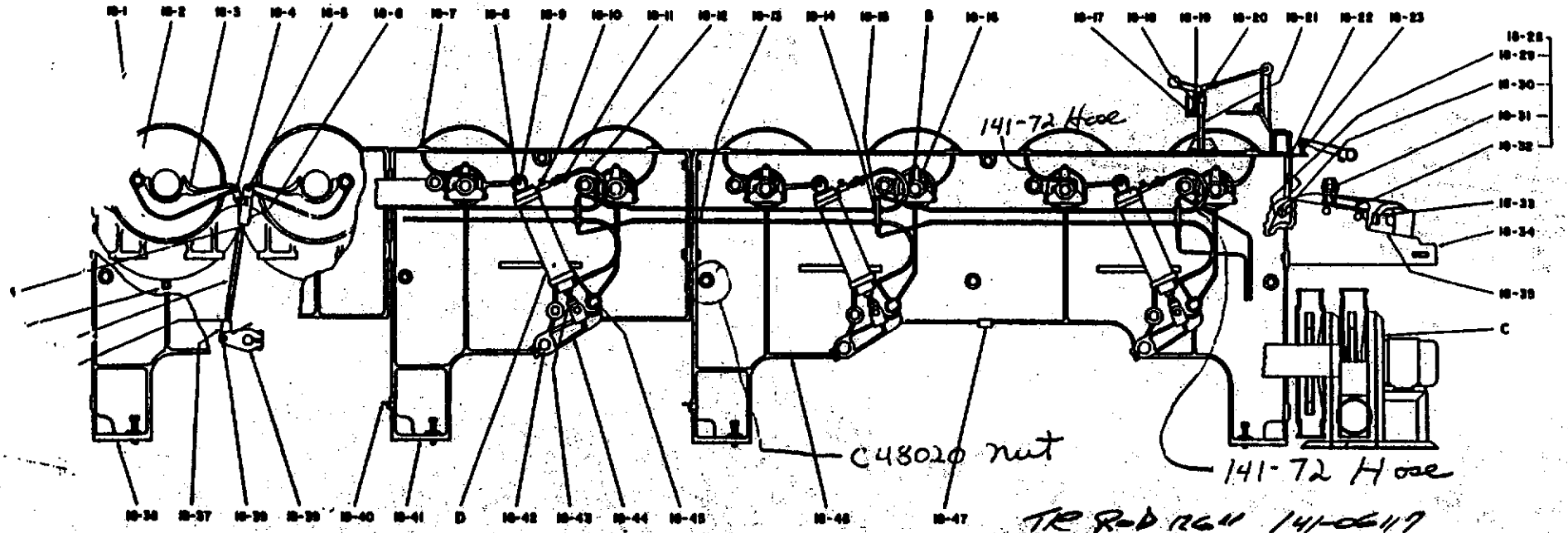


FIGURE 18
LEFT SIDE VIEW WITH GUARDS REMOVED

ITEM	DESCRIPTION
18-1	Pivot stud
18-2	Washer, pivot stud (Not shown)
18-3	Lifting lever, raising rig
18-4	Connecting link, bearing arm assembly
18-5	Pin, upper rod end, raising rig
18-6	Upper rod end
18-7	Pin, to line up frame
18-8	Cylinder pivot stud
18-9	Tru-arc ring #5100-75 (Not shown)
18-10	Lubricator, Gits #543, style "RS"
18-11	Flow control valve
18-12	Power hose assembly
18-13	Imperial hose, #44FN
18-14	Tee assembly
18-15	Hanger strap
18-16	Gasket, vacuum adapter to duct (Not shown)
18-17	Cross support
18-18	Flex-loc nut, 5/16"-18
18-19	Spacer
18-20	Clamp plate

ITEM	DESCRIPTION
18-21A	Support, spool arm, L. H.
18-21B	Support, spool arm, R. H.
18-22	Cap for spring
18-23	Spring, finger guard
18-24	Hex jam nut, 3/8" - 16
18-25	Adapter, steam inlet on chest
18-26	Rod, raising rig
18-27	Hex jam nut, 3/8" - 16, L. H. thread
18-28	Feed table assembly
18-29	Finger
18-30	Ribbon rod
18-31	Bearing pad
18-32A	L. H. table support
18-32B	R. H. table support (Not shown)
18-33	Extended nut
18-34	L. H. ribbon lead bracket
18-35	Pillow block, SKF #SY-107
18-36	L. H. frame, 2 roll
18-37	Rod end, raising rig
18-37A	Bearing, Ollite #AA-1043

ITEM	DESCRIPTION
18-38	Pin, raising rig
18-39	Lever, raising rig
18-40	L. H. guard support
18-41	L. H. frame, 2 roll
18-42	Bearing, Ollite #AA-2306
18-43	Rod end, air cylinder end, raising rig
18-43A	Bearing, Ollite #AA-1043
18-44	Lever, air cylinder end, raising rig
18-45	Stop stud, raising rig
18-46	L. H. frame, 4 roll
18-47	Guard support, R. H. & L. H.

REFERENCE ONLY

A	Steam chest assembly (See figure 30)
B	Vacuum adapter assembly (See figure 28)
C	Vacuum system assembly 4 & 6 roll frame (See figure 23) 8 roll frame (See figure 24)
D	Air cylinder assembly (See figure 36)

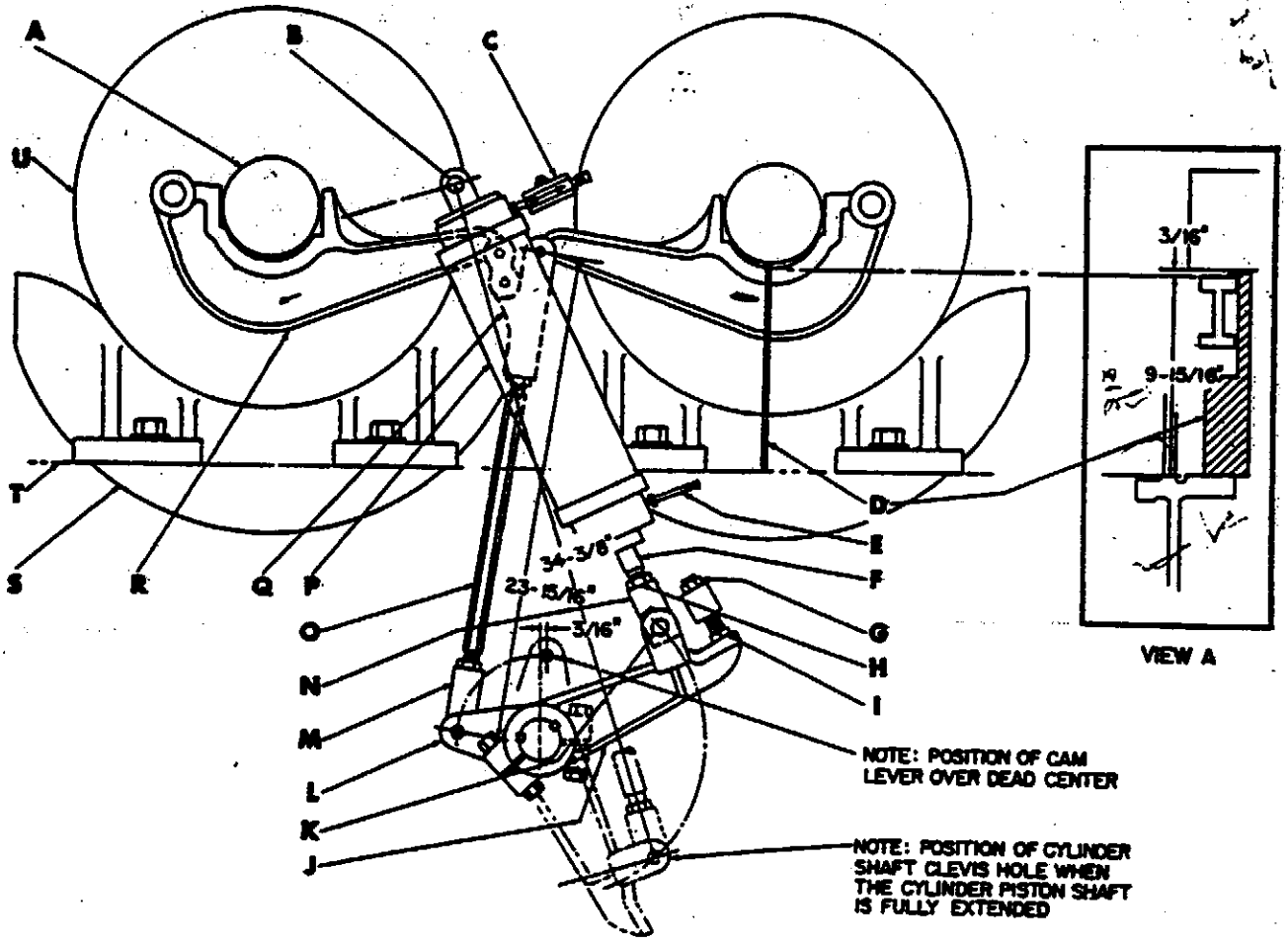


FIGURE 19
ROLL RAISING MECHANISM

ADJUSTING THE ROLL RAISING MECHANISM

See figure 19.

ROLL LOWERING SPEED CONTROL – Flow control valve (A) regulates the air leaving cylinder (H) as indicated by the arrow on the valve. This valve controls the speed of lowering the rolls. To adjust, loosen the lock-nut on the stem and turn the stem clockwise to reduce the speed and counter-clockwise to increase the speed.

ROLL RAISING MECHANISM – The roll raising arm rig rods (O) and the roll raising air cylinder piston shaft clevis (N) were adjusted and locked by the manufacturer prior to shipment. The adjustment was again checked after the unit was installed and operationally checked at the using activity by an ALMI service representative. Any further adjustment required was made by the ALMI representative at that time. Further adjustment of the operating mechanism is not normally required.

In event packing in the roll raising air cylinder needs replacing, the cylinder can be removed, disassembled, repaired, and reinstalled without readjusting the piston shaft clevis and rig rod.

If the air cylinder is required to be replaced, the position of the piston shaft clevis on the piston shaft (F) must be carefully adjusted before the cylinder is installed, and the clearance between the roll shaft (A) and the lifting arm (R) sockets checked and adjusted

before the unit is used for production work. If the clearance between the roll shaft and lifting arm sockets is insufficient, the roll shaft will ride in the lifting arm socket and damage to the arm sockets will result. If the piston clevis is not adjusted properly, damage to the chests will possibly result.

The following steps outline the procedure for adjusting and checking the length of the roll raising cylinder piston shaft clevis before installing a new cylinder, and checking and adjusting the clearance between the roll shaft and the lifting arm socket after a cylinder or other components in the roll raising mechanism are installed.

1. Fully extend the cylinder piston shaft (F) by applying normal operating air pressure at the piston extension port flow control valve (C).
2. Check the distance between the center of the cylinder bolt attaching hole (B) and the center of the cylinder shaft clevis hole (K). The distance should be 34-3/16". If the distance is not 34-3/16", loosen the clevis jam nut (H) and rotate the clevis until the distance between the two holes is 34-3/16". Securely lock the jam nut against the clevis.
3. Attach the cylinder (P) to the frame and attach the piston shaft clevis to the cam lever (J). Connect the operating air lines to the cylinder.
4. Raise the padded rolls (U). The rolls should raise approximately one inch above the steam chest (S). With the rolls in this position, the piston should be fully extended and cam lever (L) should be approximately 3/16" over dead center. The position of the cam lever can be checked by shutting off the air supply with the rolls in the raised position. If the cam lever is not over dead center, the roll will slowly fall until it rests on the chest. In event this occurs, remove the bolt attaching the piston shaft clevis and cam lever, loosen the jam nut, and rotate the clevis one-half turn counterclockwise. Securely tighten the clevis jam nut and reinstall the piston shaft clevis and cam lever attaching bolt. Raise the rolls and repeat the check of the cam lever position. Repeat adjustments if required.

NOTE

CARE SHOULD BE EXERCISED THAT THE ADJUSTMENT OF THE CLEVIS DOES NOT PERMIT THE POSITION OF THE CAM LEVER TO EXCEED BEING 3/16" OVER DEAD CENTER.

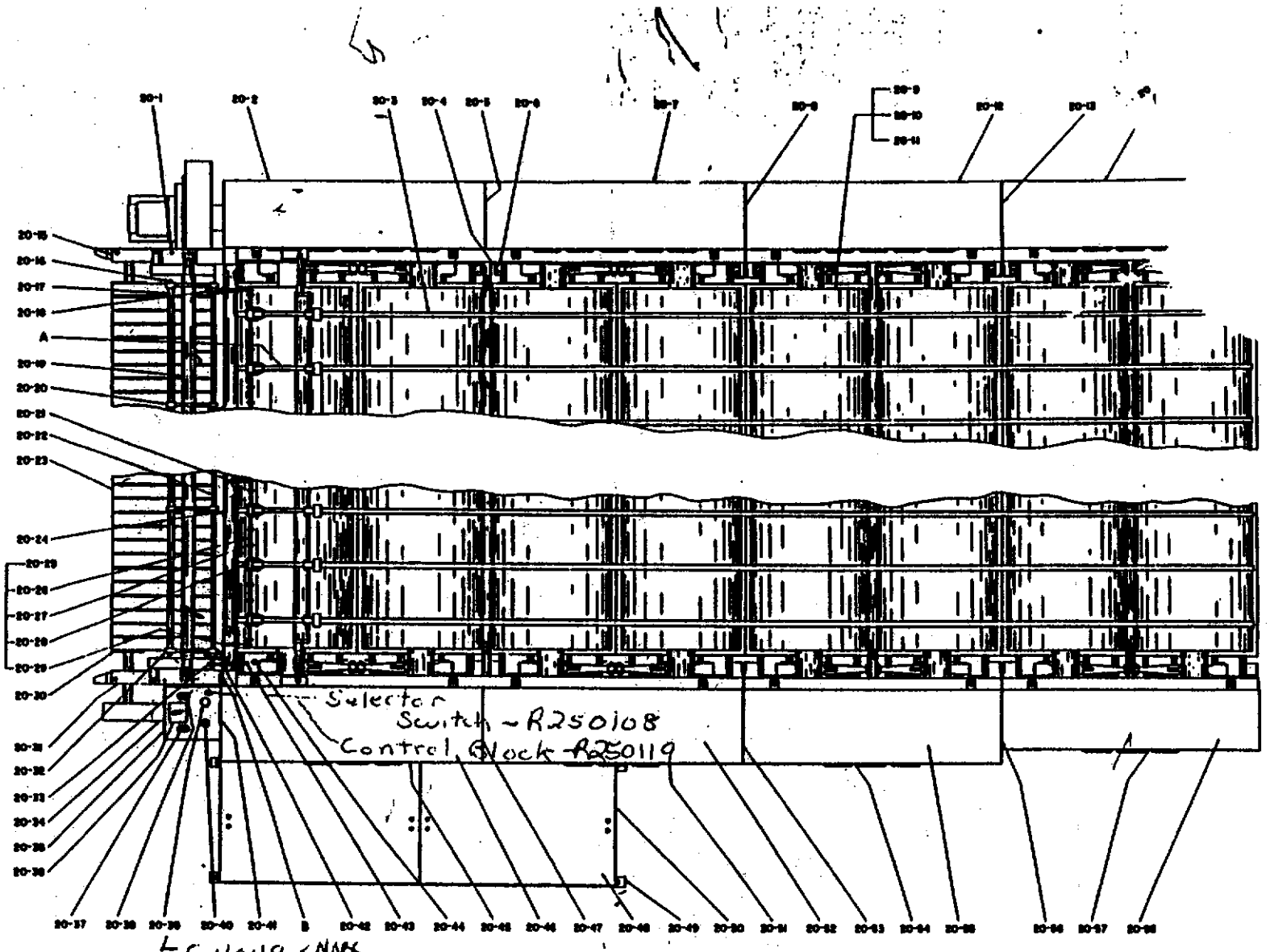
5. After the cam lever over dead center setting has been checked the roll should be lowered and the clearance between the lifting arm socket and the roll shaft checked. This clearance should be approximately 3/16". Check this clearance by placing the padded roll adjusting gage (Special Tool No. 141-173*) as shown in the insert of figure 19. With the bottom of the gage on the shelf line (T), the upper lip should fit snugly over the lowest point of the lifting arm socket surface. This will assure a minimum clearance of 3/16" between the shaft roll and the lifting arm. If the gage lip cannot be inserted between the socket and the roll shaft, the cam stop (I) must be adjusted. Adjust this stop by loosening the stop jam nut (G) and turning the stop counterclockwise approximately one turn. Tighten the jam nut and repeat the lifting arm socket and roll shaft clearance check. Repeat the stop adjustment if required.

*Shipped with unit.

FIGURE 20 →
TOP VIEW

ITEM	DESCRIPTION
20-1	Dowel pin
20-2	L. H. guard assembly, rolls 1 & 2
20-3	3/4" wide Tingue-Brown dacron heat set tape, 100 yd. roll
20-4	Dowel pin
20-5	Grommet (Not shown)
20-6	Guide block
20-7A	L. H. guard assembly, rolls 3 & 4, 4 roll ironer
20-7B	L. H. guard assembly, rolls 3 & 4, 6 & 8 roll ironer
20-8	Grommet (Not shown)
20-9	Wire mesh padded roll assembly (Standard)
20-9A	Wire mesh padding, 30" wide (3 req'd.)
20-9B	Wire mesh padding, 36" wide (1 req'd.)
20-9C	Spring clip for fastening cover on roll
20-10	Hamilton spring padded roll assembly (Optional)
20-10A	Spring pad, L. H. end (5 req'd.)
20-10B	Spring pad, R. H. end (1 req'd.)
20-10C	Pad clip (Binder holder)
20-11A	Padding, Tingue-Brown, for use in 1 & 2 lane operations (Standard)
20-11B	Padding, Tingue-Brown, for use in multiple lane operations (Standard)
20-11C	Revolite padding (Optional)
20-11D	Cover for roll
20-12A	L. H. guard assembly, rolls 5 & 6, 6 roll ironer
20-12B	L. H. guard assembly, rolls 5 & 6, 8 roll ironer
20-13	Grommet (Not shown)
20-14	L. H. guard assembly, rolls 7 & 8
20-15	Grease shield for pillow block, L. H.
20-16	Plug
20-17	Tube, safety rod
20-18	Pivot bracket with stop
20-19	Doffer roll Bushing for Roll 1183417 (2)
20-19A	Muslin covering, 36" wide x [illegible]26-1/4" long
20-19B	D.F.C. flannel, 54" wide x [illegible]-1/4" long
20-19C	1/4 pt. apron cement
20-20	Center safety guard brac[illegible]
20-21	Safety finger guard
20-22	Pivot rod, safety guar
20-23	Feed ribbon
20-24	Pivot bracket with [illegible]t stop
	Tape guide asser [illegible]ly
	[illegible]uminum bar
	[illegible] stop
	ool
	[illegible]
	[illegible]ive roll

ITEM	DESCRIPTION
20-30A	#12 duck, 21" wide x 128" long
20-30B	1/2 pt. apron cement
20-31	Grease shield for pillow block, R. H.
20-32	End safety guard bracket
20-33	Cam, safety guard limit switch
20-34	Control panel
20-35	Control panel top
20-36	Speed control, C.H. reverse drum, #9441-H40
20-37	"OFF-ON" button, C.H. #10250-H 2747-A
20-38	"START INCH-STOP" button, C. H. #9115-H83
20-39	Roll raising control, 1/4" Valvair neutral valve, model #92-38-3-13 C53018
20-40	Emergency signal light (911308-931 dial light) O Ring
20-41	Tachometer - Coupling C23472
20-42	Finger guard limit switch, C.H. #10316-H10D, N.C. & N.O.
20-43	Dowel pin
20-44	Washer
20-45	Door
20-46A	R.H. guard assembly, rolls 1 & 2 (Drive mounted inside frame)
20-46B	R.H. guard assembly, rolls 1 & 2 (Drive mounted outside frame)
20-47	Grommet (Not shown)
20-48	Drive cover (Machine with outside motor drive only)
20-49	Foot, drive guard (Not shown)
20-50	Drive guard (Machine with outside motor drive only)
20-51	Door
20-52A	R. H. guard assembly, rolls 3 & 4, 4 roll ironer (Drive mounted inside frame)
20-52B	R. H. guard assembly, rolls 3 & 4, 6 & 8 roll ironer (Drive mounted inside frame)
20-52C	R. H. guard assembly, rolls 3 & 4, 4 roll ironer (Drive mounted inside frame). When ironer is used with "Trumatic" Folder or "Trustak" Folder-Stacker
20-52D	R. H. guard assembly, rolls 3 & 4, 4 roll ironer (Drive mounted outside frame)
20-52E	R. H. guard assembly, rolls 3 & 4, 6 & 8 roll ironer (Drive mounted outside frame)
20-52F	R. H. guard assembly, rolls 3 & 4, 4 roll ironer (Drive mounted outside frame). When ironer is used with "Trumatic" Folder or "Trustak" Folder-Stacker
20-53	Grommet (Not shown)
20-54	Door
20-55A	R. H. guard assembly, rolls 5 & 6, 6 & 8 roll ironer



ITEM	DESCRIPTION
20-55B	R. H. guard assembly, rolls 5 & 6, 6 roll trouser. When trouser is used with "Transtic" Folder or "Trustch" Folder-Stacker

ITEM	DESCRIPTION
20-56	Grommet (Not shown)
20-57	Door
20-58A	R. H. guard assembly, rolls 7 & 8

ITEM	DESCRIPTION
20-58B	R. H. guard assembly, rolls 7 & 8, When used with "Transtic" Folder or "Trustch" Folder-Stacker

REFERENCE ONLY

ITEM	DESCRIPTION
A	Spool arm assembly (See figure 37)
B	Bijur lubrication system (See figu

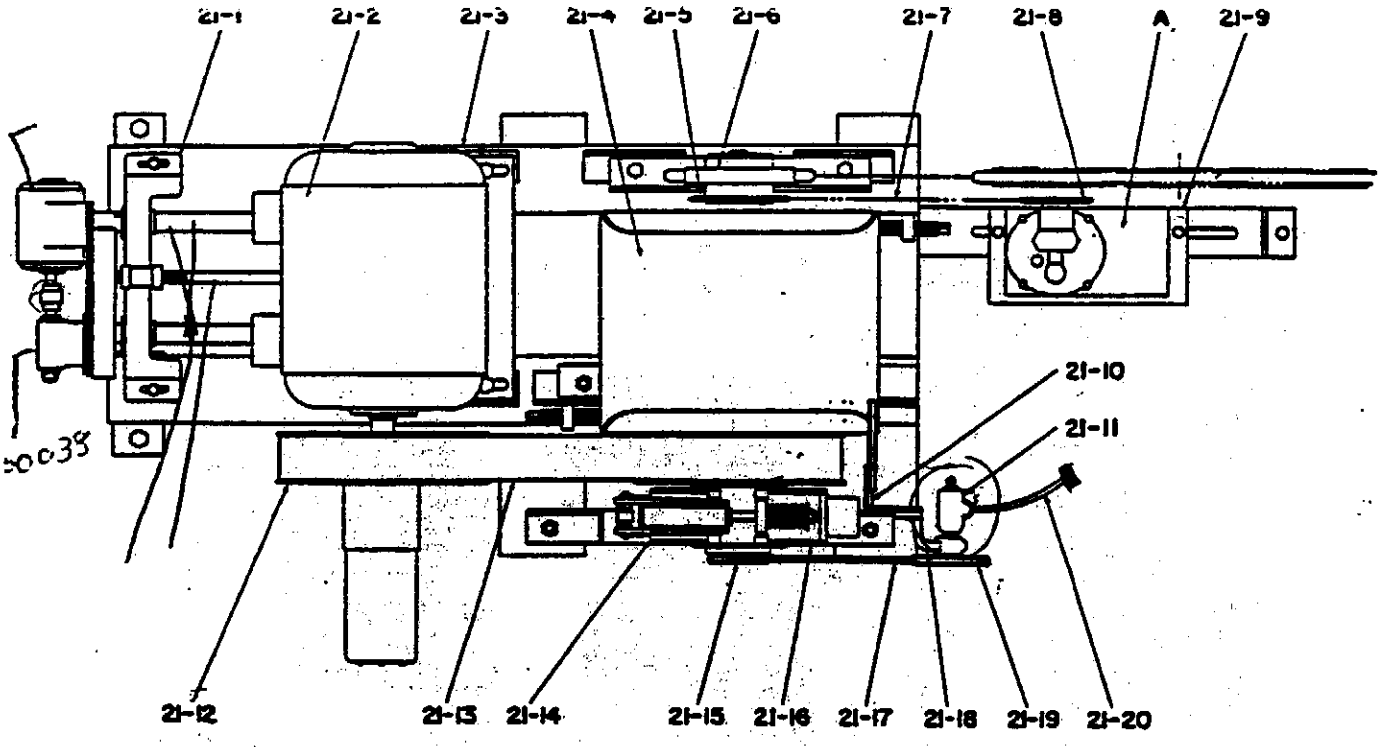


FIGURE 21
STANDARD MOTOR DRIVE
(OUTSIDE FRAME)

ITEM	DESCRIPTION
21-1	Motor base with electric remote control
21-2	Drive motor
21-3	Base, motor & reducer
21-4	Speed reducer
21-5	Drive sprocket, Bijur drive
21-6	Sprocket for speed reducer
21-7	Chain, Bijur pump
21-8	Driven sprocket, Bijur drive
21-9	Mounting plate, Bijur pump
21-10	Bracket assembly, speedometer
21-11	Speedometer drive head
21-12	Variable pitch pulley
21-13	Gerbing roto-cone vari-speed V-belt
21-14	Bracket assembly, brake
21-15	Drive sheave for speedometer
21-16	Brake assembly
21-17	Gilmer V-belt, model #8825, 1/4" x 39-9/16" cir.
21-18	Speed indicator bracket
21-19	Sheave, speedometer drive head
21-20	Flexible shaft for speedometer
	REFERENCE ONLY
A	Bijur lubrication system (See figure 27)

Horton Clutch C21816
Lewis Bretz HT 7611
use pul - 6-2-62206-1
~~5TH767B~~
9-585-14
et cal C26942
C26911

To convert old Style KH Calyper To New Style
141R1227

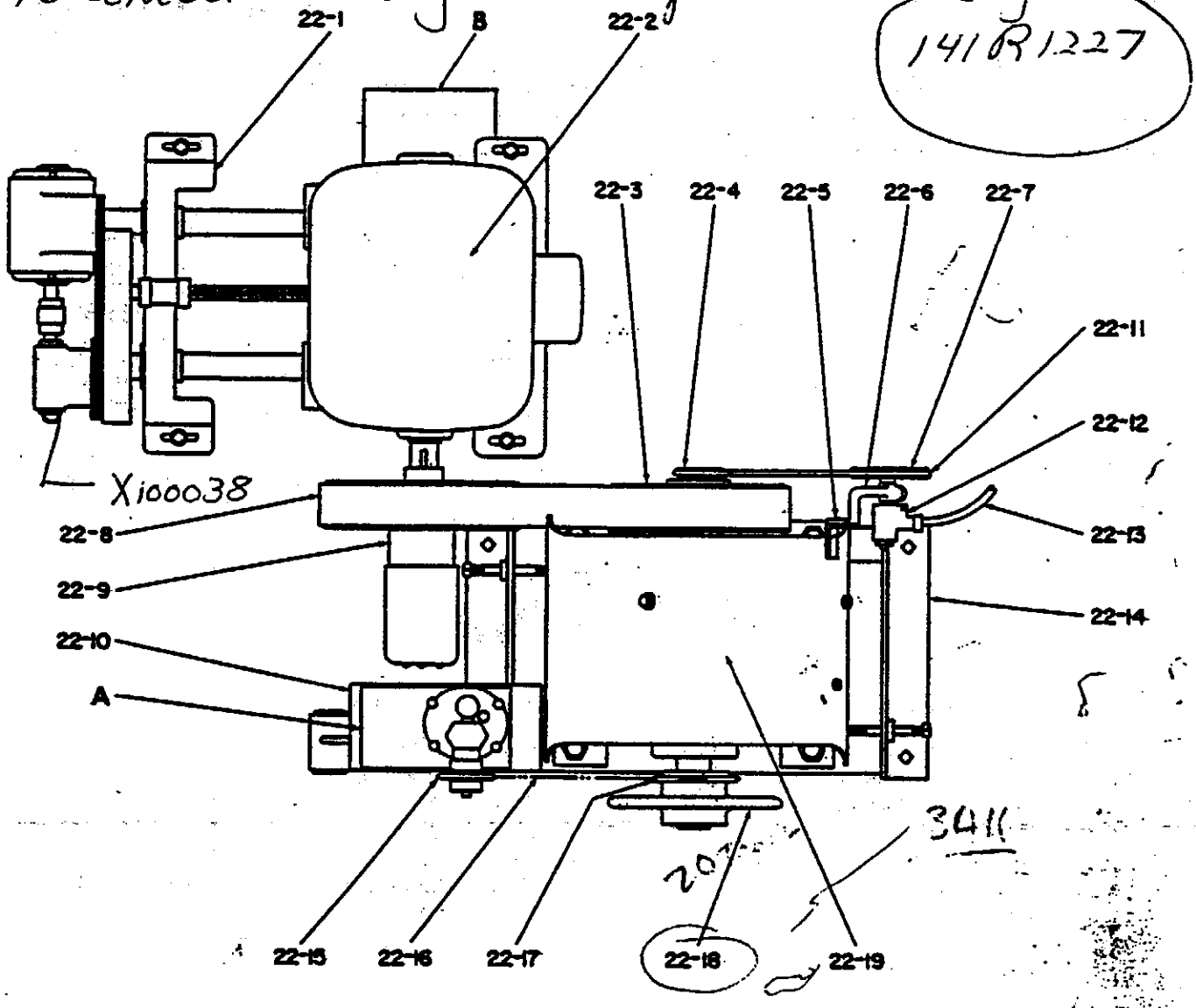


FIGURE 22
OPTIONAL MOTOR DRIVE
(INSIDE FRAME)

ITEM	DESCRIPTION
22-1	Motor base with electric remote control
22-2	Drive motor
22-3	Bracket assembly, brake
22-4	Drive sheave, speedometer
22-5	Bracket assembly, speedometer
22-6	Speed indicator bracket
22-7	Sheave, speedometer drive head
22-8	Gerbing roto-cone vari-speed V-belt #472
22-9	Variable pitch pulley (Specify bore size)
22-10	Mounting plate, Bijur pump
22-11	Gilmer V-belt, model #8825, 1/4" x 39-9/16" cir.

ITEM	DESCRIPTION
22-12	Speedometer drive head
22-13	Flexible shaft for speedometer
22-14	Base, motor & speed reducer
22-15	Driven sprocket, Bijur drive
22-16	Chain, Bijur pump
22-17	Drive sprocket, Bijur drive
22-18	Sprocket for speed reducer
22-19	Speed reducer

REFERENCE ONLY

A	Bijur lubrication system (See figure 27)
B	Motor Magnetic Brake

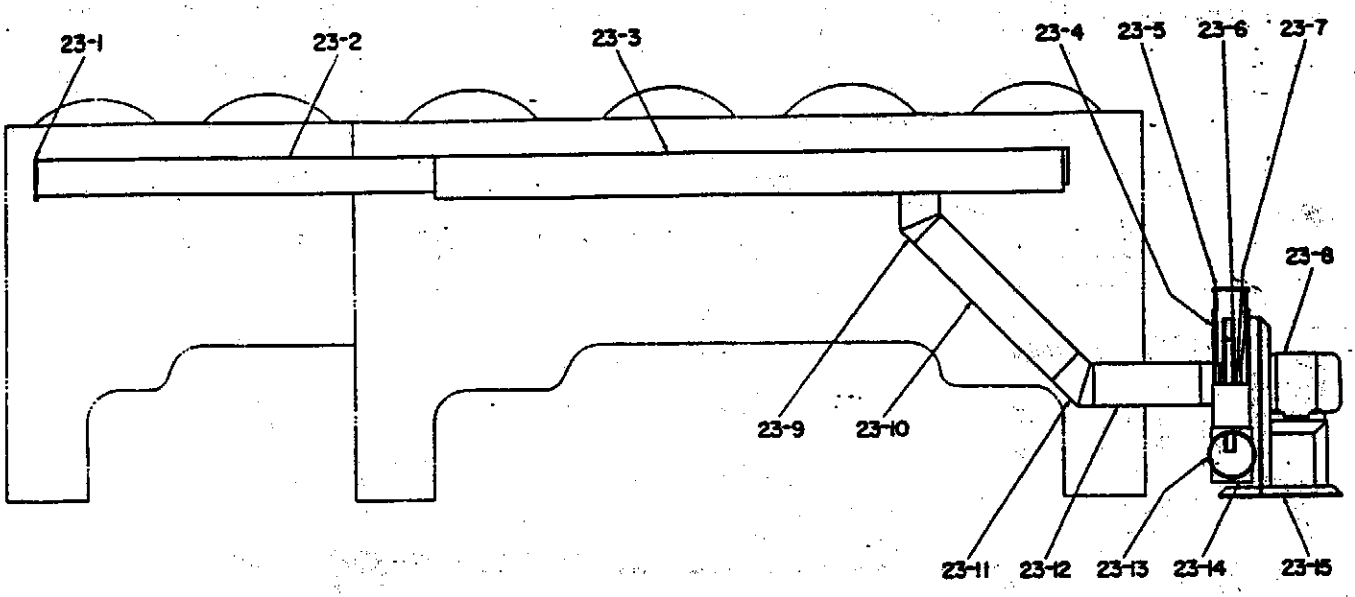


FIGURE 23
VACUUM SYSTEM ASSEMBLY, 4 & 6 ROLL IRONER

ITEM	DESCRIPTION
23-1A	Cap, rear vacuum duct, 4 roll machine
23-1B	Cap, rear vacuum duct, 6 roll machine
23-2	Vacuum duct, rolls 5 & 6 (6 roll machine only)
23-3	Vacuum duct, rolls 1, 2, 3, & 4
23-4	Housing side
23-5	Fan housing
23-6	Fan
23-7	Clamping ring

ITEM	DESCRIPTION
23-8	Vacuum motor
23-9	Elbow, 45°
23-10	Pipe, 5" dia. x 26-1/2" long
23-11	Elbow, 45°
23-12	Pipe, 5" dia. x 13-1/2" long
23-13	Transition, vacuum fan, exhaust end
23-14	Gasket, transition to fan
23-15	Motor bracket and base for fan

2 HP Vacuum motor & Fan 141-1808 208-230-460 volt

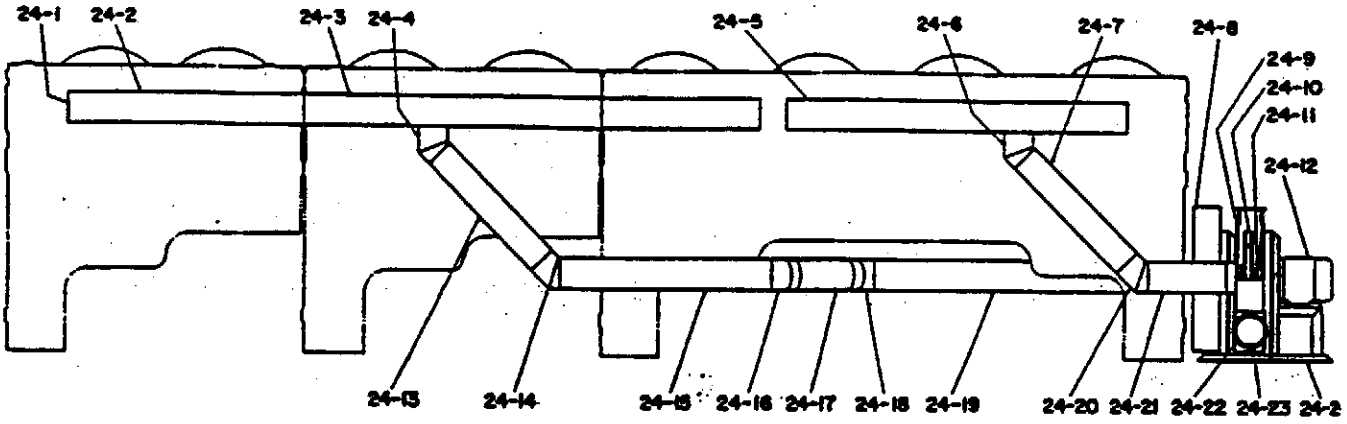


FIGURE 24
VACUUM SYSTEM ASSEMBLY, 8 ROLL IRONER

ITEM	DESCRIPTION
24-1	Cap, 8 roll rear vacuum duct
24-2	Vacuum duct, rolls 7 & 8
24-3	Vacuum duct, rolls 4 5 & 6
24-4	Elbow,45°
24-5	Vacuum duct, rolls 1, 2, & 3
24-6	Elbow,45°
24-7	Pipe, 5" dia. x 26-1/2" long
24-8	Fan housing
24-9	Housing side
24-10	Fan
24-11	Clamping ring
24-12	Vacuum motor
24-13	Pipe, 5" dia. x 30" long
24-14	Elbow,45°
24-15	Pipe
24-16	Elbow,45°
24-17	Pipe
24-18	Elbow,45°
24-19	Pipe
24-20	Elbow,45°
24-21	Pipe
24-22	Transition, vacuum fan, exhaust end
24-23	Gasket, transition to fan
24-24	Motor bracket and base for fan

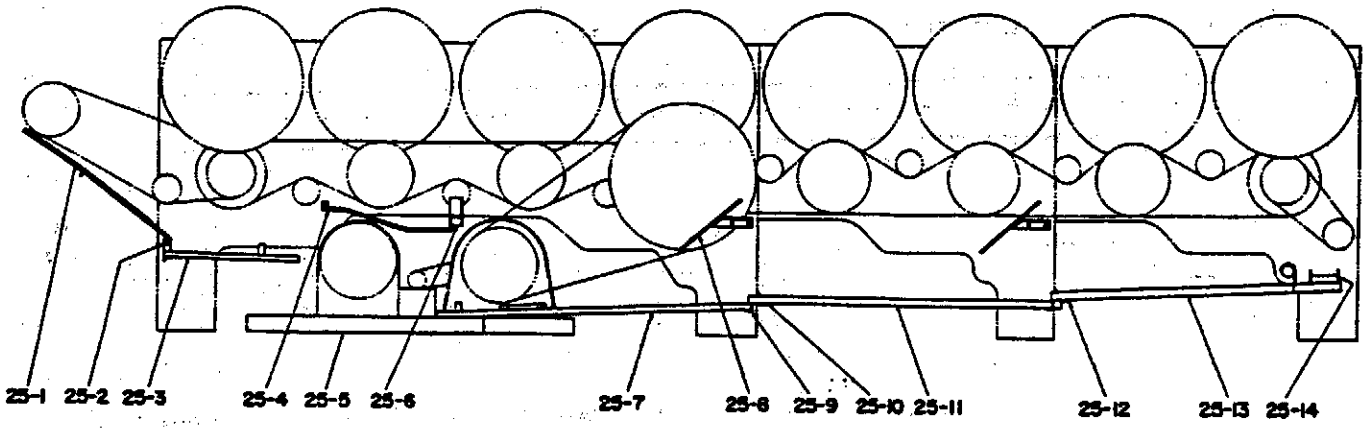


FIGURE 25
OIL PAN APPLICATION FOR 4, 6 & 8 ROLL IRONER (MOTOR OUTSIDE)

ITEM	DESCRIPTION
25-1	Oil drip pan (Under control panel)
25-2	Support bracket
25-3	Oil deflector (Under roll 1) ✓
25-4	Oil pan (Over motor)
25-5	Oil pan (Under rolls 2 & 3) ✓
25-6	Guard support (Between rolls 2 & 3)
25-7	Oil pan (Under roll 4 & reducer)
25-8	Oil deflector (6 or 8 roll ironer only)
25-9	Guard support (6 or 8 roll ironer only)
25-10	Oil pan support (6 or 8 roll ironer only)
25-11	Oil drip pan (Under rolls 5 & 6)
25-12	Oil pan support (8 roll ironer only)
25-13	Oil drip pan (Under rolls 7 & 8) (8 roll ironer only)
25-14	Oil deflector (8 roll ironer only)

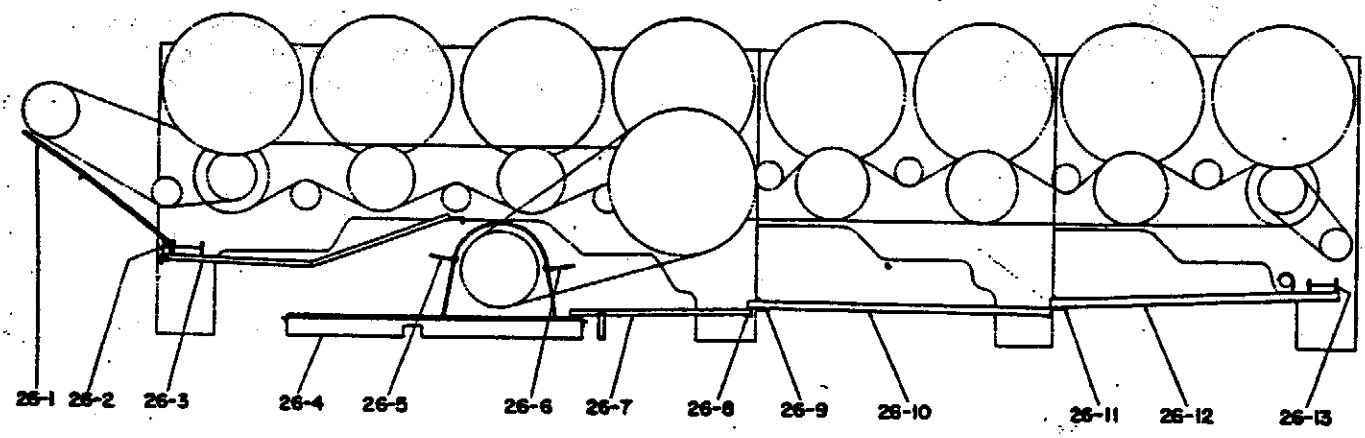
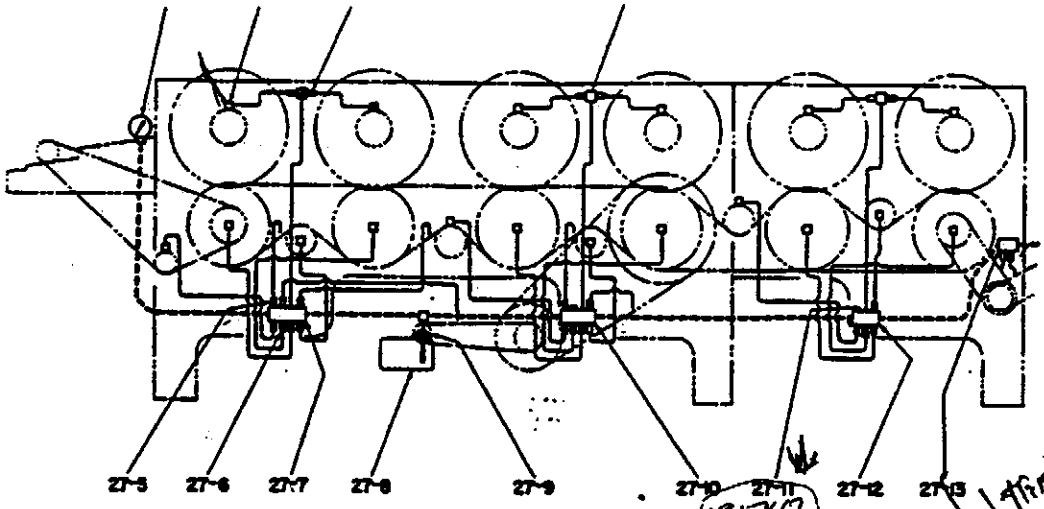


FIGURE 26
OIL PAN APPLICATION FOR 4, 6 & 8 ROLL IRONER (MOTOR INSIDE)

ITEM	DESCRIPTION
26-1	Oil drip pan (Under control panel)
26-2	Support bracket
26-3	Oil drip pan (Under rolls 1 & 2)
26-4	Oil drip pan (Drive assembly)
26-5	L. H. oil drip gutter (Over Falk reducer)
26-6	R. H. oil drip gutter (Over Falk reducer)
26-7	Oil drip pan (Under roll 4)
26-8	Guard support
26-9	Oil pan support (6 or 8 roll ironer only)
26-10	Oil drip pan (Under roll 5 & 6)
26-11	Oil pan support (8 roll ironer only)
26-12	Oil drip pan (Under rolls 7 & 8) (8 roll ironer only)
26-13	Oil deflector



NOTE: Main Bijur oil pressure lines — 5/32 O.D. x .025 wall brass tubing. Other lines 5/32 O.D. x .055 wall.

FIGURE 27 BIJUR LUBRICATION SYSTEM, 6 ROLL IRONER
(SIMILAR APPLICATION ON 4 & 8 ROLL IRONER)

ITEM	DESCRIPTION
27-1	Pressure gauge, 200#, type SF, Bijur #B-4582
27-2	Elbow adaptor, Bijur #A-3080 (At all bearings)
27-3	Meter unit #HJB-2, Bijur #B-6114
27-4	Junction, 3 way, Bijur #B-3065
27-5	Meter unit #HJB-O, Bijur #B-6048
27-6	Meter unit #HJB-1, Bijur #B-6113
27-7	Junction, 10 way, double, Bijur #B-3254
27-8A	Reservoir, 6 pint, R. H., Bijur #D-2250 (Inside drive)
27-8B	Reservoir, 6 pint, L. H., Bijur #D-2249 (Outside drive)
27-9A	Lubricator unit, #AAB-R3, Bijur #D-2221 (Inside drive)
27-9B	Lubricator unit, #AAB-L3, Bijur #D-2232 (Outside drive)
27-10	Junction, 10 way, double, Bijur #B-3254
27-11	Closure plug, Bijur #B-2488
27-12	Junction, 8 way, double, Bijur #B-3253
27-13	Junction, 5 way, single, Bijur #B-3263
27-14	Tubing clip, single, Bijur #A-2764 (Not shown)
27-15	Tubing clip, double, Bijur #B-3567 (Not shown)
27-16	Compression nut, Bijur #B-1095 (Not shown)
27-17	Compression bushing, Bijur #B-1371 (Not shown)
27-18	Compression sleeve, Bijur #B-1061 (Not shown)

BIJUR PUMP

See Figure 28.

Disconnect copper tubing and remove pump from the reservoir. The timing cam (B) is a two piece unit, in which one half of the cam may be rotated in relation to the other. The cam should be set by pulling out the knurled knob and rotating the cam until the #1 index hole is over the pin.

To prime the pump, start the ironer, and hold down the "INSTANT FEED" button (A) until oil shows freely at all points.

The filter disc (C) in the pump should be replaced yearly.

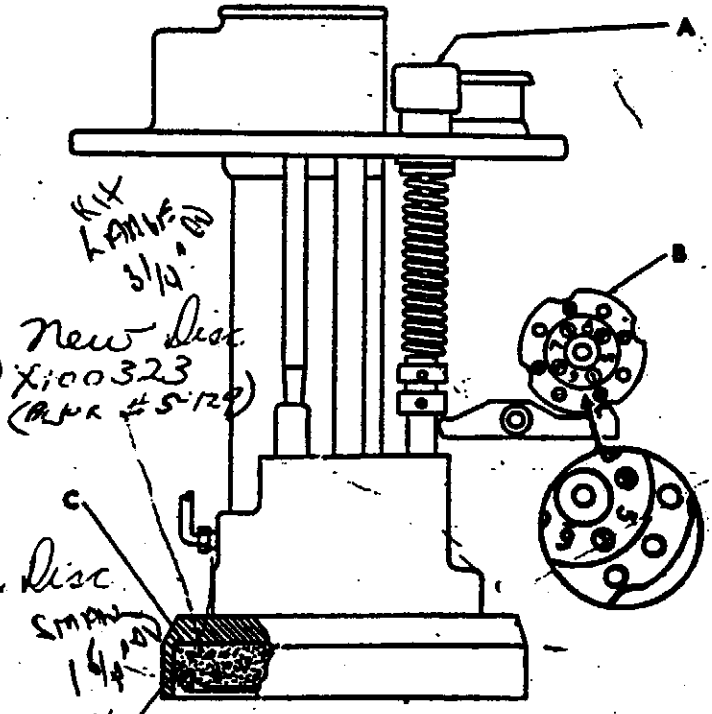


FIGURE 28 - BIJUR PUMP

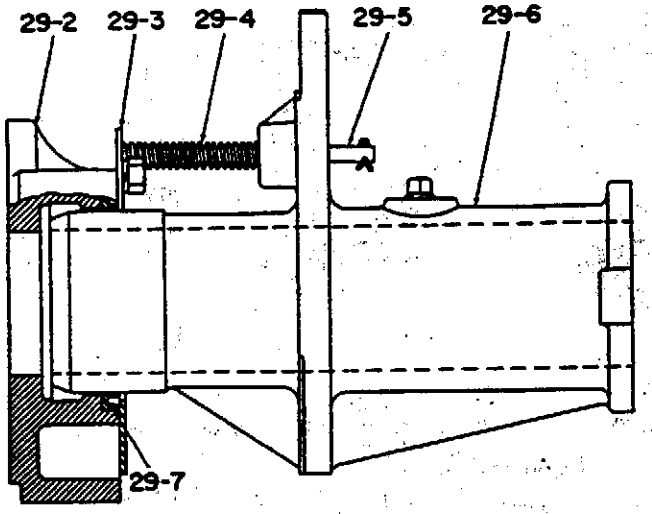


FIGURE 29
VACUUM ADAPTOR ASSEMBLY

ITEM	DESCRIPTION
29-1	Vacuum adapter assembly
29-2	Floating flange
29-3	Retaining ring
29-4	Spring
29-5	Guide for spring
29-6	Vacuum adapter
29-7	Klozure

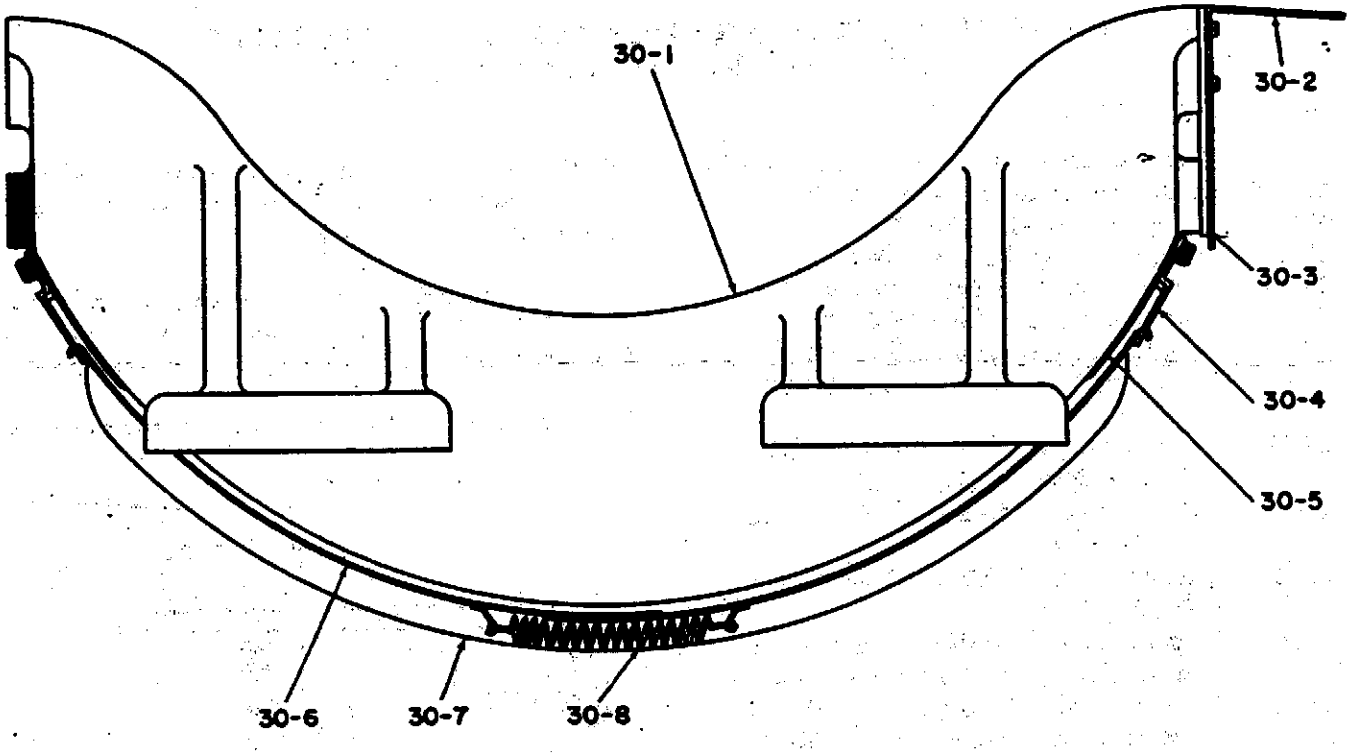


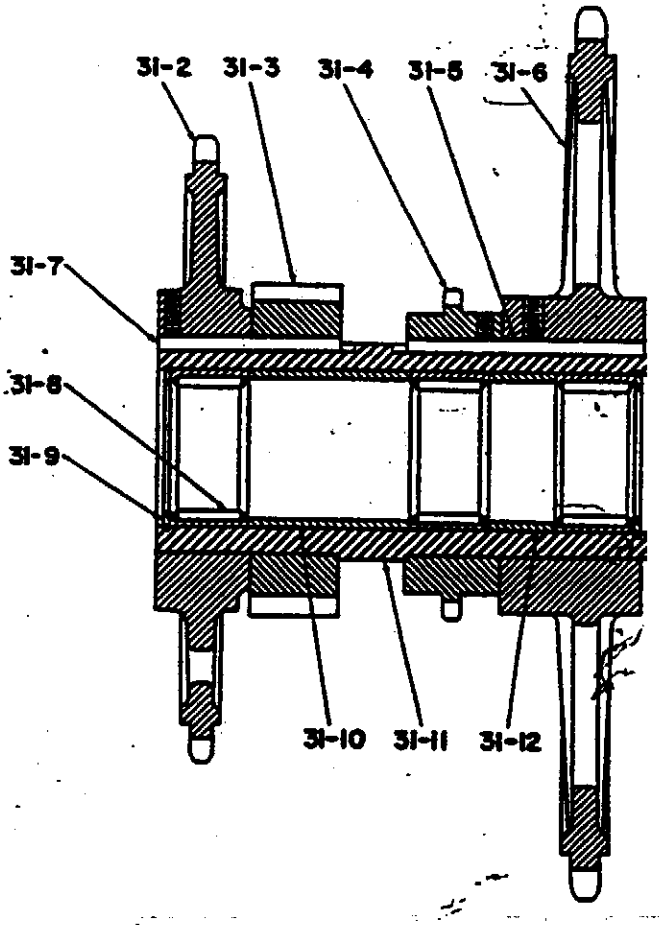
FIGURE 30
STEAM CHEST ASSEMBLY

ITEM	DESCRIPTION
30-1A	Steam chest
30-1B	*Steam chest (Drilled for bridging strip)
30-1C	Special insulated steam chest
30-1D	*Special insulated steam chest (Drilled for bridging strip)
30-2	*Bridging strip
30-3	*Insulation, bridging strip
30-4	Clamp bar (Used on special insulated steam chest only)
30-5	Back-up plate (Used on special insulated steam chest only)
30-6	Strap assembly (Used on special insulated steam chest only)
30-7	Insulation (Used on special insulated steam chest only)
30-8	Spring (Used on special insulated steam chest only)

* Rear chest only when ironer is ap[illegible] to "Trumatic" Folder or "Folestak" Folder-Stacker.

FIGURE 31
MAIN DRIVE SPROCKET ASSEMBLY

ITEM	DESCRIPTION
31-1A	Main drive sprocket assembly (4 roll ironer only)
31-1B	Main drive sprocket assembly (6 & 8 roll ironer only)
31-2	Sprocket
31-3	Pinion
31-4A	Sprocket, 5/8 pitch, 35 teeth (4 roll ironer only)
31-4B	Sprocket, 1-1/4 pitch, 34 teeth (6 & 8 roll ironer only)
31-5	Key
31-6	Sprocket
31-7	Key
31-8	Needle bearing, Torrington #445628
31-9	Retaining ring, Tru-Arc #5000-350
31-10	Spacer, long
31-11	Sleeve
31-12	Spacer, short



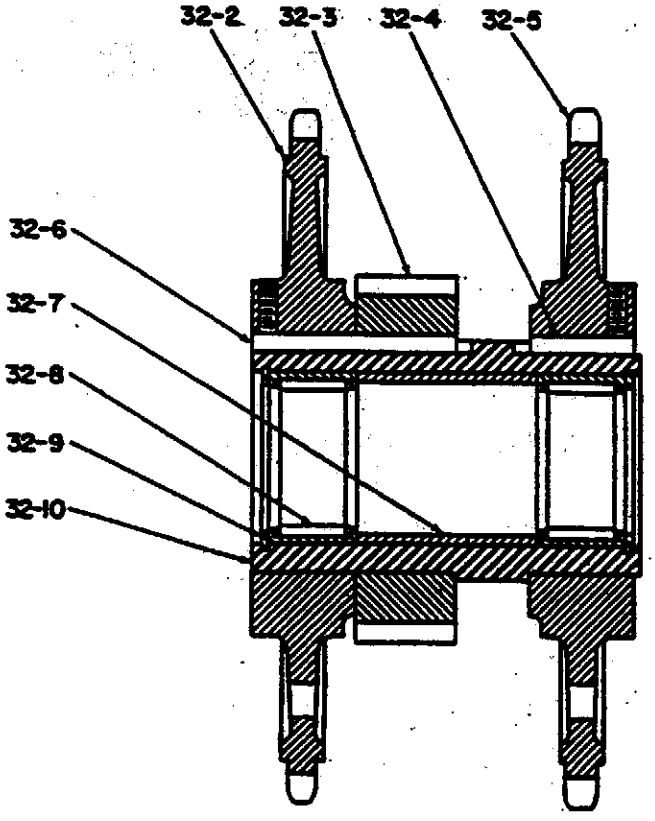


FIGURE 32
DRIVE SPROCKET ASSEMBLY

ITEM	DESCRIPTION
32-1A	Drive sprocket assembly (Roll 2 & 3 on 4 roll ironer) (Roll 2 & 3 on 6 roll ironer) (Roll 2, 3, 6 & 7 on 8 roll ironer)
32-1B	Drive sprocket assembly (Roll 5 on 6 & 8 roll ironer)
32-2	Sprocket
32-3	Pinion
32-4	Key
32-5A	Sprocket (Roll 2 & 3 on 4 roll ironer) (Roll 2 & 3 on 6 roll ironer) (Roll 2, 3, 6 & 7 on 8 roll ironer)
32-5B	Sprocket (Roll 5 on 6 & 8 roll ironer)
32-6	Key
32-7	Spacer
32-8	Needle bearing, Torrington #445628
32-9	Retaining ring, Tru-Arc #5000-350
32-10	Sleeve

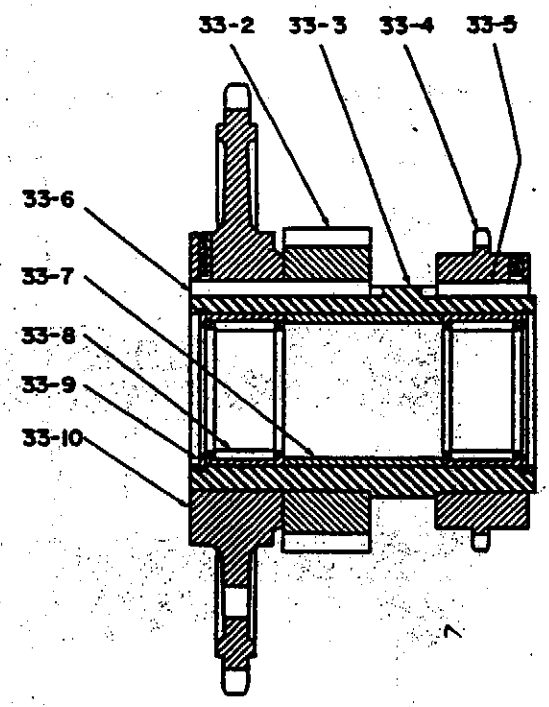


FIGURE 33
SPROCKET ASSEMBLY (WHEN IRONER IS USED WITH "HYPRO" FOLDER ONLY)

ITEM	DESCRIPTION
33-1	Sprocket assembly
33-2	Pinion
33-3	Sleeve
33-4	Sprocket
33-5	Key
33-6	Key
33-7	Spacer
33-8	Needle bearing, Torrington #445628
33-9	Retaining ring, Tru-Arc #5000-350
33-10	Sprocket

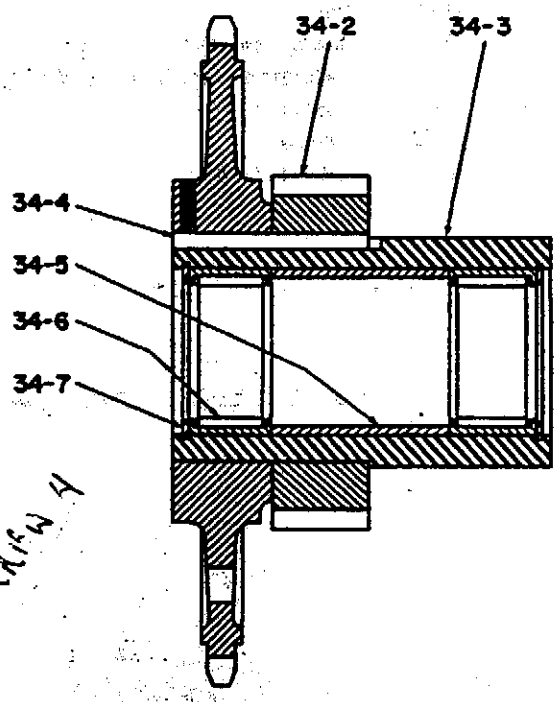


FIGURE 34
SPROCKET ASSEMBLY (WHEN IRONER IS USED WITH "TRUMATIC" FOLDER OR "TRUSTAK" STACKER ONLY)

ITEM	DESCRIPTION
34-1	Sprocket assembly
34-2	Pinion
34-3	Sleeve
34-4	Key
34-5	Spacer
34-6	Needle bearing, Torrington #445628
34-7	Retaining ring, Tru-Arc #5000-350

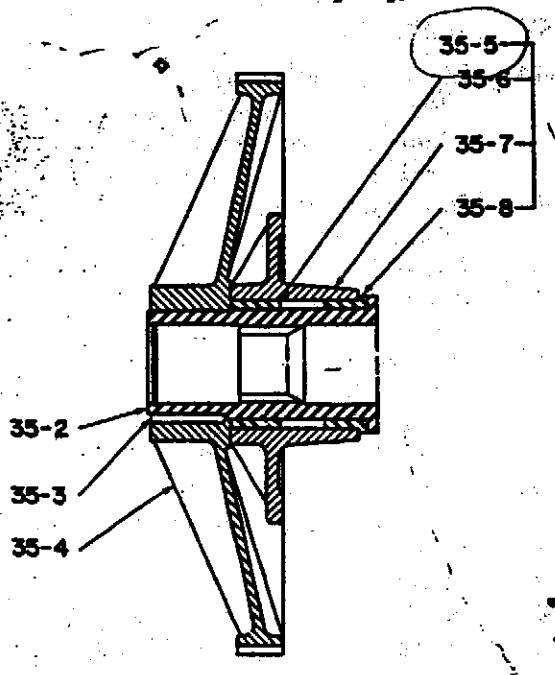
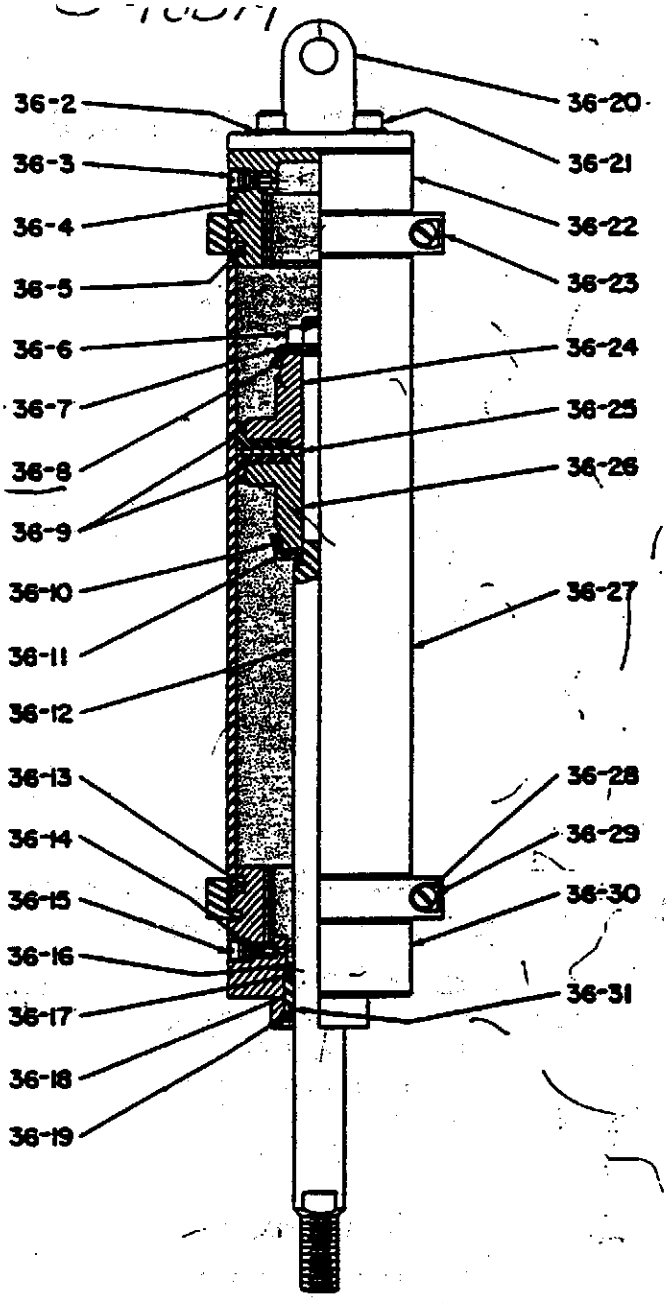


FIGURE 35
BEARING & GEAR ASSEMBLY, MAIN DRIVE

ITEM	DESCRIPTION
35-1	Bearing and gear assembly
35-2	Drive sleeve
35-3	Key
35-4	Gear
35-5	Bearing housing assembly
35-6	Outside bushing
35-7	Bearing housing
35-8	Inside bushing

FIGURE 36
AIR CYLINDERS ASSEMBLY

ITEM	DESCRIPTION
36-1	Air cylinder assembly, 1417104 Westinghouse Air Brake model #A-3-A Double acting air cylinder, 4" dia. x 11" stroke, with DC-4 kit
36-2	Lock washer, Westinghouse Air Brake #514276
36-3	Cushioning adjusting screw, Westinghouse Air Brake #850672
36-4	Packing Ring, Westinghouse Air Brake #533134
36-5	Packing ring, Westinghouse Air Brake #536587
36-6	Flex-loc nut, Westinghouse Air Brake #P49819-1
36-7	Small piston follower, Westinghouse Air Brake #850669
36-8	Cushion packing cup, Westinghouse Air Brake #850653
36-9	Piston packing cup, (2) Westinghouse Air Brake #535161
36-10	Cushion packing cup, Westinghouse Air Brake #850653
36-11	Small piston follower, Westinghouse Air Brake #850669
36-12	Piston rod (When ordering, give bore, stroke and model of cylinder which is found on nameplate. Also specify whether rod is C.R.S. or stainless steel.)
36-13	Packing ring, Westinghouse Air Brake #536587
36-14	Packing ring, Westinghouse Air Brake #533134
36-15	Cushioning adjusting screw, Westinghouse Air Brake #850672
36-16	"V" ring retainer, Westinghouse Air Brake #850675
36-17	"U" packing ring, Westinghouse Air Brake #851080
36-18	Piston rod guide, Westinghouse Air Brake #850676
36-19	Internal retaining ring, Westinghouse Air Brake #540570
36-20	Swivel bracket, Westinghouse Air Brake #P50346
36-21	Screw, Westinghouse Air Brake #523363
36-22	Head (Blind end), (Incl. 3, 4 and 5) Westinghouse Air Brake #850977
36-23	Locking clamp, (Incl. screws & washers) Westinghouse Air Brake #850982
36-24	Piston follower, Westinghouse Air Brake #850967



36-25	Piston, Westinghouse Air Brake #850968
36-26	Piston follower, Westinghouse Air Brake #850967
36-27	Cylinder body (When ordering, give bore, stroke and model of cylinder which is found on nameplate. Also specify carbon steel body.)
36-28	Screw, Westinghouse Air Brake #544187
36-29	Lock washer, Westinghouse Air Brake #544188
36-30	Head (Rod end), (Incl. 13, 14 & 15) Westinghouse Air Brake #851114
36-31	Packing ring, Westinghouse Air Brake #524719

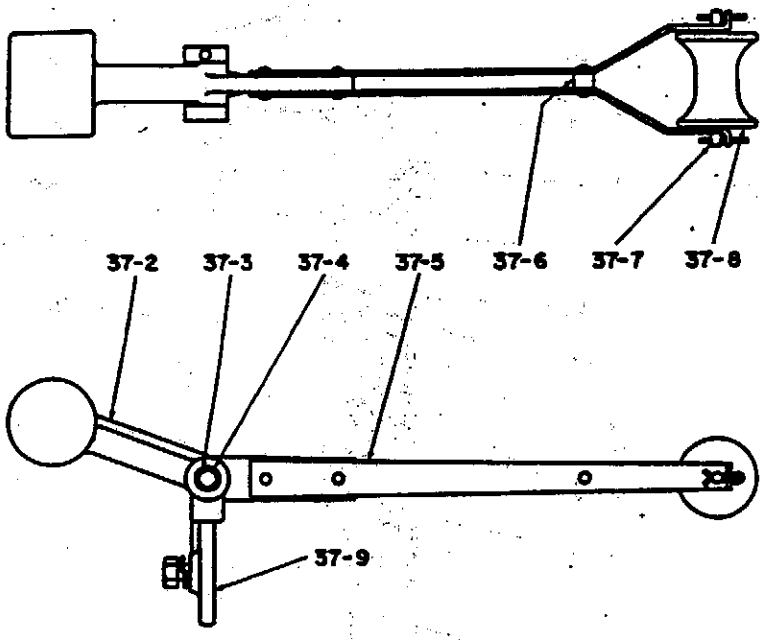


FIGURE 37
SPOOL ARM ASSEMBLY

ITEM	DESCRIPTION
37-1	Spool arm assembly
37-2	Counterweight
37-3	Pin
37-4	Bushing, Oilite #AAB-502-2
37-5	Strip
37-6	Spacer
37-7	Stud
37-8	Spool
37-9	Holder

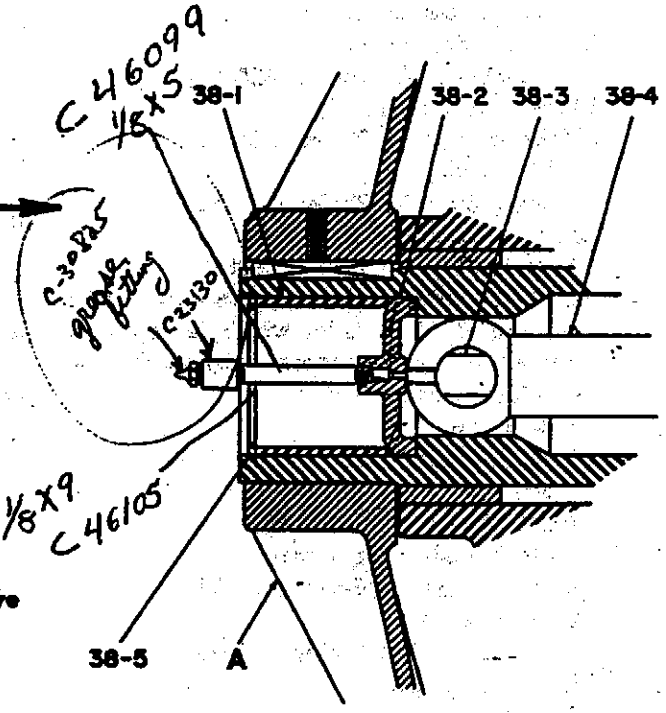


FIGURE 38
UNIVERSAL DRIVE ASSEMBLY

ITEM	DESCRIPTION
38-1	Spacer, universal drive plate
38-2	Plate, universal drive
38-3	Pin, universal joint shaft
38-4	Universal drive shaft
38-5	Tru-arc ring #5000-334
	REFERENCE ONLY
A	Bearing and gear assembly, main drive (See figure 35)

PADDING RIBBON FEED ROLL

To repad the ribbon feed roll, first remove all the feed ribbons as described on page 20. Then remove all old padding and cement. Thoroughly clean roll and cover with a piece of #12 duck, 21" wide and 128" long. Cement the duck to the roll using apron cement.

PADDING DOFFER ROLL

To repad the doffer roll, remove all old padding and cement. Thoroughly clean roll To cover the roll a piece of D.F.C. flannel 54" wide by 126-1/4" long and a piece of muslin 36" wide x 126-1/4" long is required. Cement the first 5" of the D.F.C. flannel to the roll. Lap 18" of the muslin cover under the end of the D.F.C. flannel and wrap until all of the muslin is used. Leave end hang loose.

PADDING IRONER ROLLS

Before replacing padding on the ironer rolls, contact the nearest office of the Revolite Corp., or the Tingue-Brown Corp. to obtain the necessary technical assistance required to complete this job.

SUPPLEMENT A

SUPPLEMENTAL DATA
and
PARTS LIST

HYPRO
Flatwork Ironer

CLASS 141

TABLE OF CONTENTS

This supplement covers the installation, operation, and maintenance of recently developed optional equipment and includes a parts list for the Class 141 "HYPRO" Flat Work Ironer (F. W. I.) supplement. The optional equipment comprises a finger guard, rear tape bar and bridging strip, bibb bar, and relocation of the doffer roll. A brief explanation is included covering a new spring clip used in the application of padding to ironer rolls with a different perforation pattern. An additional cutout on the RH guard and a change in a channel specification are also discussed.

GENERAL

FINGER GUARD. An optional finger guard can be added as an additional safety measure to the standard safety guard assembly of the F. W. I. Operating as part of the standard safety guard assembly, the finger guard will automatically stop the ironer if the necessity arises.

REAR TAPE BAR AND BRIDGING STRIP. The addition of the optional rear tape bar together with the bridging strip gives assurance that flat work delivered from the ironer will follow onto the attached folder for the next operation. The receiving end of the following folders have, as standard equipment, the tape bar attached, Classes 137, 138, and 140 (HYPRO).

BIBB BAR. The bibb bar assembly is used for holding small pieces or separate batches of flat work. Time is saved, with this optional equipment, in that identifying marks do not require checking on every piece when work is processed in batches.

DOFFER ROLL RELOCATION. When a Feedmaster spreader is used with the "HYPRO" ironer, the doffer roll should be relocated nearer the feed end of the ironer within the reach of the operators stationed along side. Brackets for such relocation are offered as optional equipment.

SPRING CLIP. The new spring clip will be effected for applying padding on ironer rolls with a different perforation pattern beginning serial number 141M3176 through serial number 141M3179 and serial number 141M3181 on.

CHEST ECCENTRIC STOPS. An instruction card has been issued to cover the installation of the new eccentric stops. The following 141 "HYPRO" Flat Work Ironers will be equipped with eccentric stops serial numbers 141M3176, 141M3177, 141M3178 and serial number 141M3184 on.

INSTALLATION

FINGER GUARD. Refer to Figure 40. The optional finger guard for field application is easily installed and does not require any drilling operation. Separate the blocks (3) by removing the 5/16-inch hex hd. capscrews (5) holding the 6 split clamp assemblies together. Back out the 5/16-inch setscrews (6) until they clear the pivot shaft area. Place the guard assembly (2) so that the finger guard is between the doffer roll and the safety fence with guard rivet heads toward the doffer roll. Move the guard assembly upwards until the lower half of the clamp assembly fits onto the pivot shaft. Center the guard assembly over the feed ribbon table, crosswise, and install the upper block of the 6 clamp assemblies. Insert the 5/16-inch hex hd. capscrews (5), 2 to each clamp assembly, and a lockwasher (4) under each capscrew head. Tighten all capscrews until the clamp assemblies fit snug against the pivot shaft, yet permits the assembly to turn on the shaft. Depress fully the safety bar and hold at this position. Position the guard assembly so that the rear of the lower edge of the finger guard will clear the projection of the safety fence about 1/2 inch. Tighten all 5/16-inch hex hd. capscrews and then, tighten the 5/16-inch setscrews (6) so that the guard assembly will not turn on the pivot shaft. Release the safety bar and move the assembled guard, up and down, to determine if further adjustment is required. The microswitch for stopping the ironer is regulated by the standard safety bar.

REAR TAPE BAR AND BRIDGING STRIP. Refer to Figure 41. NOTE: DO NOT INSTALL REAR TAPE BAR WHEN CLASSES 137, 138, or 140 (HYPRO) FOLDERS ARE USED.

Rear Tape Bar. To install the rear tape bar no drilling is required. Mount a bracket (1) at the delivery end of either RH or LH frames using the slotted holes normally used for bolting the frame sections together. Install a 1/2-inch washer (2) under the head of a 1/2-inch hex hd. capscrew (3) and insert this assembly through the slotted hole in the bracket and frame. Place a 1/2-inch washer (3) against the frame and thread a 1/2 inch nut (4) on the capscrew. Align the bracket perpendicularly and finger-tighten the capscrew. Similarly install the other bracket. Insert the 3/4-inch pipe-bar (5) through the 1-1/16-inch bracket holes, moving brackets, up and down, as required to install the bar level. When tape bar is level, tighten the 1/2-inch capscrews. Insert cotter pins (6) through ends of pipe bar. Be sure that bar turns freely in the brackets. If present stripping tapes are of sufficient length to extend around tape bar, separate tape ends and thread around bar, then fasten ends together. If new stripping tapes are required, separate ends of present tapes and fasten new tapes to end of old tapes. Start the ironer and using the "START-INCH" button, thread the tapes onto the ironer. Be sure that tapes are snug as slack may permit tapes to pile up and thread around ironer rolls. When the new stripping tapes are threaded onto ironer, remove old tapes, fasten ends of new tapes together using the electric heated tape welding device, if available.

Bridging Strip. To install the bridging strip no drilling is required. The steam chest located at the delivery end (last chest) of "HYPRO" ironers has 13 holes tapped for 1/4-20 threads. Place the bridging strip (7) against the chest and aline the center holes. Install a 1/4-inch lockwasher (8) against the head of a 1/4-inch

hex hd. capscrew (9) and a 5/16-inch plain washer (10) against the lockwasher. Insert this assembly into the center hole of the bridging strip, then thread into the center hole of chest. Continue the installation of all capscrew assemblies. Tighten capscrews alternately using the proper size wrench until all are firmly seated. After bridging strip is installed place insulation (11) within the bridging strip. Make sure the foil on the insulation is to the outside and the edges of the insulation are underneath the edges of the strip.

BIBB BAR. Refer to Figure 42. No drilling is required for installation of the optional bibb bar. Mount the RH and LH bibb bar brackets (1 and 2) onto the feed table brackets using one 1/2-inch carriage bolt (3) in each. Install the head of the bolt towards the outside of the ironer and a 1/2-inch washer (4) under the 1/2-inch nut (3) at the inside of the feed table brackets. Thread a bibb bar (5) through the 4-3/4-inch hem on each end of the bibb (6). Place the bibb bar assembly on the ironer, one bar below and to the rear of the doffer roll and the other bar in the channels of the bibb bar brackets. Adjust the brackets outward according to the type of work to be performed and tighten the 1/2-inch nuts. When the Feedmaster spreader device is used, slide the brackets inwards towards the ironer and mount the bibb bar next to the one under the doffer roll.

DOFFER ROLL RELOCATION. Refer to Figure 43. To install brackets for relocating the doffer roll when the Feedmaster spreader is used with the F.W.L., it is necessary to drill 2 holes at the RH and LH sides of the ribbon feed table. Place bracket at side of feed table 5 inches, center to center, forward of the installed doffer roll bracket and 1-1/16 inches outward from the edge of the feed table board. Scribe holes using the bracket as a template, and center punch. Drill 2 holes for 5/16-18-inch capscrews. Similarily drill holes for the other bracket. Install RH and LH brackets (1) on feed table in similar manner to the regularly installed doffer roll brackets. Place a 5/16-inch lockwasher (3) under the head of each 5/16-18-inch socket hex hd. capscrew (2). Install this capscrew assembly from bottom of feed table threading into the brackets. Using proper size Allen wrench, tighten as required.

SPRING CLIP. To install the new spring clips when applying padding to the rolls, insert the 7/16-inch joggled end of the spring clip into the roll. Producing a slight bow in the clip, insert the 7/32-inch joggled end through the padding and into a hole in the perforated roll. BE SURE THE 7/16-INCH END POINTS IN THE DIRECTION OF ROTATION AND THE 7/32-INCH END IS CIRCUMFERENTIALLY ALIGNED.

OPERATION

FINGER GUARD. The finger guard is operated connective through the pivot shaft with the safety bar. When pressure is applied moving the guard towards the heated chest, the micro-switch attached to the safety bar is energized causing the ironer to stop. To restart the ironer, press the "START" button.

REAR TAPE BAR AND BRIDGING STRIP. The stripping tapes, extending around the rear tape bar, move whenever the ironer is in operation but the bridging strip is stationary. The tape bar should not bind in the brackets.

BIBB BAR. The bibb bar can be used when the Feedmaster spreader is not used. Loosen the adjusting capscrews and move the brackets outward as required to produce the necessary depth. When the bibb bar is not used, the forward bibb bar can be placed next to the rearward bibb bar beneath the doffer roll.

DOFFER ROLL RELOCATION. The doffer roll is relocated by lifting the roll from one set of brackets and placing the roll into the other set of brackets accordingly whether the Feedmaster spreader is used or not used.

MAINTENANCE

FINGER GUARD. The only maintenance required on the finger guard is checking for loose fasteners and that the movement of the guard will activate the micro-switch, stopping the ironer.

REAR TAPE BAR AND BRIDGING STRIP. The only maintenance required on the rear tape bar and bridging strip is checking for loose fasteners and free movement of the tape bar.

BIBB BAR. The only maintenance required on the bibb bar is checking for loose fasteners on bracket installation.

DOFFER ROLL RELOCATION. The only maintenance required on the doffer roll relocation is checking for loose fasteners attaching the brackets.

CHANNEL SPECIFICATION. Refer to Figure 5A of Instruction and Parts Manual AD 568-006, 6-Roll Ironer with 8-Roll Drive. The channel on the RH side at delivery end of ironer should be 6' 3" instead of 7' 3", because of the longer length of the drive assembly.

RIGHT HAND GUARD. Refer to Figure 39. If the drive chain rubs against the guard on the "HYPRO" ironer, or if it becomes necessary to provide an opening in a replaced guard, the RH guard at delivery end should be cut out as shown in the area indicated.

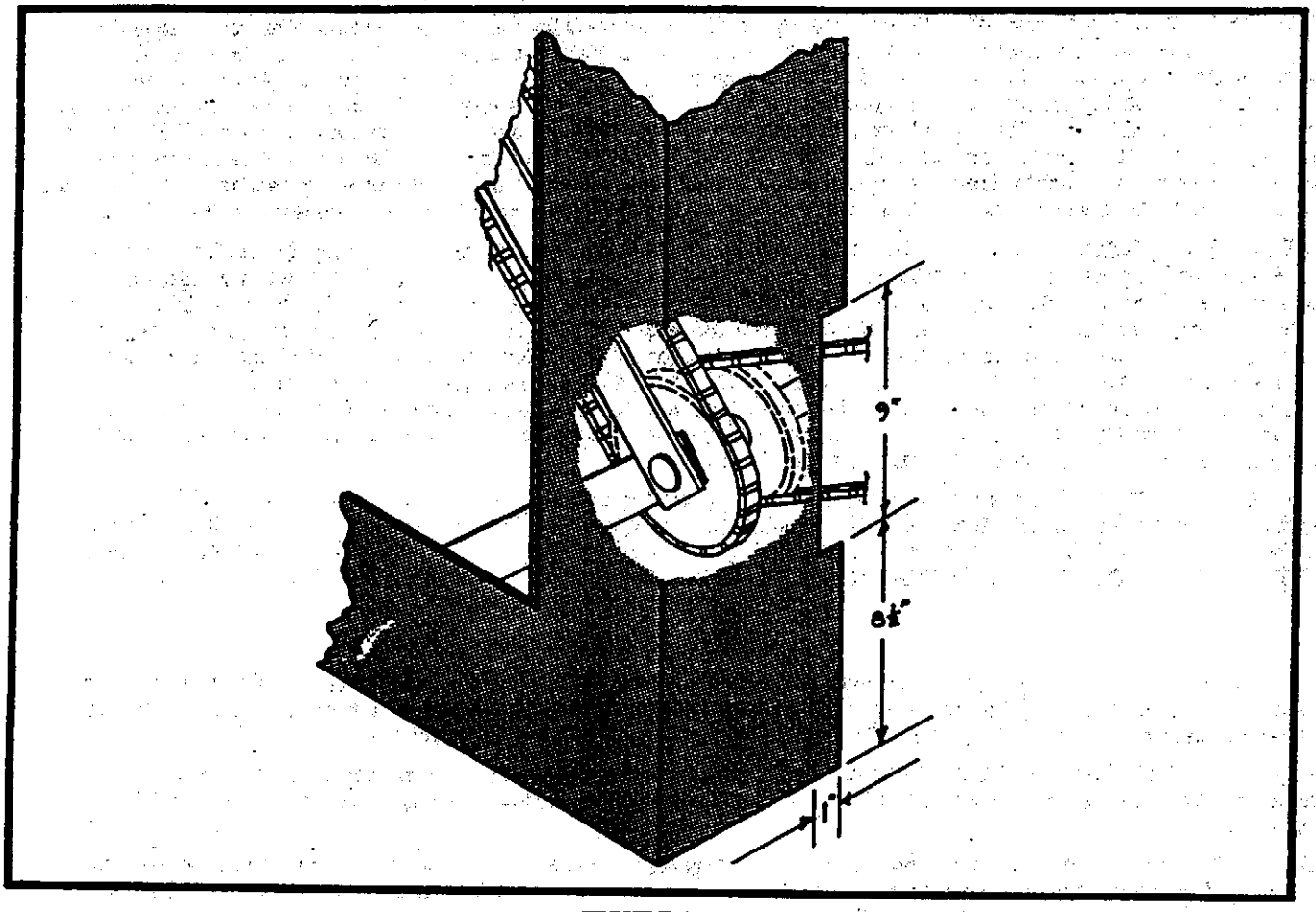


FIGURE 39

RIGHT HAND GUARD CUTOUT

PARTS LIST

GENERAL. The following pages contain an illustrated parts breakdown of the components. Assemblies are listed and illustrated for repair part purposes.

CONTENTS. Parts listings are provided with descriptions of assemblies used on the machine. For cross reference purposes the item numbers on the illustrations are the same as those assigned to the parts listing.

PURPOSE. The illustrated parts breakdown is designed to be used for repair part identification. The illustrations are intended to be used for ordering, storing, issuing, identifying, and for illustrating the assembly relationship.

ITEM NUMBER. The item number is listed in the ITEM NO. column of the parts list and is a composite of the illustration number and the index number assigned to the component on the illustration.

DESCRIPTION. The description of the assembly or component appears in this column opposite the item number assigned to it. The relationship of assemblies and components is shown by the level of indentation under the numbers 1 through 7 in the DESCRIPTION column heading. The top assembly is the complete unit which has an indent level 1. All other sub-assemblies and components are listed under indent levels 2 through 7 as applicable.

UNITS PER ASSEMBLY. The number appearing in the UNITS PER ASSEMBLY column is the quantity required of the listed part in its immediate assembly. The abbreviation REF indicates that the item listed should be consulted for additional information as required.

REPAIR PARTS ORDERING. Refer to the last page of the manual for instructions on "How To Order Repair Parts".

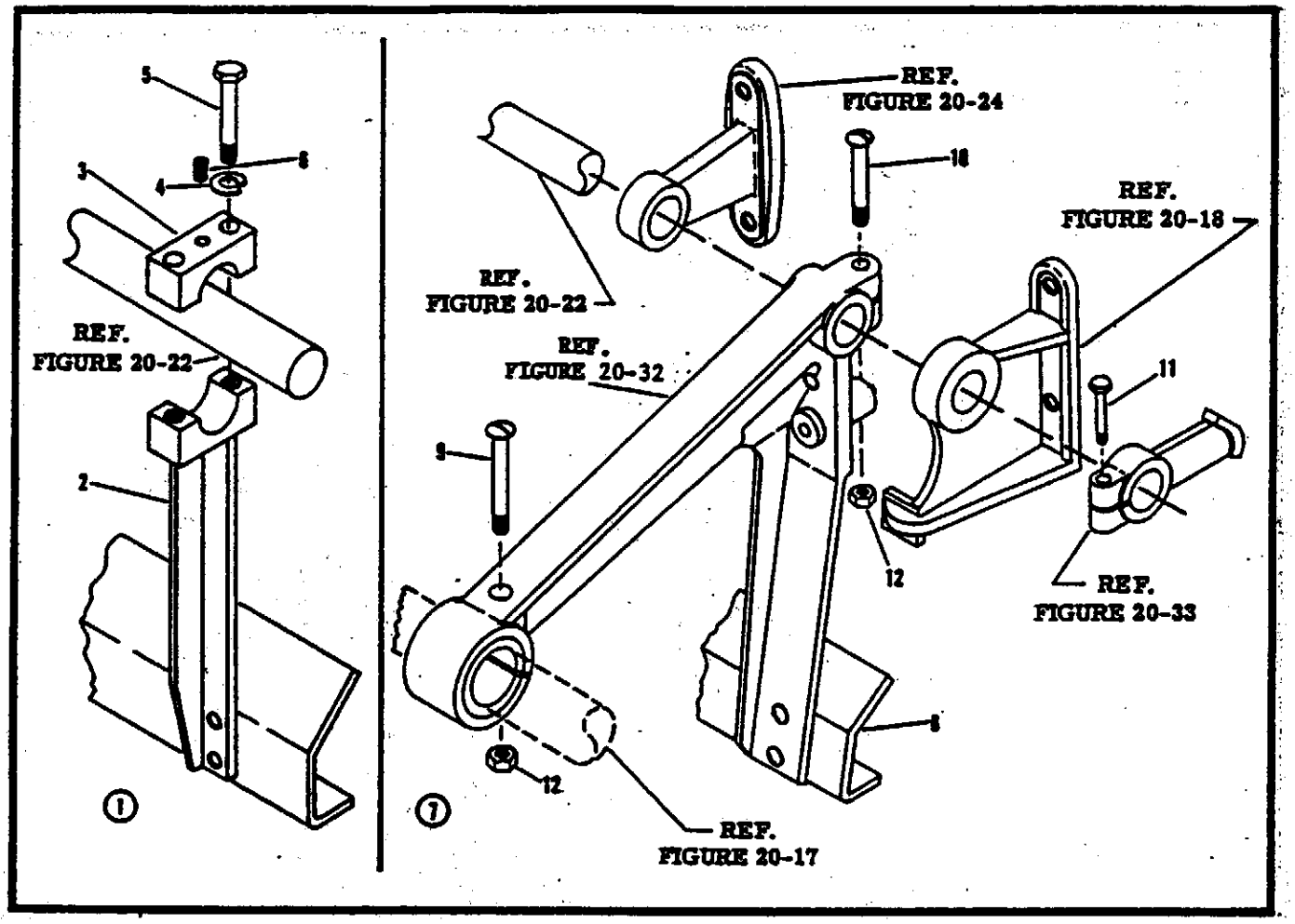


Figure 40. Finger Guard Installation

FIGURE & INDEX NUMBER	DESCRIPTION 1 2 3 4 5 6 7	MFR'S CODE	QTY PER ASSY	MODEL CODE
40-0	FINGER GUARD INSTALLATION		1	
40-1	GUARD, Finger Assy. (field application)		1	
40-2	. ANGLE AND CLAMP BAR ASSY.		1	
40-3	. BLOCK		6	
40-4	. . LOCKWASHER, 5/16		12	
40-5	. . CAPSCREW, Hex Hd. 5/16-18 x 1-1/4		12	
40-6	. SETSCREW, 5/16-18 x 3/8		6	
40-7	GUARD, Finger Assy. (factory application)		1	
40-8	. BAR, Finger		1	
40-9	. SCREW, Machine Oval Hd. 5/16-18 x 1-3/4		6	
40-10	. SCREW, Machine Oval Hd. 5/16-18 x 1-1/4		6	
40-11	. CAPSCREW, Hex Hd. 5/16-18 x 1		1	
40-12	. NUT, Hex 5/16-18		12	

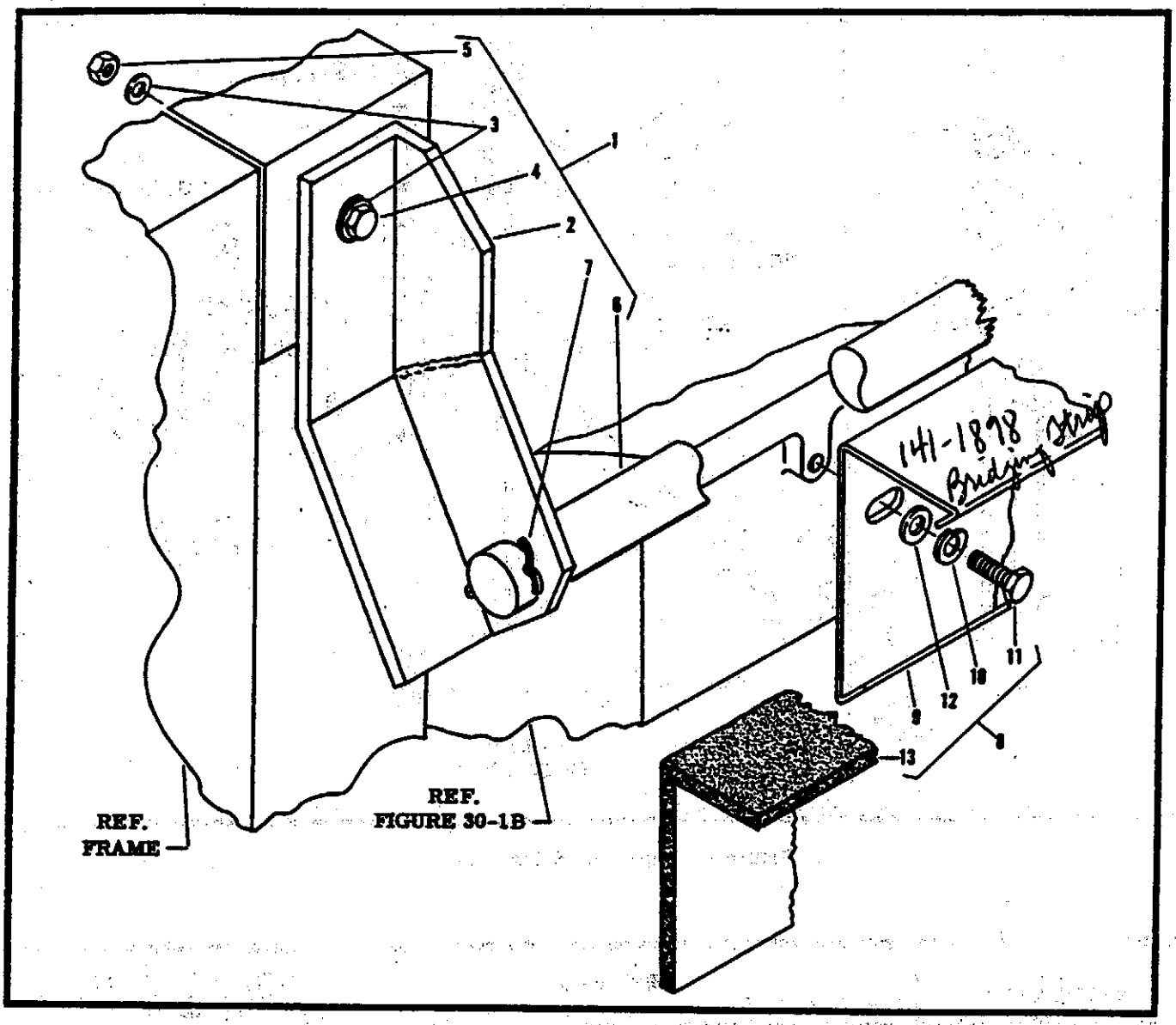


Figure 41. Rear Tape Bar And Bridging Strip Installation

FIGURE & INDEX NUMBER	DESCRIPTION 1 2 3 4 5 6 7	MFR'S CODE	QTY PER ASSY	MODEL CODE
41-0	REAR TAPE BAR AND BRIDGING STRIP INSTALLATION		1	
41-1	. BAR, REAR TAPE		1	
41-2	. . BRACKET		2	
41-3	. . WASHER 9/16 ID x 1-3/8 OD		4	
41-4	. . CAPSCREW, Hex Hd. 1/2-13 x 2-1/4		2	
41-5	. . NUT Hex 1/2-13		2	
41-6	. . BAR, Tape		1	
41-7	. . PIN, Cotter 1/8 dia x 2		2	
41-8	. BRIDGING STRIP		1	
41-9	. . STRIP, Bridging		1	
41-10	. . LOCKWASHER 1/4		13	
41-11	. . CAPSCREW Hex Hd. 1/4-20 x 1/2		13	
41-12	. . WASHER 5/16 ID x 3/4 OD		13	
41-13	. . INSULATION		1	

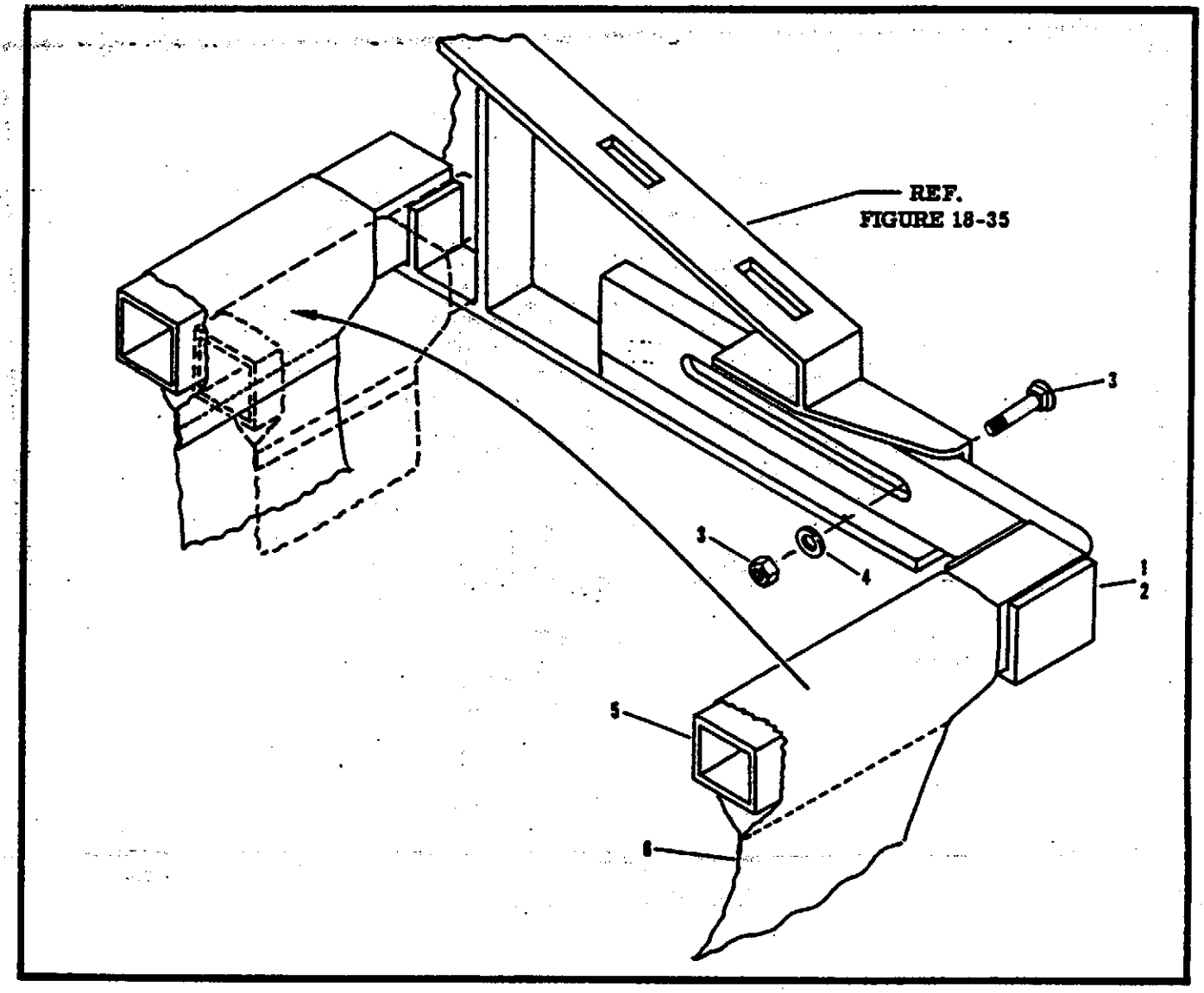


Figure 42. Bibb Bar Installation

FIGURE & INDEX NUMBER	DESCRIPTION 1 2 3 4 5 6 7	MFR'S CODE	QTY PER ASSY	MODEL CODE
42-0	BIBB BAR INSTALLATION		REF	
42-1	. BRACKET, LH		1	
42-2	. BRACKET, RH		1	
42-3	. BOLT, carriage 1/2-13 x 2-1/4 w/nut		2	
42-4	. WASHER 9/16 ID x 3/4 OD		2	
42-5	. BAR, Bibb		2	
42-6	. BIBB		1	

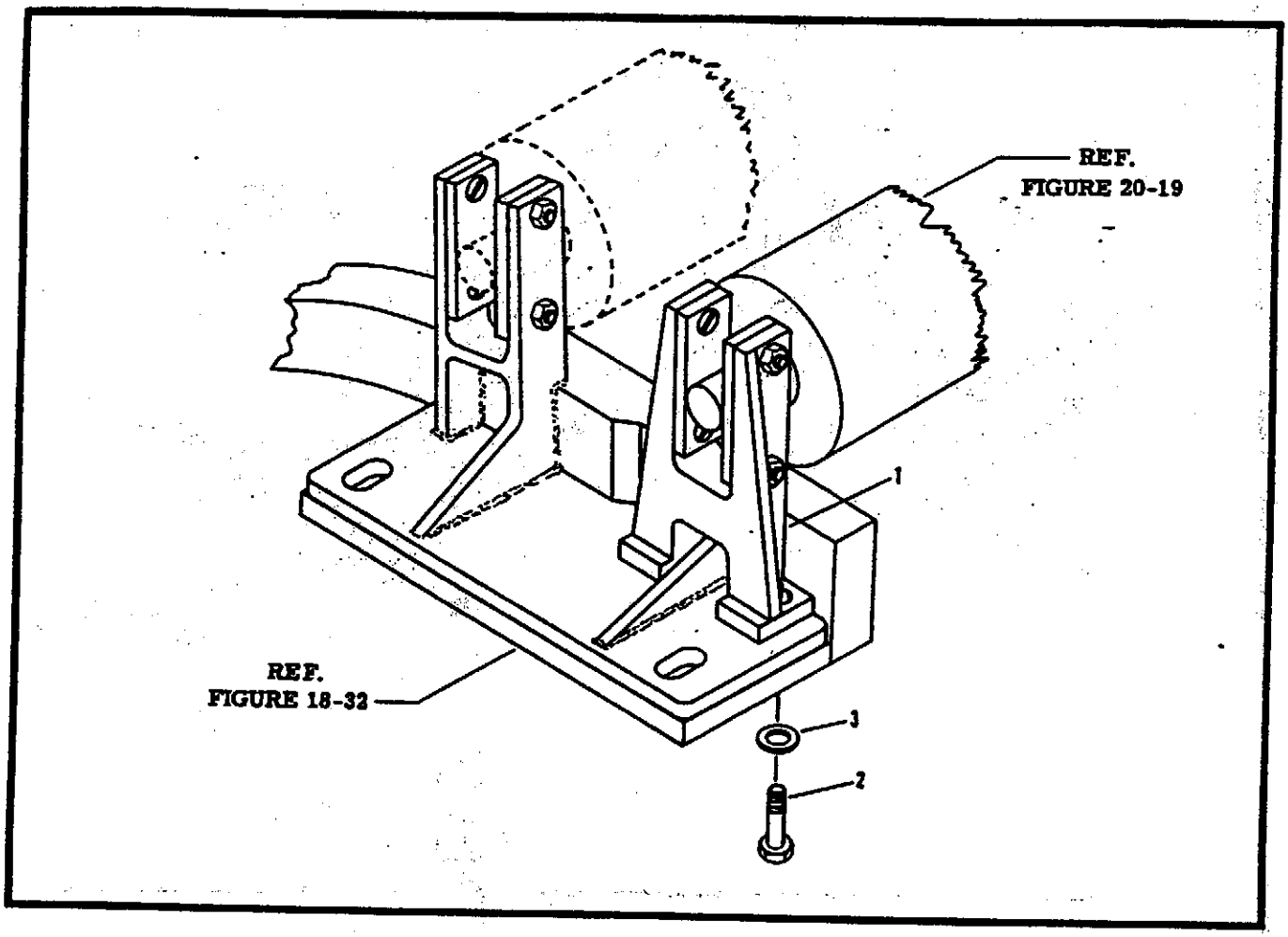


Figure 43. Doffer Roll Relocation

FIGURE & INDEX NUMBER	1 2 3 4 5 6 7 DESCRIPTION	MFR'S CODE	QTY PER ASSY	MODEL CODE
43-0	DOFFER ROLL RELOCATION		REF	
43-1	. BRACKET, Doffer Roll		2	
43-2	. CAPSCREW, Hex Hd. 5/16-18 x 1		4	
43-3	. LOCKWASHER 5/16		4	

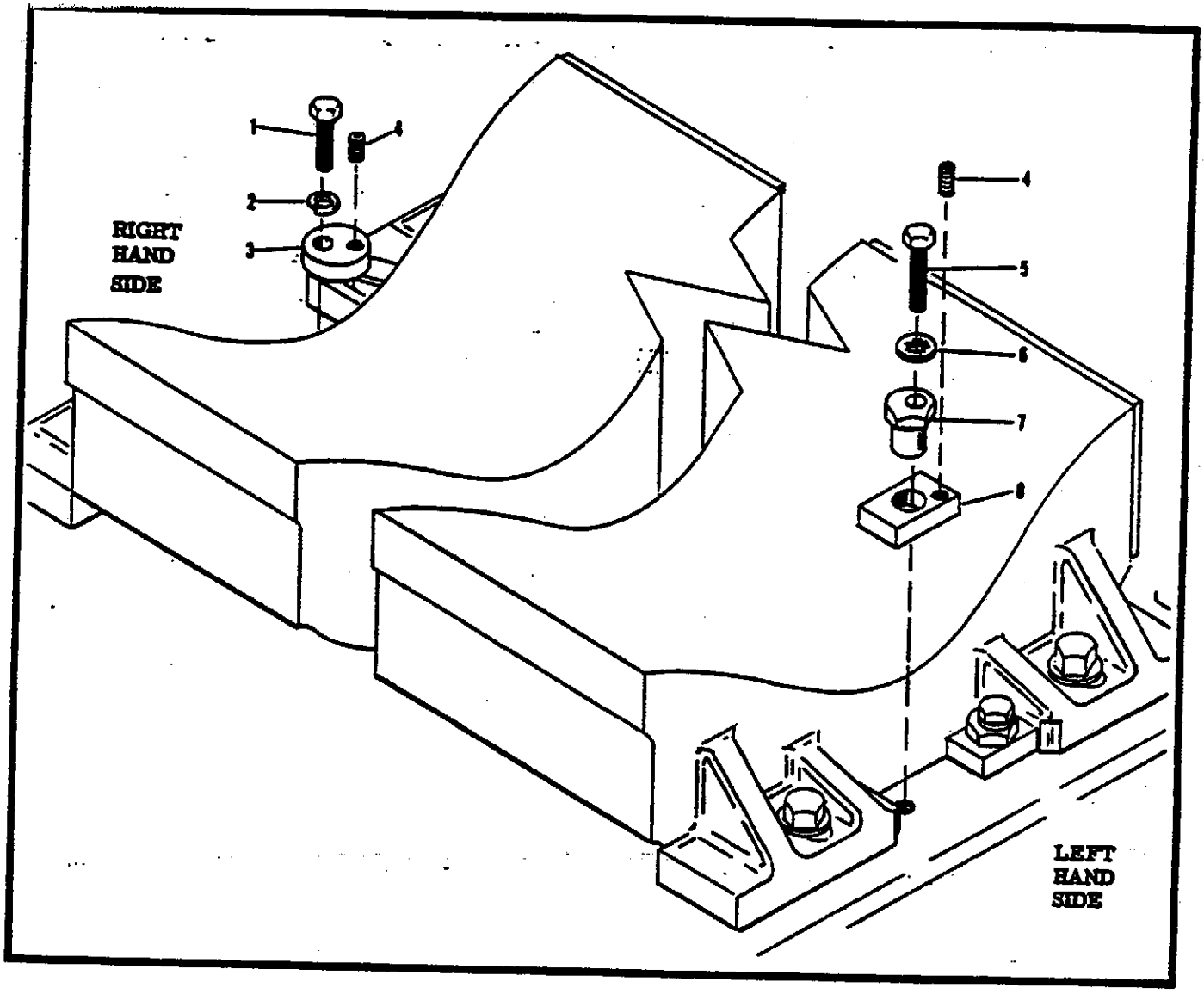


Figure 44. Chest Locking

FIGURE & INDEX NUMBER	DESCRIPTION 1 2 3 4 5 6 7	MFR'S CODE	QTY PER ASSY	MODEL CODE
44-0	CHEST LOCKING		1	
44-1	. CAPSCREW, Hex Hd., 1/2-13 x 1-1/4		2	
44-2	. LOCKWASHER, 1/2 dia.		2	
44-3	. BLOCK ECCENTRIC		2	
44-4	. SETSCREW, cup, 3/8-16 x 1/2		4	
44-5	. CAPSCREW, cad., 1/2-13 x 1-3/4		2	
44-6	. WASHER, Internal Lock, 1/2 dia.		2	
44-7	. NUT, Eccentric		2	
44-8	. BLOCK, Locating		2	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SUPPLEMENT B

CLEANING and WAXING CHEST

HYPRO
Flatwork Ironer

CLASS 141

TABLE OF CONTENTS

1. GENERAL

Experience has proven that cleaning and waxing flatwork ironer chests should be part of every flatwork ironer periodic maintenance program. If a proper wax program is followed, the presence of excessive buildup of residue will be prevented and thereby permit the processing of flatwork at a greater productive rate with a better quality.

2. RESIDUE BUILDUP

The buildup of residue on the ironer chest, especially at the front and rear lips, will contribute to poor edge to edge ironing as well as rolling of flatwork on the ironer. Included in the causes of build-up are poor rinsing in the washroom, use of excessive starch and the use of water which is extremely hard.

In the exposed area between the first two or three rolls on a flatwork ironer, there is a tendency for a pronounced buildup of deposits. Metallic cleaning pads and cleaner cloths with an abrasive material attached to them can do only a superficial job of removing deposits. Many times the chests are left in a more vulnerable condition for a greater buildup of deposits through removal of the chest finish unless followed immediately by waxing. One sure way of properly cleaning this buildup from the chest is to hand clean the chest using a fine abrasive paper or cloth, and immediately waxing the surface once it is cleaned. In the exposed areas, especially at the break or step-down between ironer chests, it is good practice to clean deposits periodically using a scraper or putty knife.

3. FLATWORK PREPARATION

Adequate moisture extraction is required for proper preparation of flatwork for ironing. The moisture retention should never be above 50 percent. For best results, high production and quality finish, flatwork should be preconditioned in a tumbler.

4. CLEANING AND WAXING IRONER CHESTS

Should you encounter difficulty with wax and lint accumulation in the vacuum system, a switch should be installed for shutting off the vacuum system whenever the ironer chests are waxed. This will prevent the wax

vapors from entering the vacuum system and congealing at the lower temperature thereby increasing the lint accumulation.

NOTE

IF AN AUTOMATIC FOLDING MACHINE IS INSTALLED BEHIND THE IRONER, TO PREVENT A FIRE AND/OR A JAM WHENEVER THE WAXING CLOTH IS RUN THROUGH, TURN OFF THE STATIC BAR AND SET THE FOLDER TO BY-PASS POSITION.

Whenever the ironer rolls are repadded, check the lips between all chests for residue buildup (see paragraph 2).

An ideal lubricant/wax is one that contains a minimum of non-lubricating residue and has a flash point above 350°F. The wax should have the ability to remain as a lubricant/wax in the presence of high ironer chest temperature.

Two methods are recommended for cleaning and waxing the flatwork ironer chests. The results accomplished with either method are basically the same. The choice depends on which method can best be used with your present periodic maintenance program.

Method A.

Using a piece of flannel about 72 inches long and 2 inches less in width than the chest, apply about one pound of a powdered Karagami wax and cleaner similar to WAX KLEEN (Concord Chemical Company, Inc., Camden 1, New Jersey) to the cloth. Spread the wax across the flannel in a strip 8 to 10 inches wide and and about 20 inches from the leading edge of the cloth. Fold the 20-inch leading edge of the flannel over the waxed strip before feeding through the ironer. During an average 8-hour production day, the waxing cloth should be run through the ironer four times --- before the start of the production run and then every two hours but never later than two hours before the end of a work day. After 2 days (8 runs) of waxing, add more wax to the cloth. As the cloth becomes saturated, about 20 runs, the amount of wax added can be reduced to one-half.

Method B.

This method requires the use of two pieces of flannel about 72 inches long and 2 inches less in width than the chests. Coat the entire surface of one flannel with one and one-half to two pounds of a mineral oil base and cleaner similar to SPEEDLITE GLIDE wax (Patek and Company, San Francisco, California).

Fold the coated flannel along its length and run twice through the ironer, once on right and left side, at the lowest ironer speed.

Run the other (uncoated) piece of flannel through the ironer. The second piece of flannel will pick up any deposits softened or dislodged from the chests or rolls.

Do the above operations each morning before the start of the production run. Recoat the waxing flannel about once a week.

5. FEEDING INSTRUCTIONS

Good distribution of work on the feed board is most important in order to receive maximum service from padding and covering on flatwork ironers that handle a variety of items. An effort should be made to vary the feeding so that items such as pillow cases or towels do not continuously pass through one sector of the ironer.

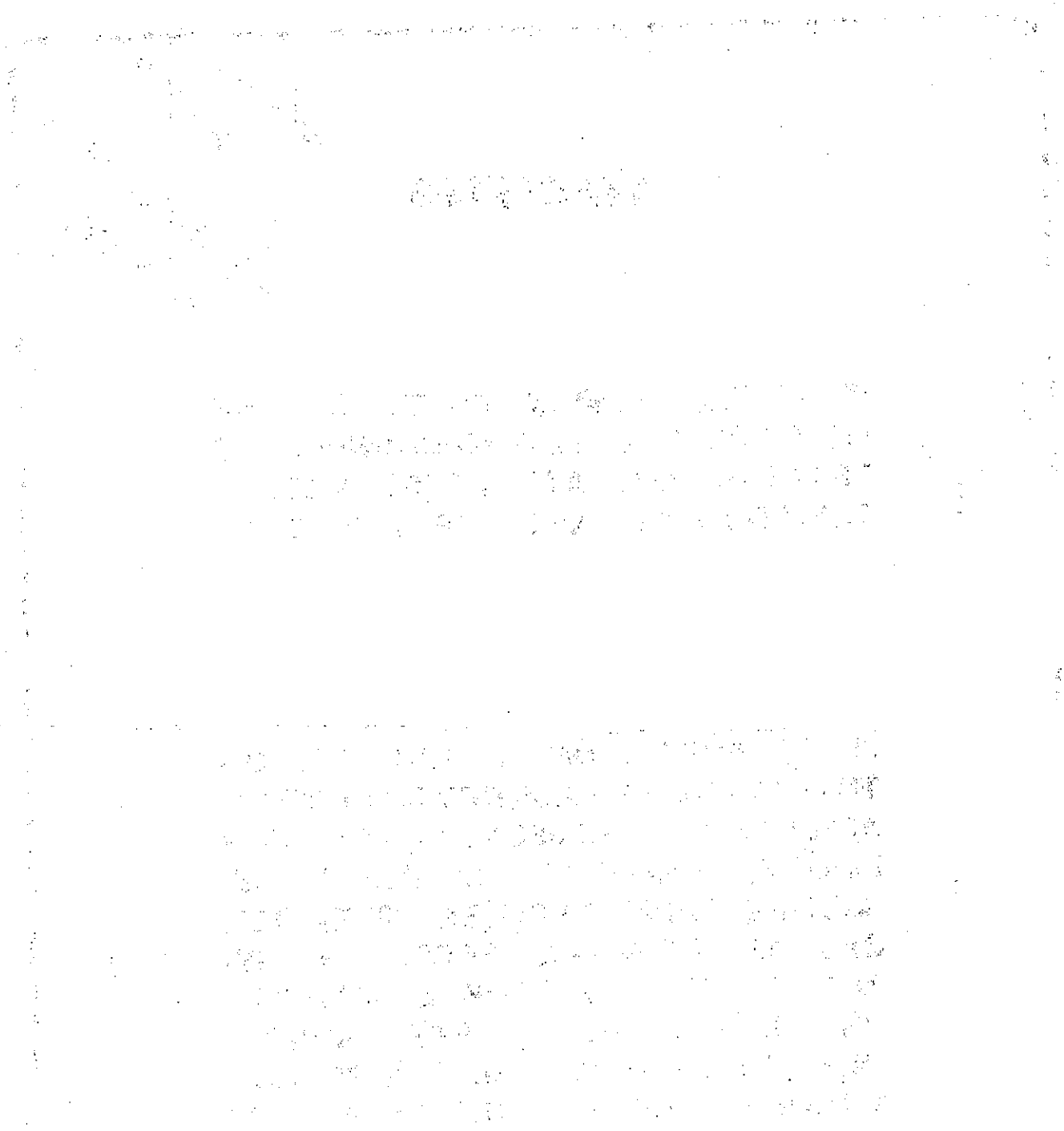
If this is not done, that portion of the roll which is under constant use tends to become smaller in diameter and the result is that extreme pressure is being exerted on the ends of the rolls in that area which is not being used and is fully padded. This condition greatly accelerates the wear on the covers and causes dirt and residue to build up on the unused portion of the ironer.

Jack 1019447
Cable for Jack 129065

WARNING

IT IS THE RESPONSIBILITY OF THE PURCHASER OF THIS MACHINERY TO TRAIN HIS OPERATING PERSONNEL IN THE PROPER MANNER OF OPERATION.

IT IS FURTHERMORE UNDERSTOOD THAT AMERICAN LAUNDRY MACHINERY ASSUMES NO RESPONSIBILITY FOR INJURY, DISABILITY OR DEATH RESULTING FROM IMPROPER OPERATION OF, OR REMOVAL FROM OR BY-PASSING THEREOF ANY ELECTRICAL OR MECHANICAL SAFETY DEVICES INCORPORATED IN THE DESIGN AND MANUFACTURING OF THIS MACHINERY.



ADDENDUM B - IRONOMATIC DRIVE
CLASS 141 ILLUSTRATED PARTS MANUAL
AD 568-007 JANUARY 1963

Table of Contents

Table of Contents (cont'd)

B-1. GENERAL

This illustrated parts manual contains an illustrated parts breakdown of the unit. Assemblies and parts are listed and illustrated for repair part purposes.

B-2. CONTENTS

Parts listings are provided with descriptions of assemblies and parts used on the unit. For cross reference purposes the index numbers on the figures and the item numbers listed in the ITEM NO. column are the same.

B-3. PURPOSE

The illustrated parts manual is intended for use in ordering parts and illustrating part relationship. Repair and overhaul instructions are contained in a separate manual.

B-4. TITLES

The figure the parts are illustrated on and the accompanying part list are both assigned the same title.

B-5. ITEM NUMBER (NO.) COLUMN

The item number listed in the ITEM NO. column of the parts list is formed by the figure number and the index number assigned to the part on the referenced figure.

B-6. PART NUMBER (NO.) COLUMN

The part number listed in the PART NUMBER column is the ALMI assigned part number and should be used for ordering the related part from ALMI.

B-7. DESCRIPTION COLUMN

The description of an assembly or part is listed in the DESCRIPTION column opposite the part number assigned it. The relationship of assemblies and parts is shown by the indent level under the numbers 1 through 7 in the DESCRIPTION column heading. The complete unit has an indent level of 1. Assemblies or parts a assembled directly onto the unit have an indent level of 2. Parts of an assembly or a subassembly have an indent level of 3. Additional subassemblies or parts of such subassemblies have an indent level of 4 through 7 as applicable.

The part numbers of parts manufactured by manufacturers other than ALMI and not modified by ALMI are listed enclosed in parenthesis immediately following the part description. The manufacturer of such parts can be determined by referring to the MFRS CODE column. (Refer to paragraph 8.)

A full description of common hardware (standard nuts, bolts, screws, washers, etc.) is listed immediately following the description.

B-8. MANUFACTURER'S (MFRS) CODE COLUMN

The three and five digit numbers listed in the MFRS CODE column are manufacturer's code numbers and indicate the manufacturer of the part. If the MFRS CODE number is other than 02432, the part is a purchased part and not modified by ALMI. The three or five digit manufacturer's number is listed in numerical sequence in table B-1. The manufacturer's name and address is listed opposite the manufacturer's code.

B-9. UNITS PER ASSEMBLY COLUMN

The number listed in the UNITS PER ASSY column is the quantity required of the listed part in its immediate assembly. The abbreviation ref indicates the related item is shown elsewhere and the referenced listing should be consulted for additional information. The abbreviation np in the UNITS PER ASSY column indicates that the item is not procurable and the next higher assembly (as indicated by indent level) should be ordered.

B-10. ATTACHING PARTS

Parts which are used to attach assemblies and parts to the preceding listed assembly or part are listed under (ATTACHING PARTS) in the DESCRIPTION column. These attaching parts are listed immediately following the assembly or part they attach and preceding any breakdown of the assembly. The symbol - - - * - - - is used to denote the end of the attaching parts listing.

Table B-1. Manufacturer's Code

CODE NO.	MANUFACTURER'S NAME AND ADDRESS
00013	Abart Gear and Machine Co. 4835-39 West 16th Street Cicero, IL 60650
01121	Allen-Bradley Co. Milwaukee, Wisconsin
02432	American Laundry Machinery Industries Norwood, Ohio 45212
19220	Eberhard Mfg. Co. Cleveland, Ohio
23826	Furnas Electric Co. 1004 Mckee Street Batavia IL 60510
27780	Haydon Mfg. Co. Torrington, Connecticut
30327	Imperial Brass Mfg. Co. Chicago, IL
31875	Horton Mfg. Co. 1179 15th Avenue Minneapolis, Minn. 55414
43766	Nice Ball Bearing Co. 30th and Hunting Park Avenue Philadelphia, PA 19140
70925	Bijur Lubricating Corp. 151 West Passaic Street Rochelle Park, New Jersey 07662
71400	Bussman Mfg. Division of McGraw-Edison Co. 2536 West University St. St. Louis, Mo. 63017
73559	Carling Electric Valve 505 New Park Avenue West Hartford, Conn. 06110

Table B-1. Manufacturer's Code (cont'd)

CODE NO.	MANUFACTURER'S NAME AND ADDRESS
78189	Illinois Tool Works Inc. Shakeproof Div. St. Charles Rd. Elgin, Illinois 60126
80549	Kelsey-Hayes Co. Davenport, Iowa
81976	Century America Corp. 300 East Joe Orr Road Chicago Heights, Ill. 60411
81978	Skinner Electric Valve Inc. New Britain, Connecticut
92578	Penn Controls Inc. 240 East Willow Avenue Wheaton, IL 60188
93199	General Electric Schenectady, New York
96432	Gerbing Mfg. Corp. South State Rd. Elgin, IL 60120
98814	Dorris Co. 750 North Skinner Blvd. St. Louis, MO 63130

B-11. REPAIR PARTS ORDERING

Refer to the inside of the back cover of this manual for instructions on "How to Order Repair Parts".

B-12 ABBREVIATIONS

The definition of abbreviations used throughout the manual are listed below:

ac	alternate current
ALMI	American Laundry Machinery Industries
amp	ampere
assy	assembly
bi	black iron
c	centigrade
cad. pl	cadmium plated
Co	Company
coml	commercial
conn	connector
cy	cycle
dia	diameter
F	Fahrenheit
fig.	figure
ft	feet
galv	galvanized
hex.	hexagon
hd	head
hp	horse power
id	inside diameter
in.	inch
Inc	Incorporated
lb	pound
lg	long
lh	left hand
mach	machine
med	medium
mfg	manufacturing
MFRS	manufacturers
mi	malleable iron
nha	next higher assembly
no.	number

NPT	American Standard Taper Pipe Thread
od	outside diameter
ph	phase
ref	reference
rd	round
rh	right hand
sq	square
sst	stainless steel
st	straight
sw	switch
thd	thread
uf	microfarad
UNC	Unified National Coarse
UNF	Unified National Fine
v	volt
va	volt ampere
w	watt
w/	with
w/o	without
o	degree

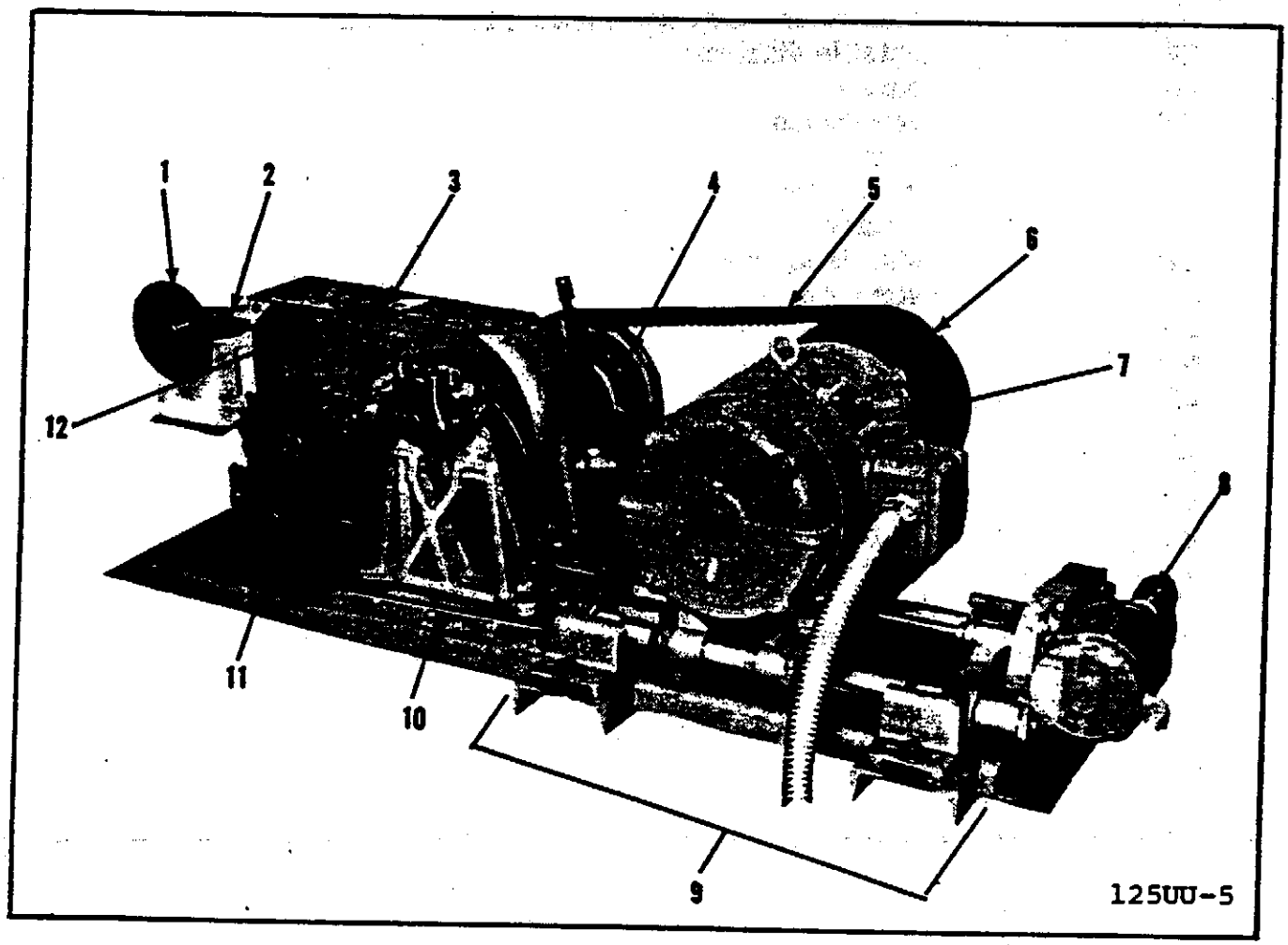


Figure B-1. Location of Components, Ironomatic Drive, Ironer Drive Side

1. BIJUR LUBRICATION SPROCKET(See figures B-3,B-4,B-5 items 48,52 and 51.)
2. BIJUR LUBRICATION RESERVOIR(For breakdown see figure B-15.)
3. SPEED REDUCER(For breakdown see figures B-9,B-10 and B-11.)
4. SPEED REDUCER INPUT SHEAVE(See figures B-3,B-4 and B-5 item 1.)
5. DRIVE BELT(See figures B-3,B-4 and B-5 item 2.)
6. VARI SPEED SHEAVE(See figures B-3,B-4 and B-5 item 3.)
7. IRONER DRIVE MOTOR(See figures B-3,B-4 and B-5 items 8,7 and 7.)
8. SHIFTING MOTOR(See figures B-6,B-7and B-8 item 15.)
9. ADJUSTABLE MOTOR BASE(For breakdown see figures B-6,B-7 and B-8.)
10. DISC BRAKE CALIPER, BRAKE DISC,AND BRAKE BRACKET (See figures B-3, B-4 and B-5.)
11. MAIN DRIVE SPROCKET(See figures B-3,B-4 and B-5 items 43,47 and 45.)
12. BIJUR DRIVE SPROCKET(connected to Bijur Lubricator drive sprocket by chain)(See figures B-3,B-4 and B-5 items 44,48 and 46.)

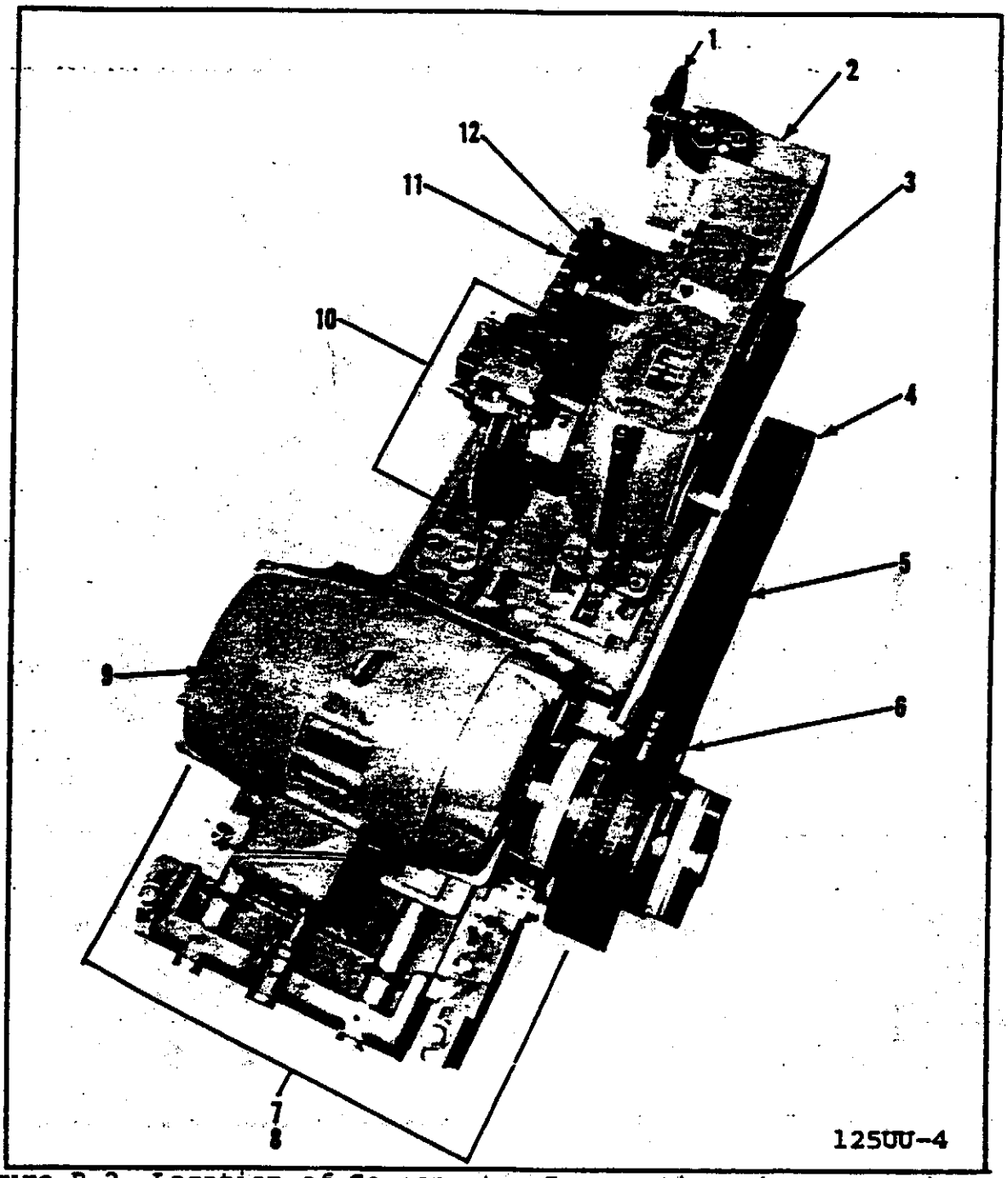


Figure B-2. Location of Components, Ironomatic Drive, Top View

1. BIJUR LUBRICATOR DRIVE SPROCKET(See figures B-3,B-4, and B-5.)
2. BIJUR LUBRICATOR RESERVOIR(For breakdown see figure B-15.)
3. SPEED REDUCER(For breakdown see figures B-9,B-10 and B-11.)
4. SPEED REDUCER INPUT SHEAVE(See figures B-3,B-4 and B-5 item 1.)
5. DRIVE BELT(See figures B-3,B-4 and B-5 item 2.)
6. VARI SPEED SHEAVE(See figures B-3,B-4 and B-5 item 3.)
7. ADJUSTABLE MOTOR BASE(For breakdown see figures B-6,B-7 and B-8.)
8. SHIFTING MOTOR(See figures B-6,B-7 and B-8 item 15.)
9. IRONER DRIVE MOTOR(See figures B-3,B-4 and B-5, items 8,7 and 7.)
10. DISC BRAKE CALIPER AND BRAKE DISC(See figures B-3,B-4 and B-5.)
11. MAIN DRIVE SPROCKET(connected to ironer drive system by chain)(See figures B-3,B-4 and B-5 items 43,47 and 45.)
12. BIJUR DRIVE SROCKET(connected to Bijur Lubricator drive sprocket by chain)(See figures B-3,B-4 and B-5 items 44,48 and 46.)

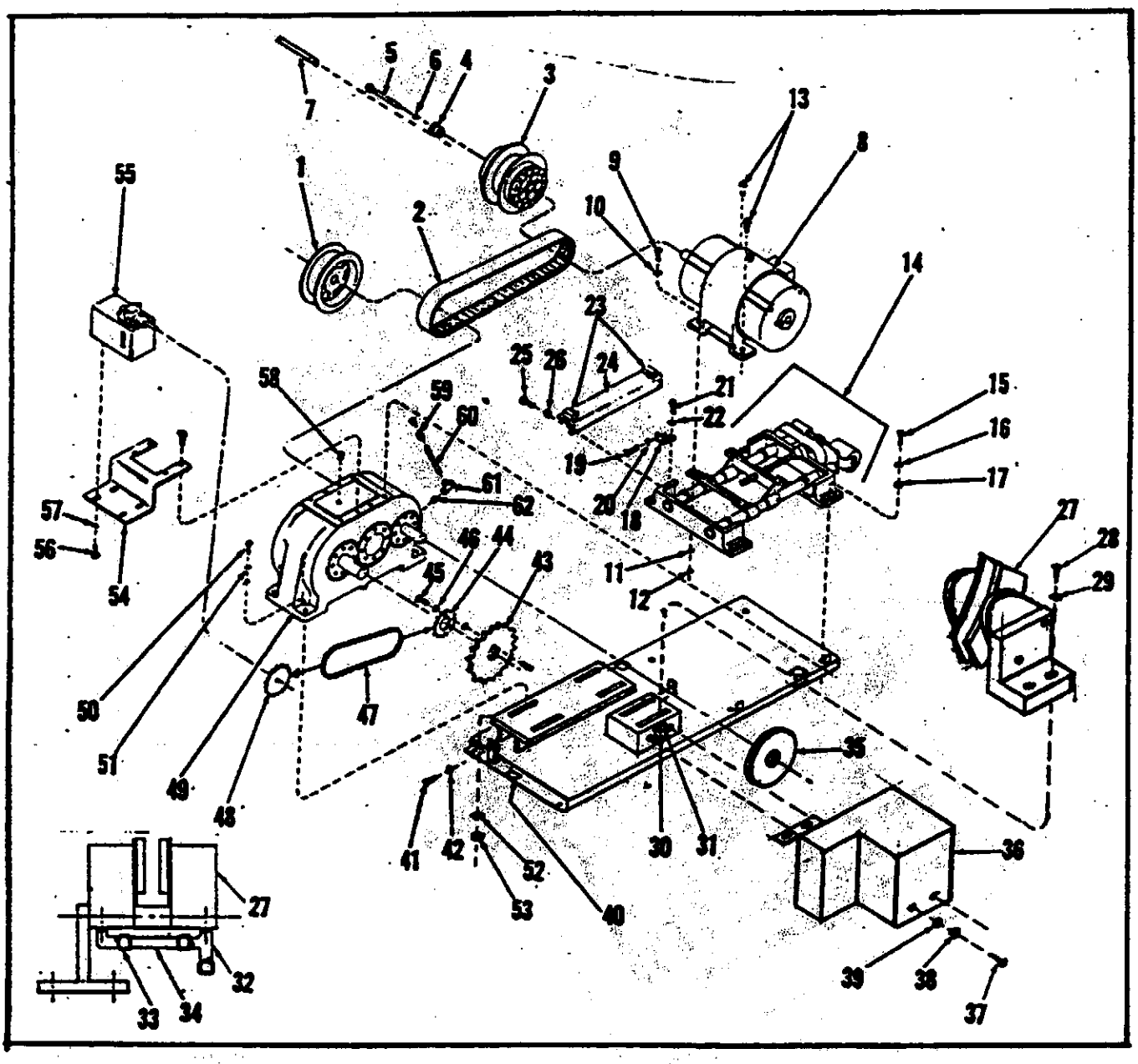


Figure B-3. Drive Application, 60cy/7-1/2hp

Coils for Cutler-Hammer Brake type 5

5114846075

200-208 Volt	9-941-45	C-26942
220 Volt	9-941-19	C-26941

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
3--	141-A419	DRIVE APPLICATION,60cy/7-½ hp 2,3, and 4 roll Hypro FWI (See figure B-1 or B-2 for nha.)		ref
-1	C-66716	SHEAVE,companion(35S-120)		1
-2	C-11733	BELT,vari speed(3566)		1
-3	C-56562	PULLEY,vari speed(213T)		1
-4	141-1845	PLATE,locking	02432	1
		(ATTACHING PARTS)		
-5	C-18065	BOLT,3/8-16 UNC x 5-3/4 in. lg		1
-6	C-43301	LOCKWASHER,3/8 internal shakeproof		1
-7	C-55037	PIN,dowel		1
-8		MOTOR,drive 7-1/2 hp(specify one of the following:)		
-8-1	141-1796	MOTOR,drive 7-1/2 hp 200-208v/3ph/60cy	02432	1
-8-2	141-1797	MOTOR,drive 7-1/2 hp 220-240v/3ph/60cy	02432	1
-8-3	141-1798	MOTOR,drive 7-1/2 hp 440-480v/3ph/60cy	02432	1
-8-4	141-1799	MOTOR,drive 7-1/2 hp 550-600v/3ph/60cy	02432	1
		(ATTACHING PARTS)		
-9	C-63100	SCREW,cap 3/8-16 UNC x 2 in lg		4
-10	C-42373	LOCKWASHER, 3/8		4
-11	C-80761	WASHER, flat 3/8		4
-12	C-48139	NUT,hex.hd 3/8-16 UNC		4
-13	C-54913	PIN, taper 4 x 2 in.lg		4
		- - - * - - -		
-14		BASE,adjustable motor(3BH10) 7-1/2 hp(For breakdown see figure B-6.) (specify one of the following:)	02432	1
-14-1	141-1815	BASE,adjustable motor(3BH10) 7-1/2 hp 200-208v/3ph/60cy	02432	1
-14-2	141-1816	BASE,adjustable motor(3BH10) 7-1/2 hp 220-240v/3ph/60cy	02432	1
-14-3	141-1817	BASE,adjustable motor(3BH10)	02432	1
		(ATTACHING PARTS)		
-15	C-62435	SCREW,cap 1/2-13 UNC x 1-3/4 in.lg		4
-16	C-43330	LOCKWASHER,1/2 medium		4

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
3-17	C-80516	WASHER,flat 1/2		4
		- - - * - - -		
-18	141-1791	BRACKET,actuator		1
-19	C-62463	SCREW,cap 1/4-20 UNC x 1 in lg		2
-20	C-48023	NUT,jam 1/4-20 UNC		2
		(ATTACHING PARTS)		
-21	C-62041	SCREW,cap 1/4-20 UNC x 5/8 in.lg		2
-22	C-42368	LOCKWASHER,1/4 medium		2
		- - - * - - -		
-23	C-69277	SWITCH,micro(BZE6-2RN)		
-24	141-1844	MOUNTING,micro switch	02432	1
		(ATTACHING PARTS)		
-25	C-62412	SCREW,cap 1/4-20 UNC x 1/2 in.lg		2
-26	C-42368	LOCKWASHER,1/4 medium		2
		- - - * - - -		
-27	C-18568	DISC BRAKE,caliper(model DB)(For breakdown see figure B-14.)		1 1
		(ATTACHING PARTS)		
-28	C-62421	SCREW,cap 3/8-16 UNC x 1-1/2 in.lg		4
-29	C-42373	LOCKWASHER,3/8 medium		4
-30	C-80761	WASHER,flat 3/8		4
-31	C-48139	NUT,hex. 3/8-16 UNC		4
		- - - * - - -		
-32	C-30744	FITTING,tee 1/4 t x 1/8 pt (71-F)		
-33	C-30742	FITTING,elbow 1/4 t x 1/8 pt (69-F)		
-34	M-92392	TUBING,copper 1/4in.od		
-35	C-18569	DISC,tol-o-matic 8in.dia x 1 in.bore w/ fixed hub (40018)		1
-36	141-06136	GUARD,disc brake	02432	1
-37	C-62412	SCREW,cap 1/4-20 UNC x 1/2 in.lg		2
-38	C-42368	LOCKWASHER,1/4 medium		2
-39	C-80561	WASHER,flat 1/4		2
		- - - * - - -		
-40	10-1402	NAMEPLATE,drive chain tension	02432	1

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
3-41	C-62408	SCREW,set 5/8-11 UNC x 4 in lg		1
-42	C-48303	NUT,jam 5/8-11 UNC		1
-43		SPROCKET,drive(specify one of the following:)		
-43-1	141-4123	SPROCKET,drive F.P.M 22-128	02432	1
-43-2	141-4124	SPROCKET,drive F.P.M 25-150	02432	1
-44	141-4115	SPROCKET,lube drive	02432	1
-45	C-62041	SCREW,cap 1/4-20 UNC x 5/8 in.lg		2
-46	C-42368	LOCKWASHER,1/4 medium		2
-47	141-04118	CHAIN,lube 3/8 P	02432	1
-48	141-4119	SPROCKET,lube unit	02432	1
-49	141-1840	SPEED REDUCER 7-1/2 hp(1808 RH-D1)(For breakdown see figure B-9.)		
		(ATTACHING PARTS)		
-50	C-62763	SCREW,cap 1/2-13 UNC x 2 in. lg		4
-51	C-43330	LOCKWASHER,1/2 medium		4
-52	C-80516	WASHER, flat 1/2		4
-53	C-48145	NUT,hex.hd 1/2-13 UNC		4
		- - - * - - -		
-54	141-01153	BRACKET ASSY,lubricator unit	02432	1
-55	141-01145	LUBE RESERVOIR ASSY (For breakdown see figure B-15.)	02432	1
		(ATTACHING PARTS)		
-56	C-62108	SCREW,cap 5/16-18 UNC x 5/8 in.lg		4
-57	C-43314	LOCKWASHER, 5/16 medium		4
		- - - * - - -		
-58	C-56013	PLUG,pipe 3/8 NPT		1
-59	C-23029	COUPLING,3/8 NPT full		1
-60	C-46165	NIPPLE, pipe 3/8 NPT x 6 in. lg		1
-61	C-70619	TEE, pipe 3/8 NPT		1
-62	C-46145	NIPPLE, close 3/8 NPT		1

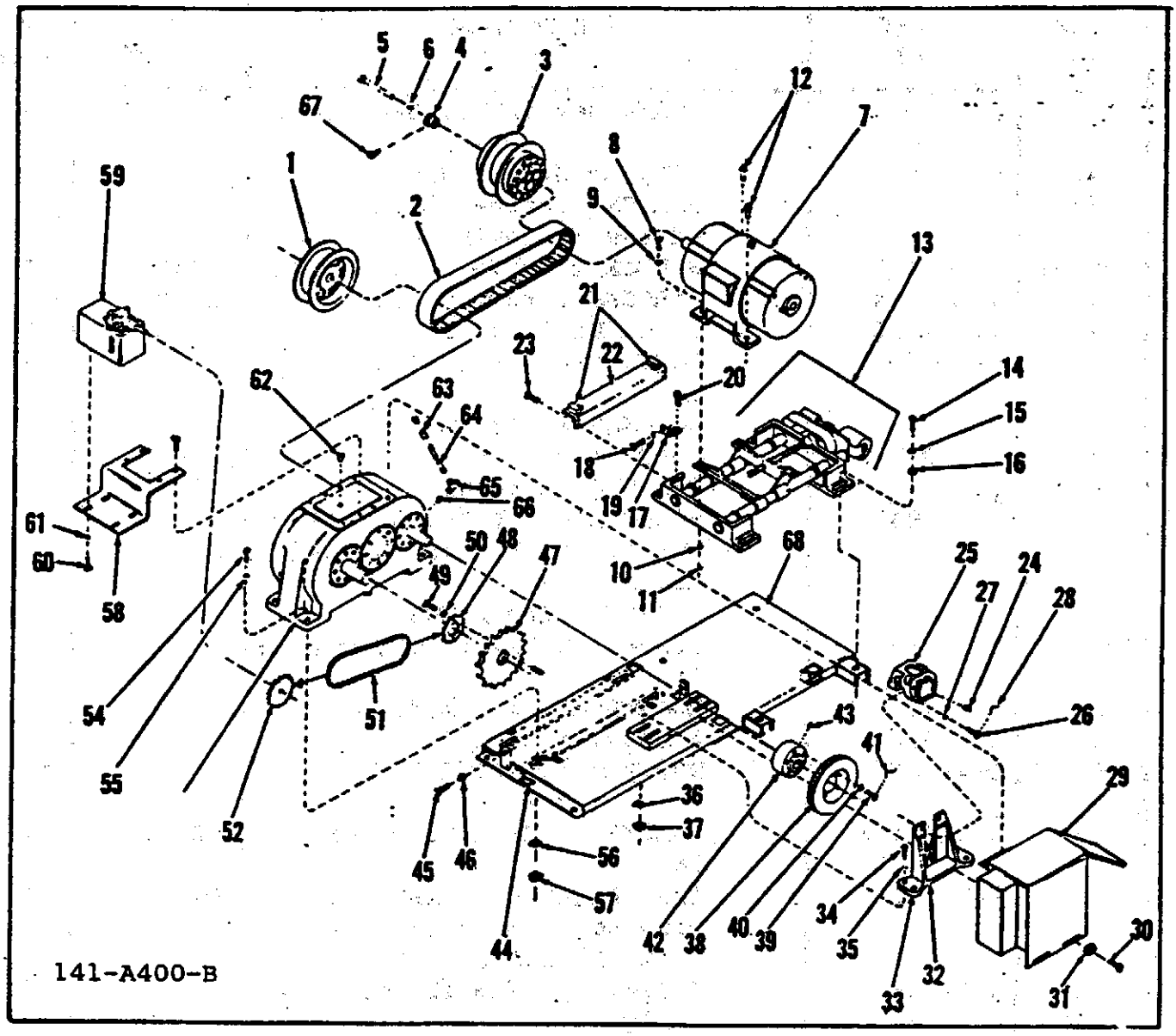


Figure B-4. Drive Application, 60cy/15 hp

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
4 --	141-A400	DRIVE APPLICATION,60cy 15hp Hypro Ironer (See figure B-1, or B-2, for nha.)		ref
-1	C-66707	SHEAVE,companion 1-1/4 bore (4S120)	96432	1
-2	C-11730	BELT,vari speed(478)	96432	1
-3	C-66708	PULLEY,dura cone(254T) 1-5/8in.bore	96432	1
-4	141-1782	PLATE,locking (ATTACHING PARTS)	02432	1
-5	C-63467	SCREW,hex.hd 3/8-16 unc x6 in.lg cad.pl		1
-6	C-43301	LOCKWASHER,internal tooth 3/8 cad.pl - - - * - - -		1
-7		MOTOR,drive 15hp(Specify one of the following:)		1
-7-1	141-1800	MOTOR,drive 15hp 200-208v/3ph/60cy	02432	1
-7-2	141-1801	MOTOR,drive 15hp 220-240v/3ph/60cy	02432	1
-7-3	141-1802	MOTOR,drive 15hp 440-480v/3ph/60cy	02432	1
-7-4	141-1803	MOTOR,drive 15hp 550-600v/3ph/60cy (ATTACHING PARTS)	02432	1
-8	C-62794	SCREW,hex.hd cap 1/2-13 unc x 2-1/2in.lg cad.pl		4
-9	C-43330	LOCKWASHER,spring 1/2 cad.pl		4
-10	C-80566	WASHER,1/2 cad.pl		4
-11	C-48145	NUT,hex.1/2-13 unc cad.pl		4
-12	C-54914	PIN,taper 4x2-1/2in.lg and 1/4-28unc hex.nut - - - * - - -		2
-13		BASE,adjustable motor(4BH9) 15hp (For breakdown see figure B-7.) (Specify one of the following:)	02432	1
-13-1	141-1818	BASE,adjustable motor(4BH9) 15hp 200-208v/3ph/60cy	02432	1
-13-2	141-1819	BASE,adjustable motor(4BH9) 15hp 220-240v/3ph/60cy	02432	1
-13-3	141-1819	BASE,adjustable motor(4BH9) 15hp 440-480v/3ph/60cy	02432	1

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
4-13-4	141-1820	BASE,adjustable motor(4BH9) 15hp 550-600v/3-h/60cy	02432	1
		(ATTACHING PARTS)		
-14	C-62766	SCREW,hex.hd cap 5/8-11 unc x 1-3/4in.lg cad.pl		4
-15	C-43223	LOCKWASHER,external 5/8	78189	4
-16	C-80564	WASHER,5/8 cad.pl		4
		- - - * - - -		
-17	141-1791	BRACKET,actuator	02432	1
-18	C-62463	SCREW,hex.hd 1/4-20 unc x 1 in.lg		2
-19	C-48023	NUT,jam 1/4-20 unc cad.pl		2
		(ATTACHING PARTS)		
-20	C-62041	SCREW,hex.hd cap 1/4-20x5/8 in.lg		2
		- - - * - - -		
-21	C-69277	SWITCH,micro(BZE6-2RN)		2
-22	141-1792	MOUNTING,micro switch	02432	1
		(ATTACHING PARTS)		
-23	C-63165	SCREW,hex.hd self tapping		4
		- - - * - - -		
-24		FITTING,tube 1/4tx7/16-20 st w/ o-ring(4F5BU-S)		1
-25	C-18553	DISC BRAKE,caliper(For breakdown see figure B-13.)	80549	1
		(ATTACHING PARTS)		
-26	C-63411	SCREW,socket hd 1/2-20 unf x 1-3/4 in.lg		2
-27	C-43222	LOCKWASHER,external 1/2	78189	2
-28	M-99927	LOCKWIRE		27 in.
		- - - * - - -		
-29	141-01149	GUARD,brake	02432	1
		(ATTACHING PARTS)		
-30	C-63165	SCREW,hex.hd self tap 1/4-20 x 1/2in.lg		2
-31	C-80561	WASHER,1/4 cad.pl		2
		- - - * - - -		
-32	2257-553	BRACKET,brake	02432	1
-33	2257-1095	SPACER,mounting bracket	02432	2
		(ATTACHING PARTS)		
-34	C-62766	SCREW,hex.hd 5/8-11 unc x 1-3/4in.lg cad.pl		4
-35	C-43223	LOCKWASHER,external 5/8	78189	4
-36	C-80564	WASHER, 5/8		4
-37	C-48387	NUT,hex.5/8-11 unc cad.pl		4

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
4-38	C-18552	DISC,rotor(D74900)	80549	
		(ATTACHING PARTS)		
-39	2257-6242	SCREW,hex.hd cap 5/8-18 unf x 1-1/2in.lg		5
-40	C-43320	LOCKWASHER,spring 5/8		5
-41	M-99927	LOCKWIRE		18 in.
		- - - * - - -		
-42	141-1795	HUB,disc brake	02432	1
-43	C-62303	SCREW,socket set hdless 1/4-20 unc x 1/2in.lg cad.pl		2
-44	10-1402	NAMEPLATE,drive chain tension	02432	1
-45	C-62408	SCREW,sq hd set 5/8-11 unc x 4in.lg		2
-46	C-48303	NUT,jam 5/8-11 unc cad.pl		2
-47		SPROCKET,main drive(Specify one of the following:)		
-47-1	141-4113	SPROCKET,main drive 40-200 fpm speed range 4-5 roll Hypro Ironer	02432	1
-47-2	141-4118	SPROCKET,main drive 30-174 fpm speed range 4-6 roll Hypro Ironer	02432	1
-47-3	141-4114	SPROCKET,main drive 20-150 fpm speed range 4-8 roll Hypro Ironer	02432	1
-48	141-4115	SPROCKET,lube drive	02432	1
		(ATTACHING PARTS)		
-49	C-62041	SCREW,hex.hd cap 1/4-20x5/8 in.lg		2
-50	C-43268	LOCKWASHER,spring 1/4 cad.pl		2
		- - - * - - -		
-51	141-04115	CHAIN,lubricator pump drive	02432	1
-52	141-4119	SPROCKET,driven lubricator	02432	1
-53	141-1794	SPEED REDUCER(3806 RH-D1) (For breakdown see figure B-10.)	02432	1
		(ATTACHING PARTS)		
-54	C-62767	SCREW,hex.hd 3/4-10 unc x 2-3/4in.lg cad.pl		4
-55	C-43316	LOCKWASHER,med 3/4 cad.pl		4
-56	C-80597	WASHER,3/4 cad.pl		4
-57	C-48227	NUT,hex.3/4-10 unc cad.pl		4
		- - - * - - -		

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
4-58	141-01146	BRACKET ASSY,lubricator pump	02432	1
-59	141-01145	LUBE RESERVOIR ASSY(For breakdown see figure B-15.) (ATTACHING PARTS)	02432	1
-60	C-62108	SCREW,hex.hd cap 5/16-18 unc x 5/8in.lg		4
-61	C-43314	LOCKWASHER,spring 5/16 cad. pl		4
		- - - * - - -		
-62	C-56013	PLUG,pipe solid sq 3/8mi		1
-63	C-23029	COUPLING,3/8 full		1
-64	C-46179	NIPPLE,3/8x10-1/4in.lg bi		1
-65	C-70619	TEE,3/8 mi		1
-66	C-46145	NIPPLE,close 3/8 bi		1
-67	141-6753	PIN,roll	02432	1
-68	141-01141	BASE ASSY, drive	02432	1

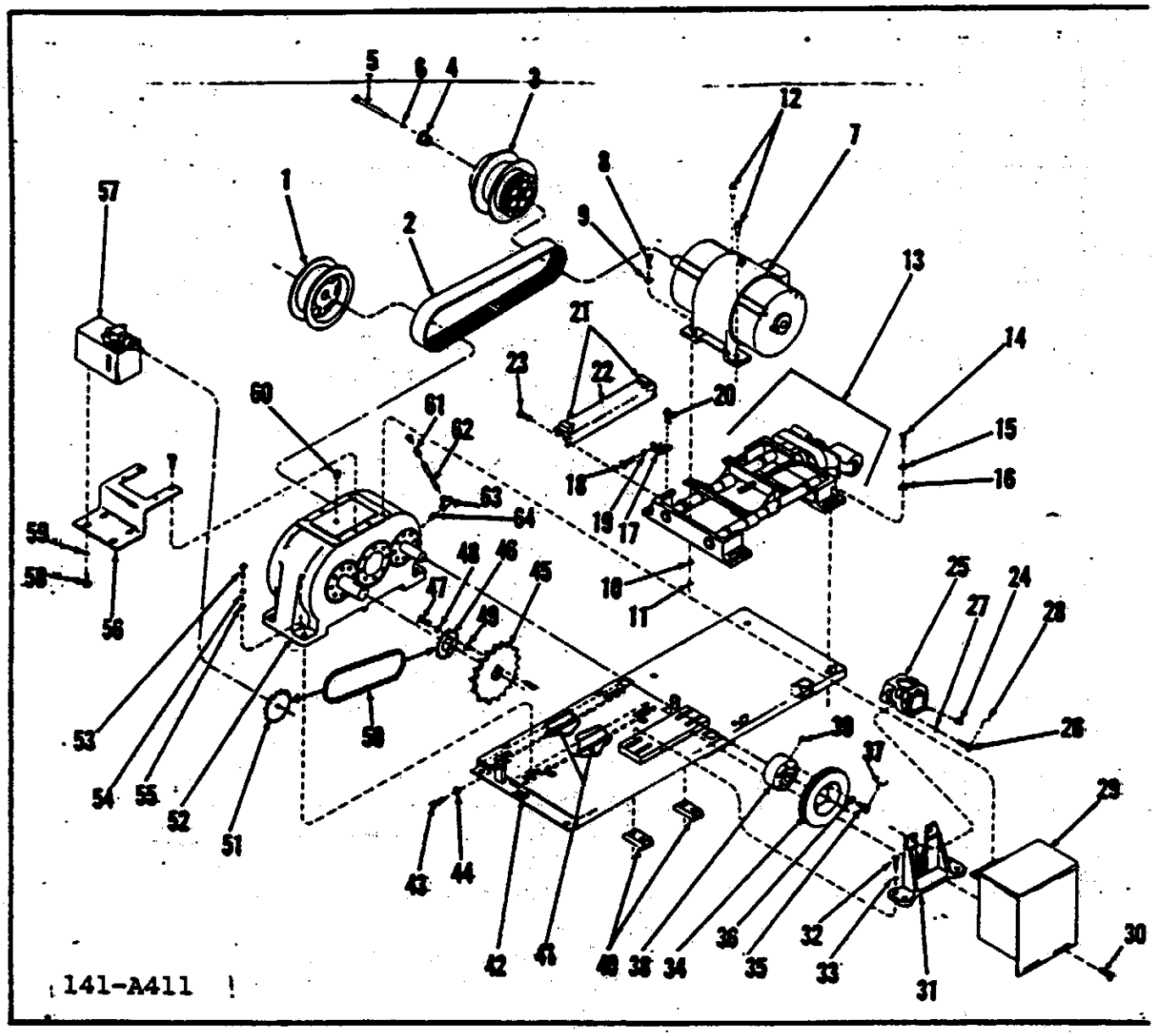


Figure B-5. Drive Application, 60cy/20 hp

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
5 --	141-A411	DRIVE APPLICATION,60cy/20hp Hypro FWI(See figure B-1 and B-2 for nha.)	ref	
-1	C-66712	SHEAVE,companion 2in.bore (4S125)	96432	1
-2	C-11732	BELT,vari speed(478U)	96432	1
-3	C-56561	PULLEY,vari-speed 256Tx 1-7/8in.bore	96432	1
-4	141-1825	PLATE,locking (ATTACHING PARTS)	02432	1
-5	C-63469	SCREW,hex.hd 3/8-16 unc x 6-1/2in.lg cad.pl		1
-6	C-43301	LOCKWASHER,internal tooth 3/8 cad.pl - - - * - - -		1
-7		MOTOR,drive 20hp(specify one of the following:)		1
-7-1	141-1804	MOTOR,drive 20hp 200-208v/ 3ph/60cy	02432	1
-7-2	141-1805	MOTOR,drive 20hp 220-240v/ 3ph/60cy	02432	1
-7-3	141-1806	MOTOR,drive 20hp 440-480v/ 3ph/60cy	02432	1
-7-4	141-1807	MOTOR,drive 20hp 550-600v/ 3ph/60cy (ATTACHING PARTS)	02432	1
-8	C-62794	SCREW,hex.hd cap 1/2-13 unc x 2-1/2in.		4
-9	C-43330	LOCKWASHER,spring 1/2 cad. pl		4
-10	C-80566	WASHER,1/2 cad.pl		4
-11	C-48145	NUT,hex.1/2-13 unc cad.pl		4
-12	C-54914	PIN,taper 4x2-1/2in.lg and 1/4-28 unc hex.nut - - - * - - -		2
-13		BASE,adjustable motor(4BH9) 20hp(For breakdown see figure B-8.) (specify one of the following:)	02432	1
-13-1	141-1818	BASE,adjustable motor(4BH9) 20hp 200-208v/3ph/60cy	02432	1
-13-2	141-1819	BASE,adjustable motor(4BH9) 20hp 220-240v/3ph/60cy	02432	1
-13-3	141-1819	BASE,adjustable motor(4BH9) 20hp 440-480v/3ph/60cy	02432	1

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
5-13-4	141-1820	BASE,adjustable motor (4BH9) 20hp 550-600v/3ph/ 60cy	02432	1
		(ATTACHING PARTS)		
-14	C-62767	SCREW,hex.hd cap 5/8-11 unc x 1-3/4 in.lg cad.pl		4
-15	C-43223	LOCKWASHER,external 5/8	78189	4
-16	C-80564	WASHER, 5/8 cad.pl		4
		- - - * - - -		
-17	141-1791	BRACKET,actuator	02432	1
-18	C-62463	SCREW,hex.hd 1/4-20 unc x 1 in.lg		2
-19	C-48023	NUT,jam 1/4-20 unc cad.pl		2
		(ATTACHING PARTS)		
-20	C-62041	SCREW,hex.hd cap 1/4-20 x 5/8 in.lg		2
		- - - * - - -		
-21	C-69277	SWITCH,micro(BZE6-2RN)		2
-22	141-1792	MOUNTING,micro switch	02432	1
		(ATTACHING PARTS)		
-23	C-63165	SCREW,hex.hd self tapping		4
		- - - * - - -		
-24	C-22921	FITTING,tube 1/4 t x 7/16-20 st w/ o-ring(4F5BU-S)		1
-25	C-18553	DISC BRAKE,caliper(For breakdown see figure B-13.)	80549	1
		(ATTACHING PARTS)		
-26	C-63411	SCREW,socket hd 1/2-20 unf x 1-3/4 in.lg		2
-27	C-43222	LOCKWASHER,external 1/2	78189	2
-28	M-99927	LOCKWIRE		27 in.
		- - - * - - -		
-29	141-6751	GUARD,brake	02432	1
		(ATTACHING PARTS)		
-30	C-63165	SCREW,hex.hd self tapping 1/4-20unc x 1/2in.lg cad.pl		2
		- - - * - - -		
-31	2257-553	BRACKET, brake	02432	1
		(ATTACHING PARTS)		
-32	C-62766	SCREW,hex.hd cap 5/8-11 unc x 1-3/4in.lg cad.pl		4
-33	C-43223	LOCKWASHER,external 5/8	78189	4
		- - - * - - -		
-34	C-18552	DISC,rotor (D74900)	80549	1

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
		(ATTACHING PARTS)		
5-35	2257-6242	SCREW,hex.hd cap 5/8-18 unf x 1-1/2in.lg		5
-36	C-43320	LOCKWASHER,spring 5/8		5
-37	M-99927	LOCKWIRE		18 in.
		- - - * - - -		
-38	141-1824	HUB,disc brake	02432	1
-39	C-62016	SCREW,set socket hdless 1/2-13x1/2in.lg		2
-40	141-1827	TAP BAR,brake	02432	2
-41	141-1823	TAP BAR,reducer	02432	2
-42	10-1402	NAMEPLATE,drive tension	02432	1
-43	C-62408	SCREW,sq hd set 5/8-11 unc x 4in.lg cad.pl		2
-44	C-48303	NUT,jam 5/8-11 unc cad.pl		2
-45		SPROCKET,main drive (Specify one of the following:)		
-45-1	141-4121	SPROCKET,main drive 40-200 fpm speed range/6-8 roll Hypro FWI	02432	1
-45-2	141-4122	SPROCKET,main drive 30-174 fpm speed range/7-9 roll Hypro FWI	02432	
-46	141-4120	SPROCKET,lube drive	02432	1
		(ATTACHING PARTS)		
-47	C-62041	SCREW,hex.hd cap 1/4-20x5/8 in.lg		2
-48	C-43268	LOCKWASHER,1/4 cad.pl		2
-49	C-80561	WASHER,1/4 cad.pl		2
		- - - * - - -		
-50	141-04116	CHAIN,lubricator pump drive	02432	1
-51	141-4119	SPROCKET,driven lubricator	02432	1
-52	C-58564	SPEED REDUCER,gear 6.7 262rpm 30hp(5807)(For breakdown see figure B-11.)	98814	1
		(ATTACHING PARTS)		
-53	C-62767	SCREW,hex.hd 3/4-10 unc x 2-3/4in.lg		4
-54	C-43316	LOCKWASHER,medium 3/4 cad.pl		4
-55	C-80597	WASHER,3/4 cad.pl		4
		- - - * - - -		
-56	141-01148	BRACKET ASSY,lubricator pump	02432	1

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
5-57	141-01145	LUBE RESERVOIR ASSY(For breakdown see figure B-15.) (ATTACHING PARTS)	02432	1
-58	C-62108	SCREW,hex.hd cap 5/16-18 unc x 5/8in.lg		4
-59	C-43314	LOCKWASHER,spring 5/16 cad.pl pl		4
		- - - * - - -		
-60	C-56013	PIPE PLUG,solid sq 3/8mi		1
-61	C-23029	COUPLING,3/8 full		1
-62	C-46179	NIPPLE,3/8x10-1/4in.lg bi		1
-63	C-70619	TEE,3/8 mi		1
-64	C-46145	NIPPLE, 3/8 bi		

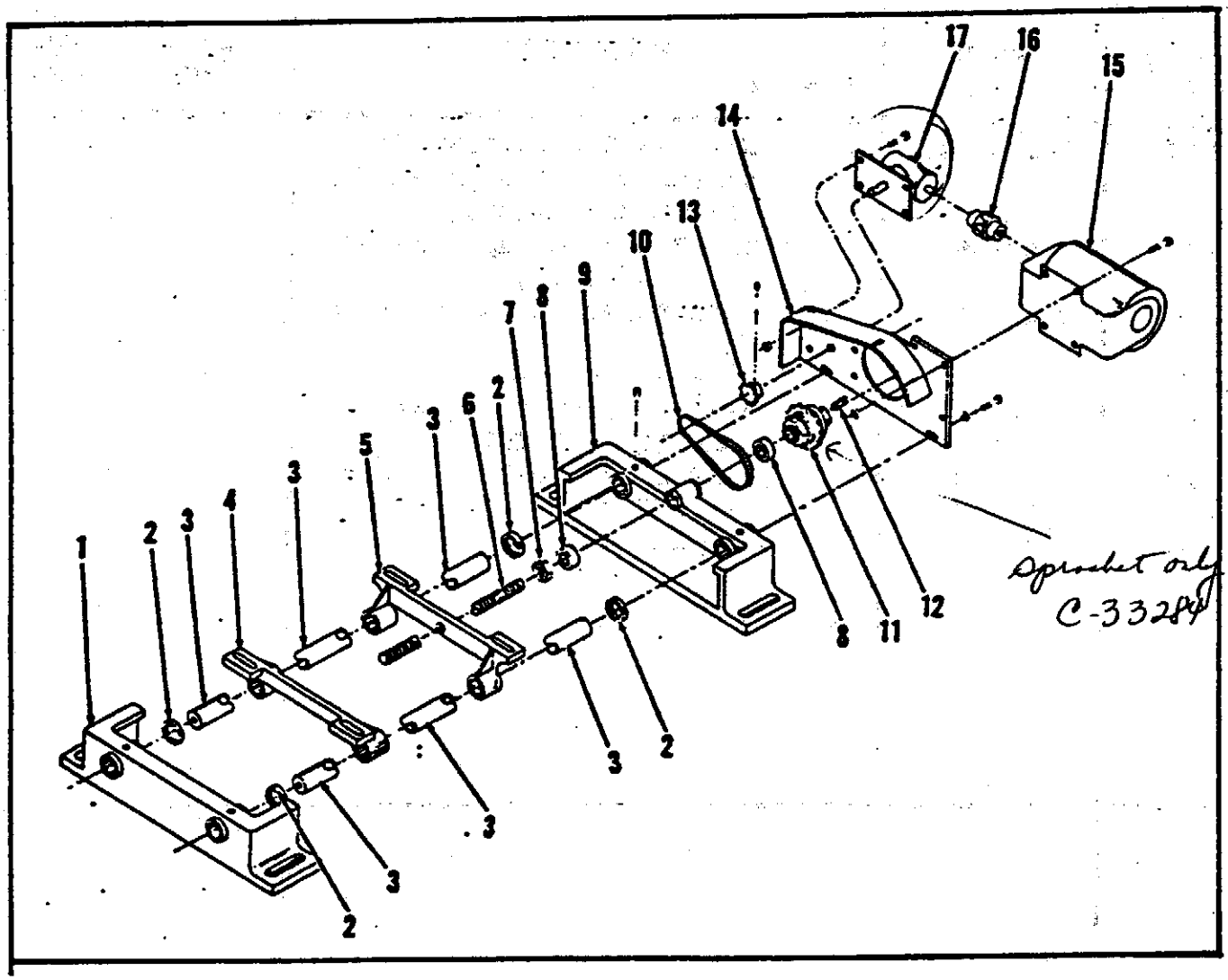


Figure B-6. Adjustable Motor Base, 7-1/2 hp

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
6 --		BASE,adjustable motor (3BH10)7-1/2 hp(See figure B-3, item 14 for nha.)		ref
-1		SUPPORT,back bar(14804) w/ set screws	96432	1
-2		COLLAR,slide rod 1-5/8 in. "skwezloc"	96432	4
-3	C-65570	ROD,slide(14816-1)	96432	2
-4	~~C-47970~~	14607-1 MOUNT,plain motor(~~14807~~)	96432	1
-5	~~C-47971~~	14606-1 MOUNT,tapped motor(~~14806~~)	96432	1
-6	~~C-54978~~	14639-1 SCREW,adjustment(~~14821-1~~)		
-7		NUT,adjustment hex.hd jam(A-14822) w/ setscrew	96432	1
-8	C-13016	BEARING,thrust (607)	43766	2
-9		SUPPORT,front bar(14802) w/ set screws	96432	1
-10	~~C-47972~~	C47977 CHAIN,roller(41x1 ft.6 in.lg)		1
-11	~~C-47977~~	C47972 TORQUE LIMITER(250-1 x 3/4 bore(For breakdown see figure B-12.)	96432	1
-12		KEY,3/16 sq x 1-7/16 in. lg		1
-13	C-33281	SPROCKET,11 tooth w/ hub (14218-2) and set screw	96432	1
-14		BRACKET,mounting(14622-2)	96432	1
-15		MOTOR,control 7-1/2 hp 3ph/60cy(specify one of the following:)	93199	1
-15-1		MOTOR,control 7-1/2 hp 200-208v/3ph/60cy	93199	1
-15-2		MOTOR,control 7-1/2 hp 220-240v/3ph/60cy	93199	1
-15-3		MOTOR,control 7-1/2 hp 440-480v/3ph/60cy	93199	1
-15-4		MOTOR,control 7-1/2 hp 550-600v/3ph/60cy	93199	1
-16	C-23471	COUPLING,flexible 1/2 x 1/2(G-100)	96432	1
-17	X-100038	REDUCER,gear 14-1/2:1	[illegible] 96432	

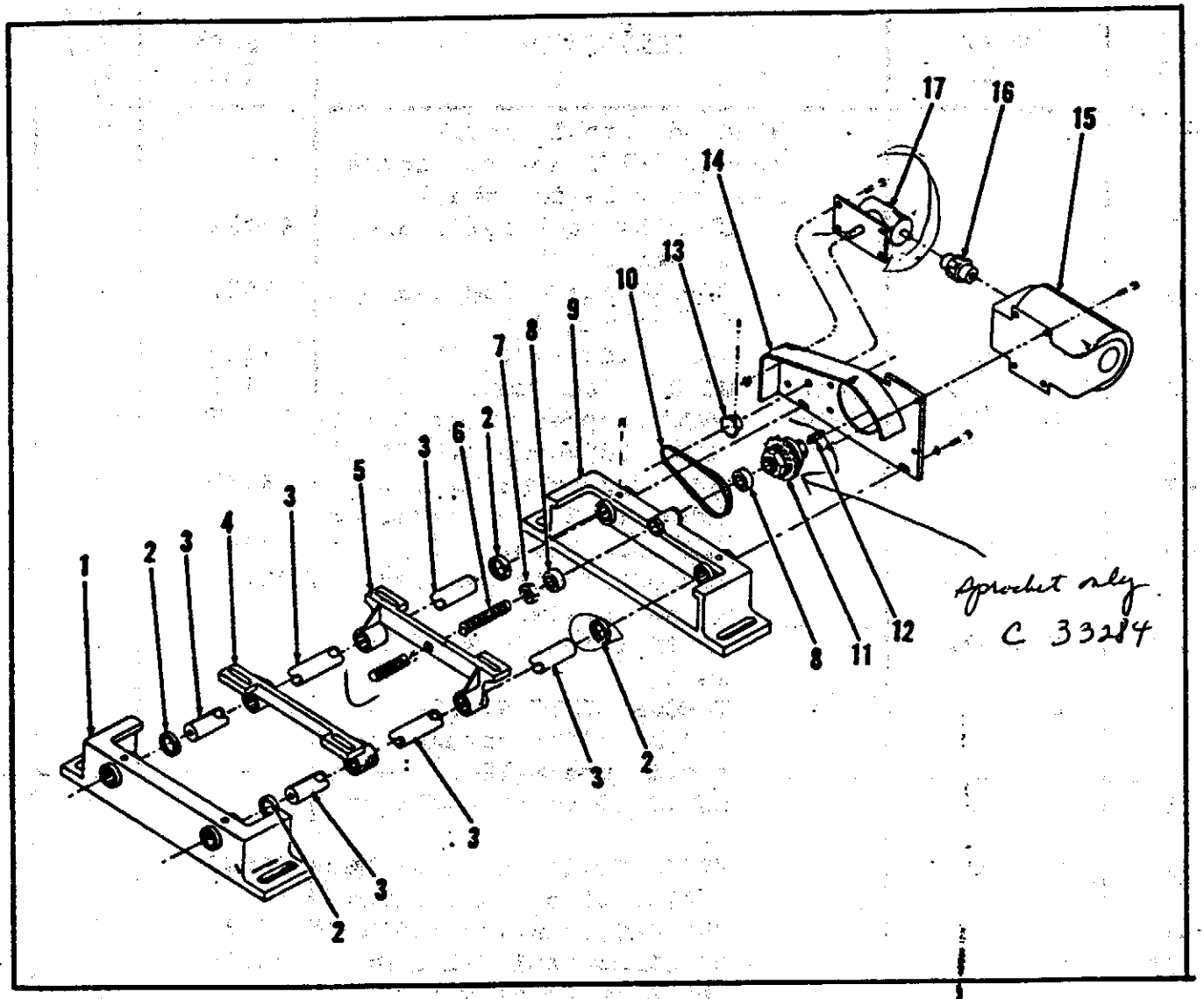


Figure B-7. Adjustable Motor Base, 15 hp

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
7 --		BASE,adjustable motor(4BH9) 15 hp(See figure B-4, item 13, for nha.)		ref
-1		SUPPORT,back bar(14804) w/ set screws	96432	1
-2		COLLAR,slide rod 1-5/8 in."skwezloc"	96432	4
-3	C-65570	ROD,slide(14816-1)	96432	2
-4	C-47970	MOUNT,plain motor(14807)	96432	1
-5	C-47971	MOUNT,tapped motor(14806)	96432	1
-6	C-54978	SCREW,adjustment(14821-1)		
-7		NUT,adjustment hex.hd jam(A-14822-1)w/ set screw	96432	1
-8	C-13016	BEARING,thrust(607)	43766	2
-9		SUPPORT,front bar(14802) w/ set screws	96432	1
-10	~~C-47972~~	C47977 CHAIN,roller(41x1 ft.6in. lg)		1
-11	~~C-47977~~	C47972 TORQUE LIMITER(250-1x3/4 bore)(For breakdown see figure B-12.)	96432	1
-12		KEY,3/16sq x 1-7/16in.lg		1
-13	C-33281	SPROCKET,11 tooth w/ hub (14218-2) and set screw	96432	1
-14		BRACKET,mounting(14622-2)	96432	1
-15		MOTOR,control 15hp 3ph/ 60cy(Specify one of the following:)	93199	1
-15-1	C47973	200V MOTOR,control 15hp 200-208v/3ph/60cy	93199	1
-15-2		MOTOR,control 15hp 220-240v/3ph/60cy	93199	1
-15-3		MOTOR,control 15hp 440-480v/3ph/60cy	93199	1
-15-4		MOTOR,control 15hp 550-600v/3ph/60cy	93199	1
-16	C-23471	COUPLING,flexible 1/2 x 1/2(G-100)	96432	1
-17	X-100038	REDUCER,gear 14-1/2:1	~~93199~~ 96432	1

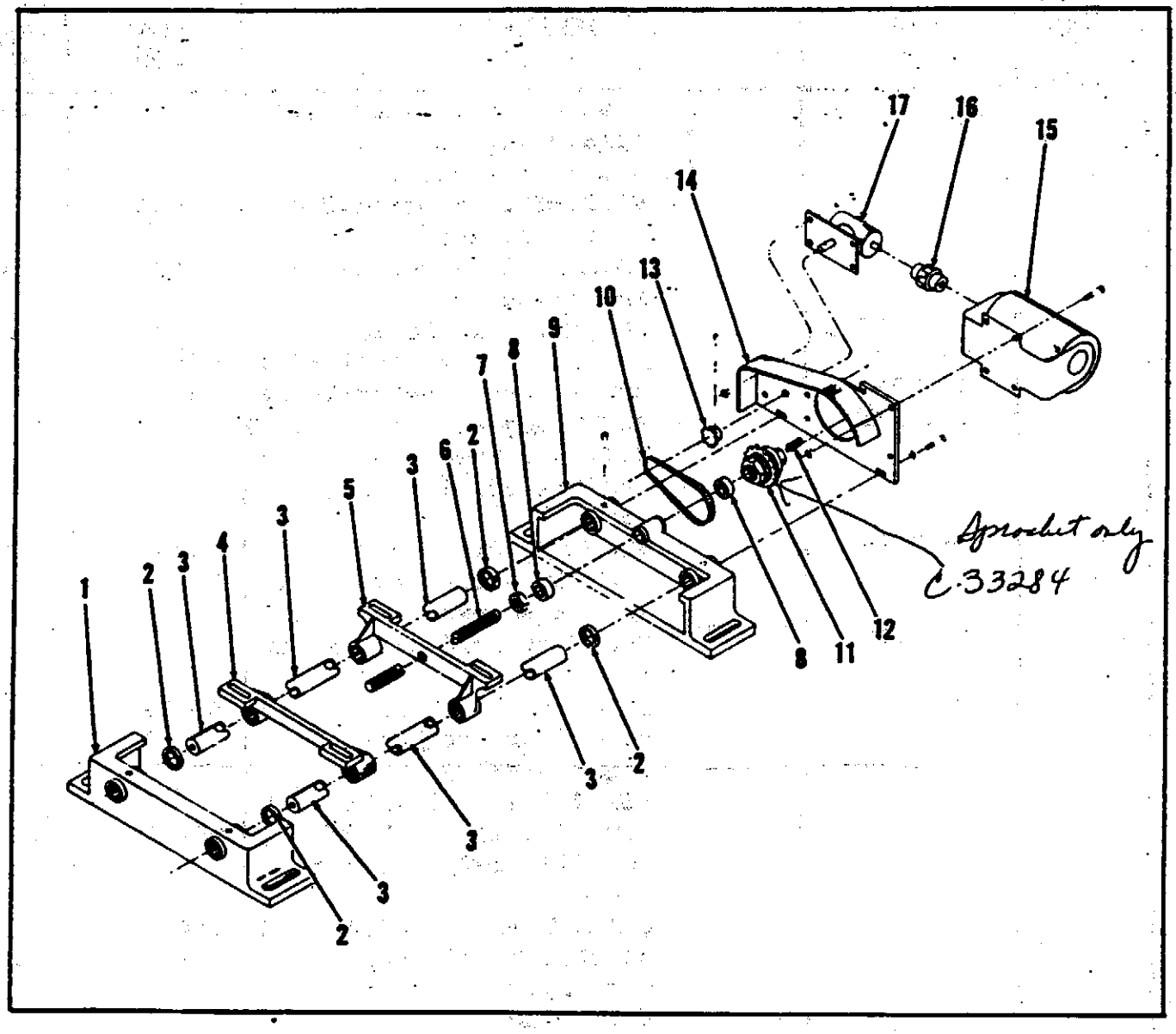


Figure B-8. Adjustable Motor Base, 20 hp

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7		MFRS. CODE	UNITS PER ASSY
8--			BASE,adjustable motor (4BH9) 20hp (See figure B-5, item 13 for nha.)		ref
-1			SUPPORT,back bar(14804) w/ set screws	96432	1
-2			COLLAR,slide rod 1-5/8 in."skwezloc"	96432	4
-3	C-65570		ROD,slide(14816-1)	96432	2
-4	C-47970		MOUNT,plain motor (14807)	96432	1
-5	C-47971		MOUNT,tapped motor (14806)	96432	1
-6	C-54978		SCREW,adjustment(14821-1)		
-7			NUT,adjustment hex.hd jam(A-14822-1)w/ set screw	96432	1
-8	C-13016		BEARING,thrust(607)	43766	2
-9			SUPPORT,front bar(14802) w/ set screws	96432	1
-10	~~C-47972~~	C47977	CHAIN,roller(41x1ft.6in. lg)	96432	1
-11	~~C-47977~~	C47972	TORQUE LIMITER(250-1x3/4 bore)(For breakdown see figure B-12.)	96432	1
-12			KEY,3/16sqx1-7/16in.lg		1
-13	C-33281		SPROCKET,11 tooth w/ hub (14218-2) and set screw	96432	1
-14			BRACKET,mounting (14622-2)	96432	1
-15			MOTOR,control 20hp 3ph/60cy(Specify one of the following:)	93199	1
-15-1			MOTOR,control 20hp 200-208v/3ph/60cy	93199	1
-15-2			MOTOR,control 20hp 220-240v/3ph/60cy	93199	1
-15-3			MOTOR,control 20hp 440-480v/3ph/60cy	93199	1
-15-4			MOTOR,control 20hp 550-600v/3ph/60cy	96432	1
-16	C-23471		COUPLING,flexible 1/2x 1/2(G-100)	~~93199~~ 96432	
-17	X-100038		REDUCER,gear 14-1/2:1 ratio(1-1/2 ATD)		

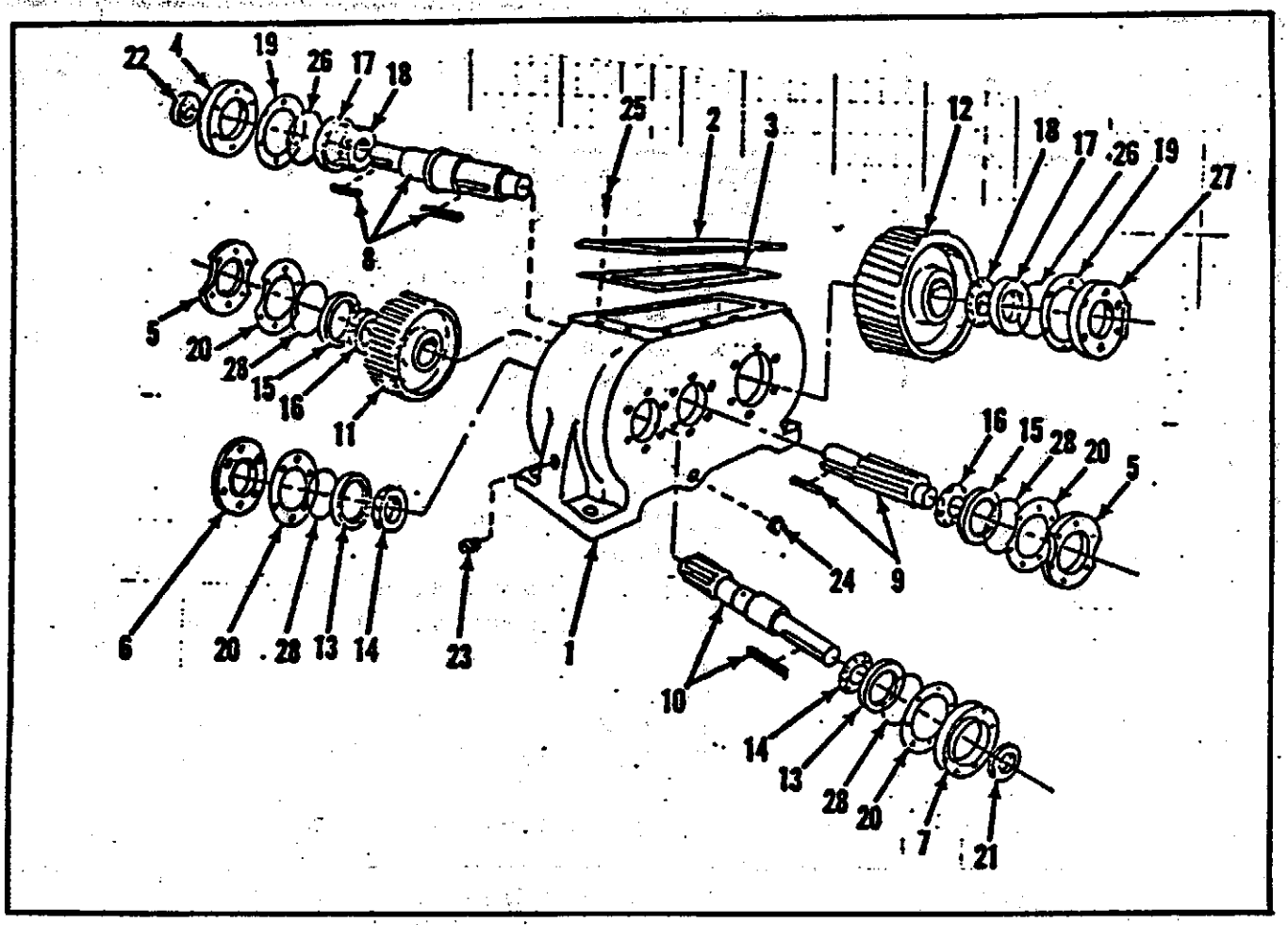


Figure B-9. Speed Reducer, 7-1/2 hp

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
9 --	141-1840	REDUCER, speed 7-1/2 hp(See figure B-3, item 49 for nha.	98814	ref
-1		CASE (58-01)	98814	1
-2		PLATE, cover(5803-11)	98814	1
-3	C-33566	GASKET, cover plate(5860)	98814	1
-4		CAP, low speed open (5735-0)	98814	1
-5		CAP, intermediate (28920-X)	98814	1
-6		CAP, high speed closed (28920-X)	98814	1
-7		CAP, high speed open (33821-0)	98814	1
-8	C-65569	SHAFT, low speed double extended(58-08-DE)	98814	1
-9	C-65571	SHAFT, intermediate pinion (58-09)	98814	1
-10	C-65572	SHAFT, high speed pinion (58-10)	98814	
-11	C-33282	GEAR, intermediate(58-11)	98814	
-12	C-33283	GEAR, low speed(58-12)	98814	
-13	C-13017	BEARING, cup high speed	98814	
-14	C-13018	BEARING, cone high speed	98814	
-15	C-13019	BEARING, cup intermediate	98814	
-16	C-13020	BEARING, cone intermediate (33889)	98814	
-17	C-13022	BEARING, cup low speed (47620)	98814	
-18	C-13023	BEARING, cone low speed (47680)	98814	
-19	C-26828	SHIMS (5735-S)	98814	
-20	C-25829	SHIMS (28920-S)		
-21	C-52624	SEAL, oil high speed shaft	98814	
-22	C-52625	SEAL, oil low speed shaft (415013)	98814	
-23		PLUG, pipe	98814	
-24		PLUG, magnetic drain	98814	
-25		PLUG, breather	98814	
-26	C-59854	O-RING (47620-R)	98814	
-27		CAP, low speed closed (5735-X)	98814	
-28	C-59855	O-RING (33821-R)	98814	

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
9 -29	C-65573	SHAFT,low speed(58-09) (not shown)	98814	
-30	C-65574	SHAFT,high speed pinion double extended(58-10DF) (not shown)	98814	
		NOTE ALWAYS GIVE MODEL NUMBER AND SERIAL NUMBER WHEN ORDERING PARTS.		

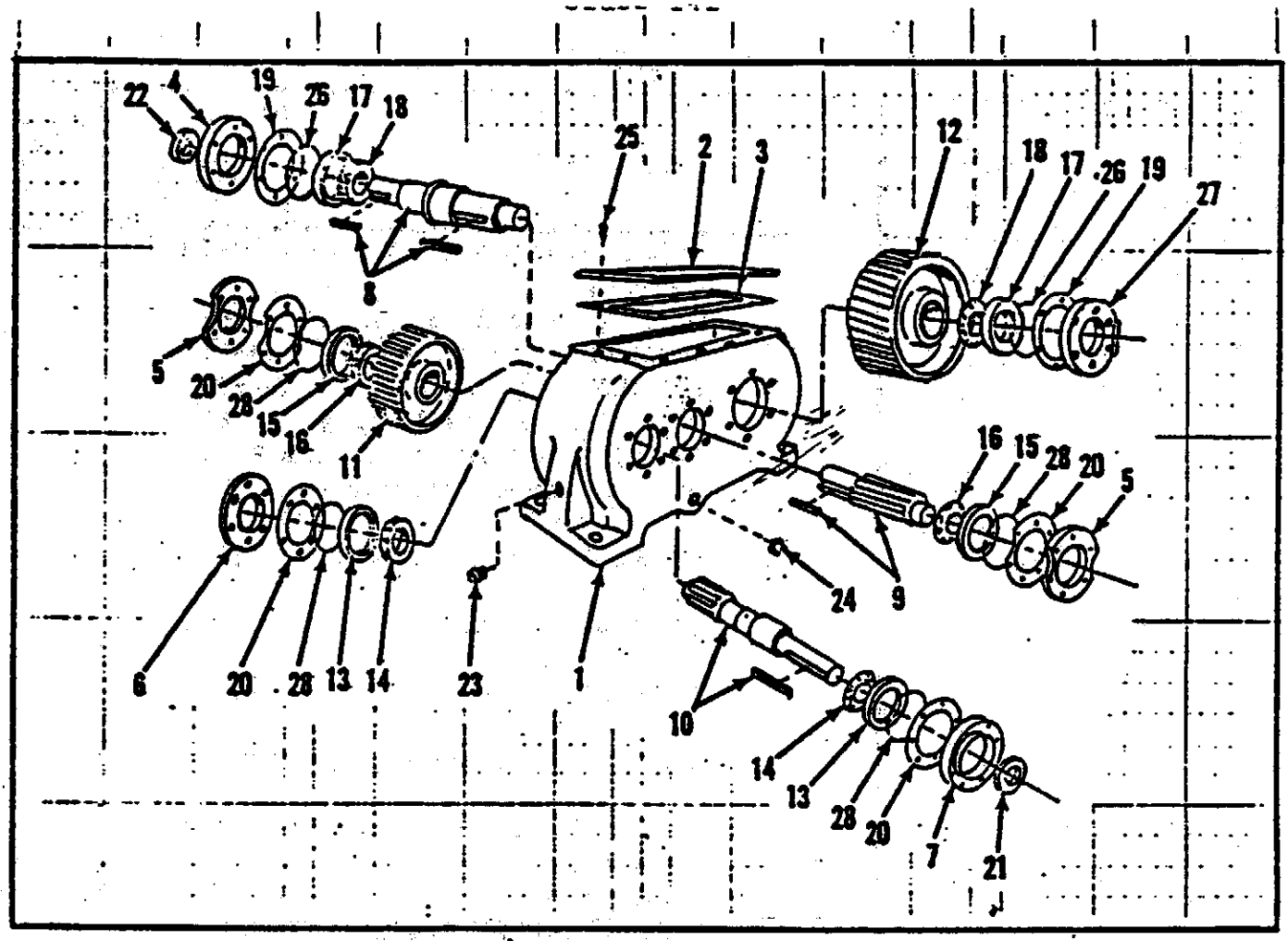


Figure B-10. Speed Reducer, 15hp

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
10--	141-1794	REDUCER,speed(3806RH-D1) 15 hp(See figure B-4, item 53 for nha.)	98814	ref
-1		CASE(58-01)	98814	1
-2		PLATE,cover(5803-11)	98814	1
-3	C-33566	GASKET,cover plate(5860)	98814	1
-4		CAP,low speed open (5735-0)	98814	1
-5		CAP,intermediate (28920-X)	98814	1
-6		CAP,high speed closed (28920-X)	98814	1
-7		CAP,high speed open (33821-0)	98814	1
-8	C-65569	SHAFT,low speed double extended(58-08-DE)	98814	1
-9	C-65571	SHAFT,intermediate pinion(58-09)	98814	1

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
10-10	C-65572	SHAFT,high speed pinion (58-10)	98814	
-11	C-33282	GEAR,intermediate(58-11)	98814	
-12	C-33283	GEAR,low speed(58-12)	98814	
-13	C-13017	BEARING,cup high speed	98814	
-14	C-13018	BEARING,cone high speed	98814	
-15	C-13019	BEARING,cup intermediate	98814	
-16	C-13020	BEARING,cone intermed-iate(33889)	98814	
-17	C-13022	BEARING,cup low speed (47620)	98814	
-18	C-13023	BEARING,cone low speed (47680)	98814	
-19	C-25828	SHIMS(5735-S)	98814	
-20	C-25829	SHIMS(28920-S)		
-21	C-52624	SEAL,oil high speed shaft	98814	
-22	C-52625	SEAL,oil low speed shaft (415013)	98814	
-23		PLUG,pipe	98814	
-24		PLUG,magnetic drain	98814	
-25		PLUG,breather	98814	
-26	C-59854	O-RING(47620-R)	98814	
-27		CAP,low speed closed (5735-X)	98814	
-28	C-59855	O-RING(33821-R)	98814	
-29	C-65573	SHAFT,low speed(58-09) (not shown)	98814	
-30	C-65574	SHAFT,high speed pinion double extended(58-10DF) (not shown)	98814	
		NOTE ALWAYS GIVE MODEL NUMBER AND SERIAL NUMBER WHEN ORDERING PARTS.		

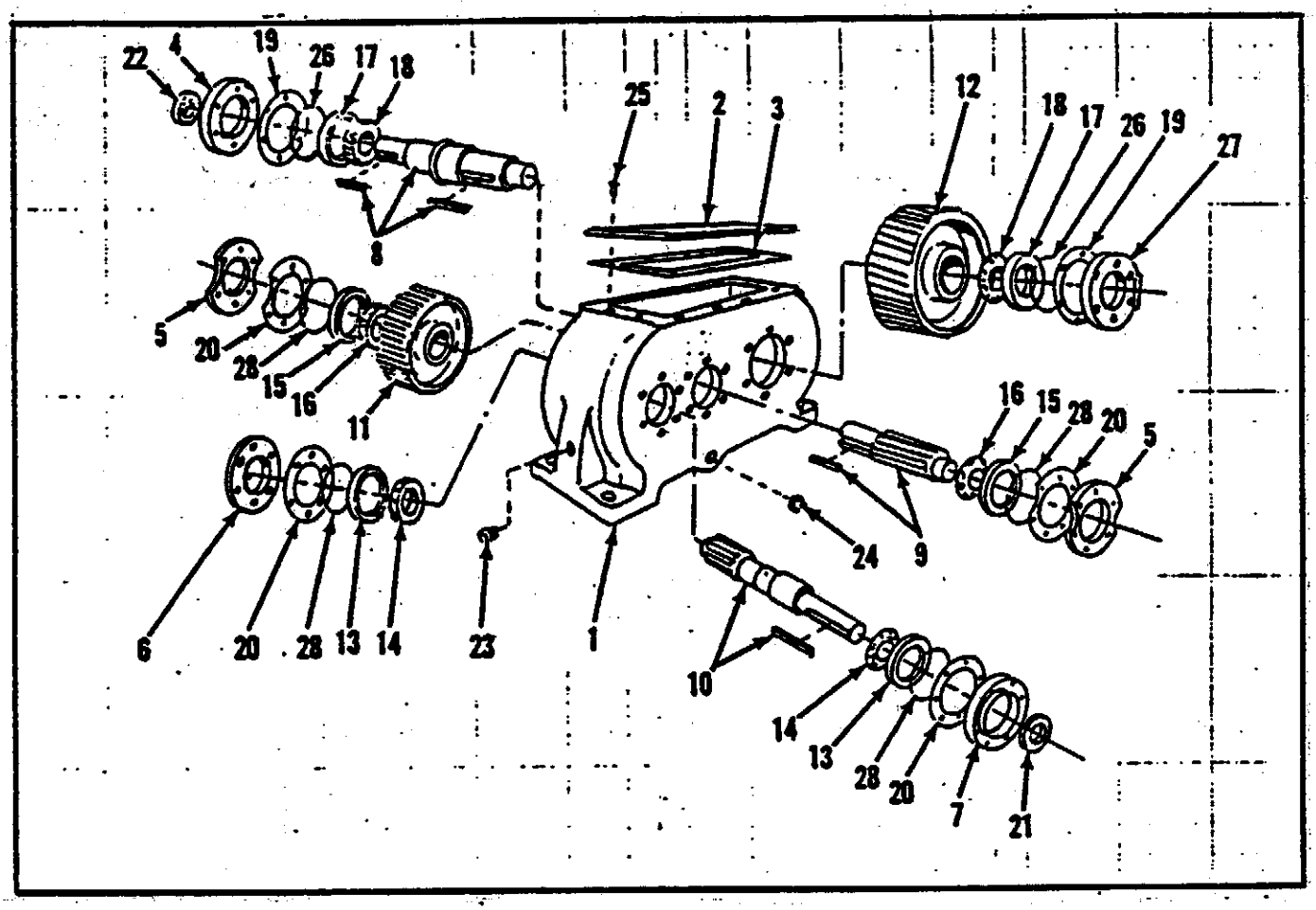


Figure B-11. Speed Reducer, 20 hp

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
11--	C-58564	REDUCER, speed 20 hp(See figure B-5, item 52 for nha.)	98814	ref
-1		CASE(58-01)	98814	1
-2		PLATE,cover(5803-11)	98814	1
-3	C-33566	GASKET,cover plate(5860)	98814	1
-4		CAP,low speed open (5735-0)	98814	1
-5		CAP,intermediate (28920-X)	98814	1
-6		CAP,high speed closed (28920-X)	98814	1
-7		CAP,high speed open (33821-0)	98814	1
-8	C-65569	SHAFT,low speed double extended(58-08-DE)	98814	1
-9	C-65571	SHAFT,intermediate pinion(58-09)	98814	1

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
11-10	C-65572	SHAFT,high speed pinion (58-10)	98814	
-11	C-33282	GEAR,intermediate(58-11)	98814	
-12	C-33283	GEAR,low speed(58-12)	98814	
-13	C-13017	BEARING,cup high speed	98814	
-14	C-13018	BEARING,cone high speed	98814	
-15	C-13019	BEARING,cup intermediate	98814	
-16	C-13020	BEARING,cone intermed-iate(33889)	98814	
-17	C-13022	BEARING,cup low speed (47620)	98814	
-18	C-13023	BEARING,cone low speed (47680)	98814	
-19	C-25828	SHIMS(5735-S)	98814	
-20	C-25829	SHIMS(28920-S)		
-21	C-52624	SEAL,oil high speed shaft	98814	
-22	C-52625	SEAL,oil low speed shaft (415013)	98814	
-23		PLUG,pipe	98814	
-24		PLUG,magnetic drain	98814	
-25		PLUG,breather	98814	
-26	C-59854	O-RING(47620-R)	98814	
-27		CAP,low speed closed (5735-X)	98814	
-28	C-59855	O-RING(33821-R)	98814	
-29	C-65573	SHAFT,low speed(58-09) (not shown)	98814	
-30	C-65574	SHAFT,high speed pinion double extended(58-10DF) (not shown)	98814	
		NOTE ALWAYS GIVE MODEL NUMBER AND SERIAL NUMBER WHEN ORDERING PARTS.		

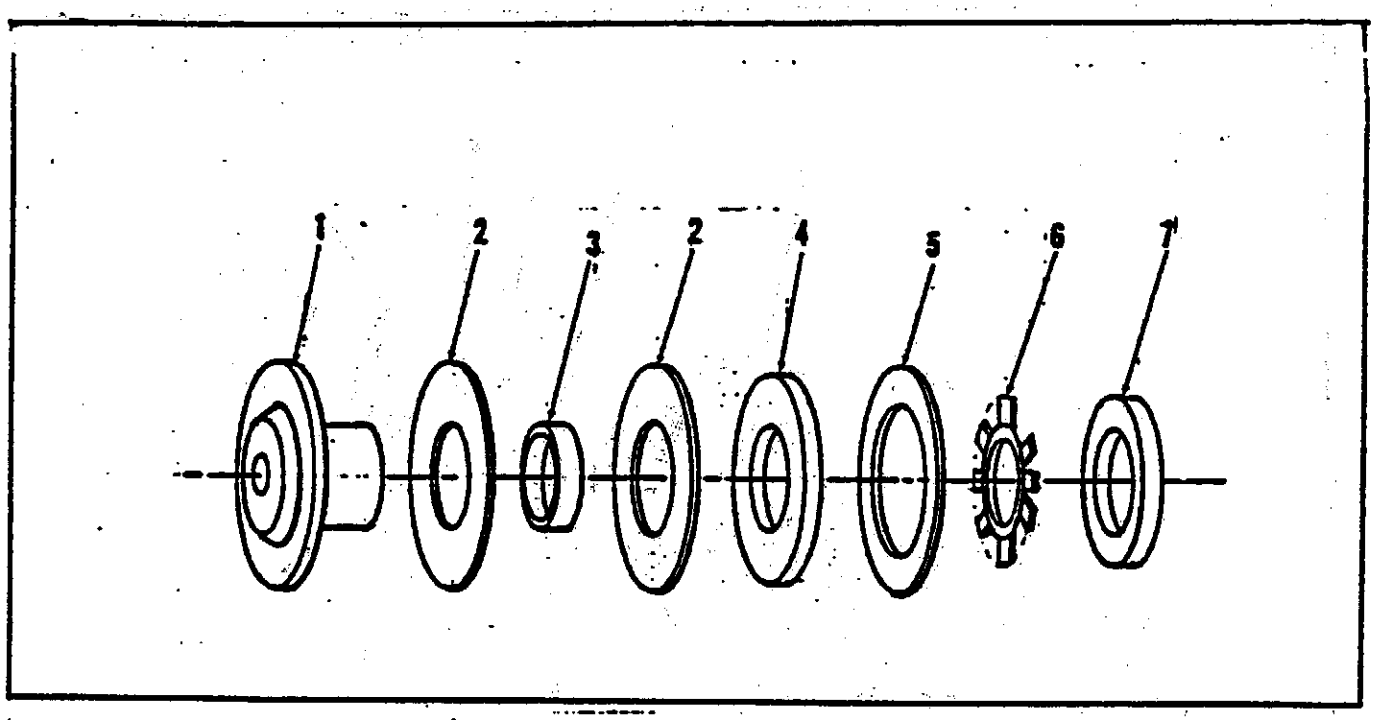


Figure B-12. Torque Limiter

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
12--	C-47977	TORQUE LIMITER(250-1 x 3/4 fore)(See figure B-6, B-7 or B-8 for nha.)		
-1		HUB,3/4 bore	96432	1
-2		FACING,friction	96432	1
-3		BUSHING	96432	1
-4		PLATE,pressure	96432	1
-5		SPRING	96432	1
-6		LOCKWASHER,tab	96432	1
-7		NUT,adjusting	96432	1

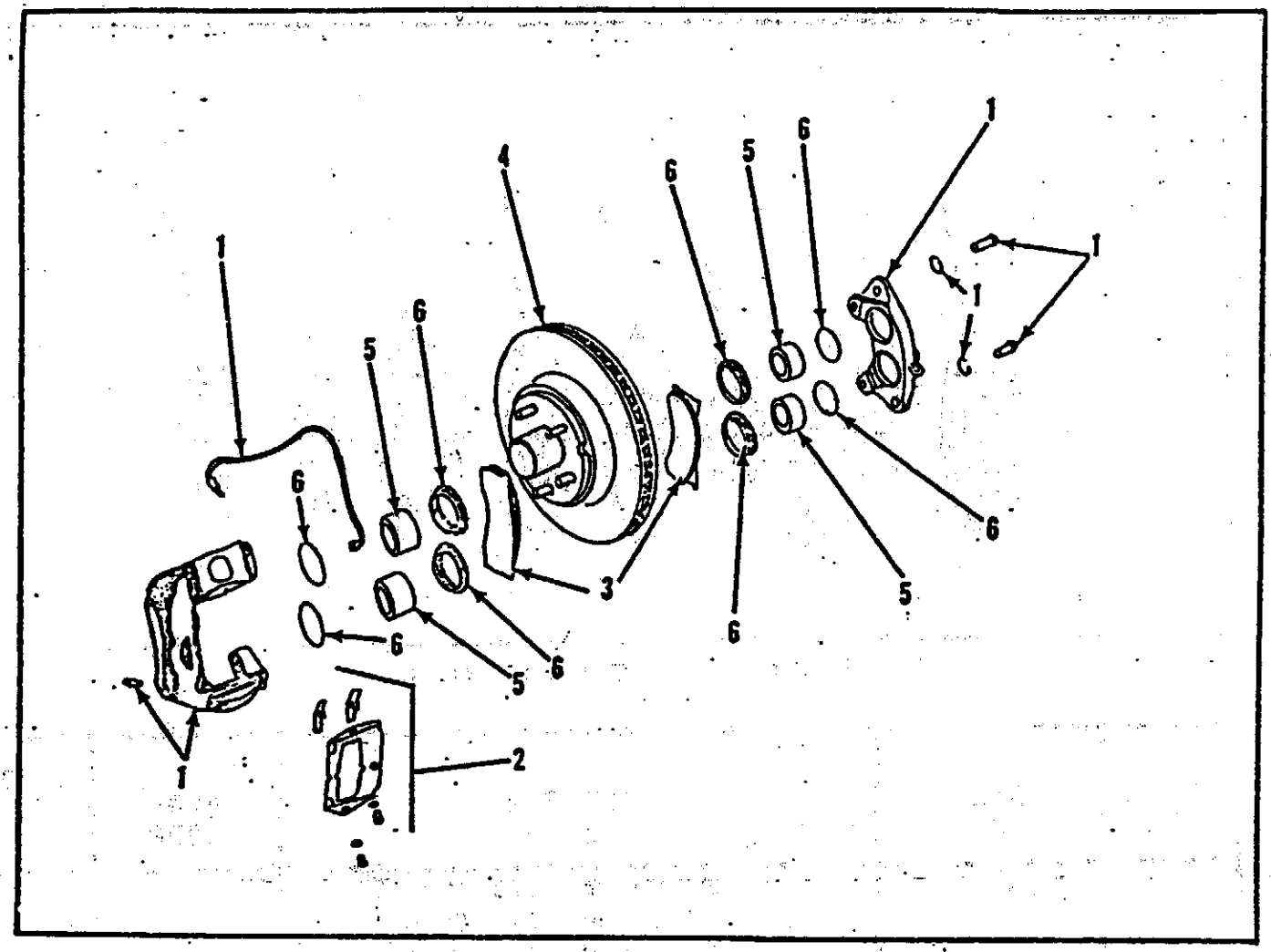


Figure B-13. Kelsey-Hayes Disc Brake Replacement Parts

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
13--	ref	BRAKE REPAIR KITS(See figures B-4 and B-5, item 25 for nha.)	80549	1
-1	C-18541	CALIPER KIT(77692RH) 1 caliper complete (less shoe and lining clip and bolts)	80549	1
-2	C-18543	CALIPER SHIELD KIT(7414)(consists of: 1 caliper shield and clip assembly, bolts, lockwashers)	80549	1
-3	C-18542	SHOE AND LINING KIT(74121) (consists of: 4 shoe and lining assemblies)	80549	1 set
-4	2263-030	DISC AND HUB ASSEMBLY (7419)	80549	ref
-5	74110	PISTON KIT(consists of: 1 piston)(74110)		
-6	77698	BRAKE CYLINDER REPAIR KIT(consists of: 4 piston seals, 4 piston boots, and 1 tube of lubricant)	80549	1

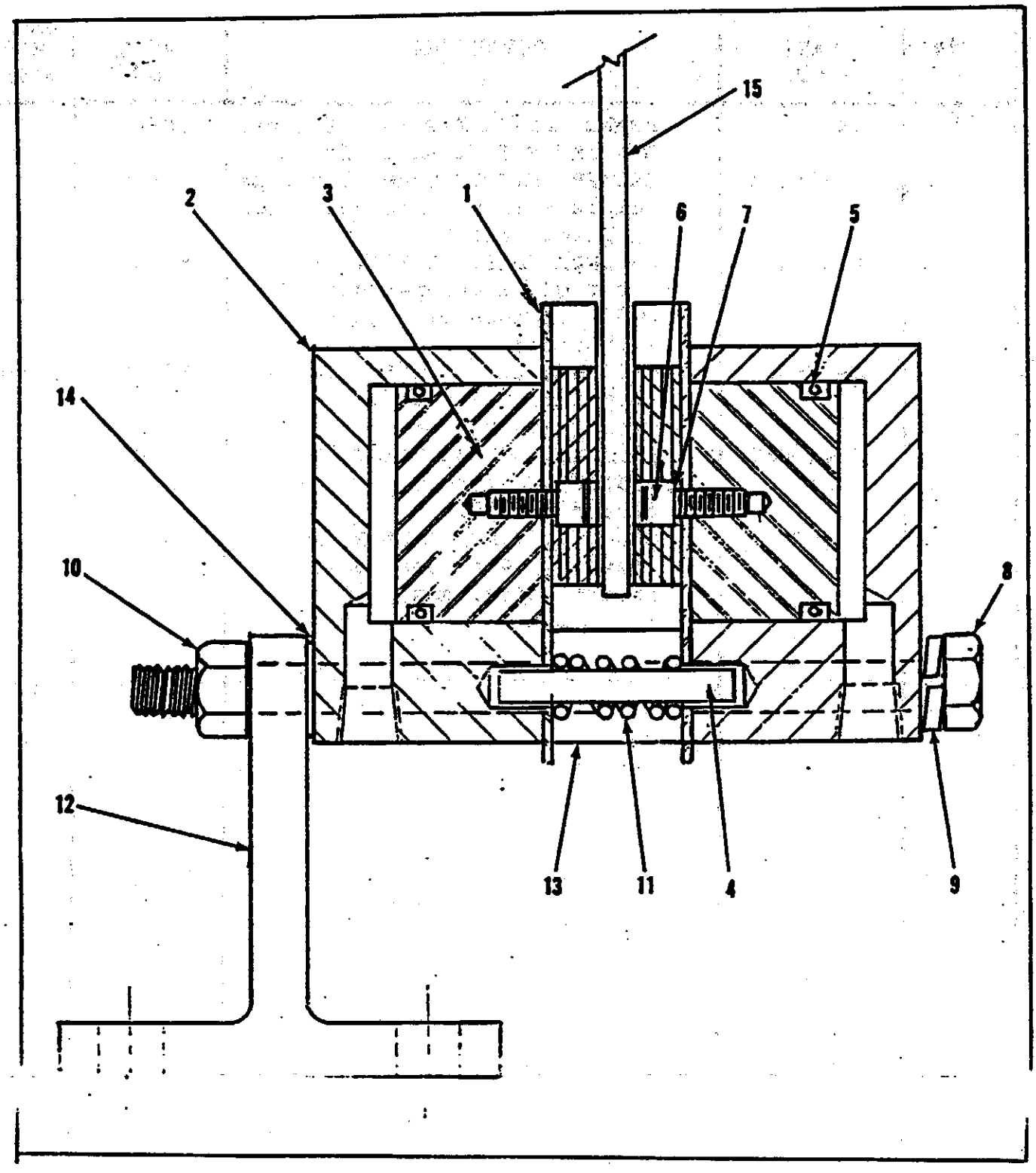


Figure B-14. Horton Disc Brake (model DB)

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
14—	ref	DISC BRAKE,caliper(model DB)(See figure B-3, item 27 for nha.)		1
-1	C-21883	SHOE ASSEMBLY(8356)		1
-2		AIR CHAMBER(B-7005)		2
-3	C-55134	PISTON(A-7006)		
-4	C-54972	GUIDE PIN(A-7012)		1
-5	C-59863	O-RING(P-386)		2
-6		MACHINE SCREW(P-1320)		4
-7		LOCKWASHER(P-1019)		4
-8		CAPSCREW(P-1426)		2
-9		LOCKWASHER(P-1004)		2
-10		NUT,hex.(P-941)		2
-11	C-68354	SPRING,return(A-7828)		1
-12		"T" SUPPORT(A-6415)		1
-13		SPACER,air chamber (A-7654)		2
-14		WASHER(P-1038)		2
-15	C-25830	DISC(TOL-O-MATIC 40018)		1

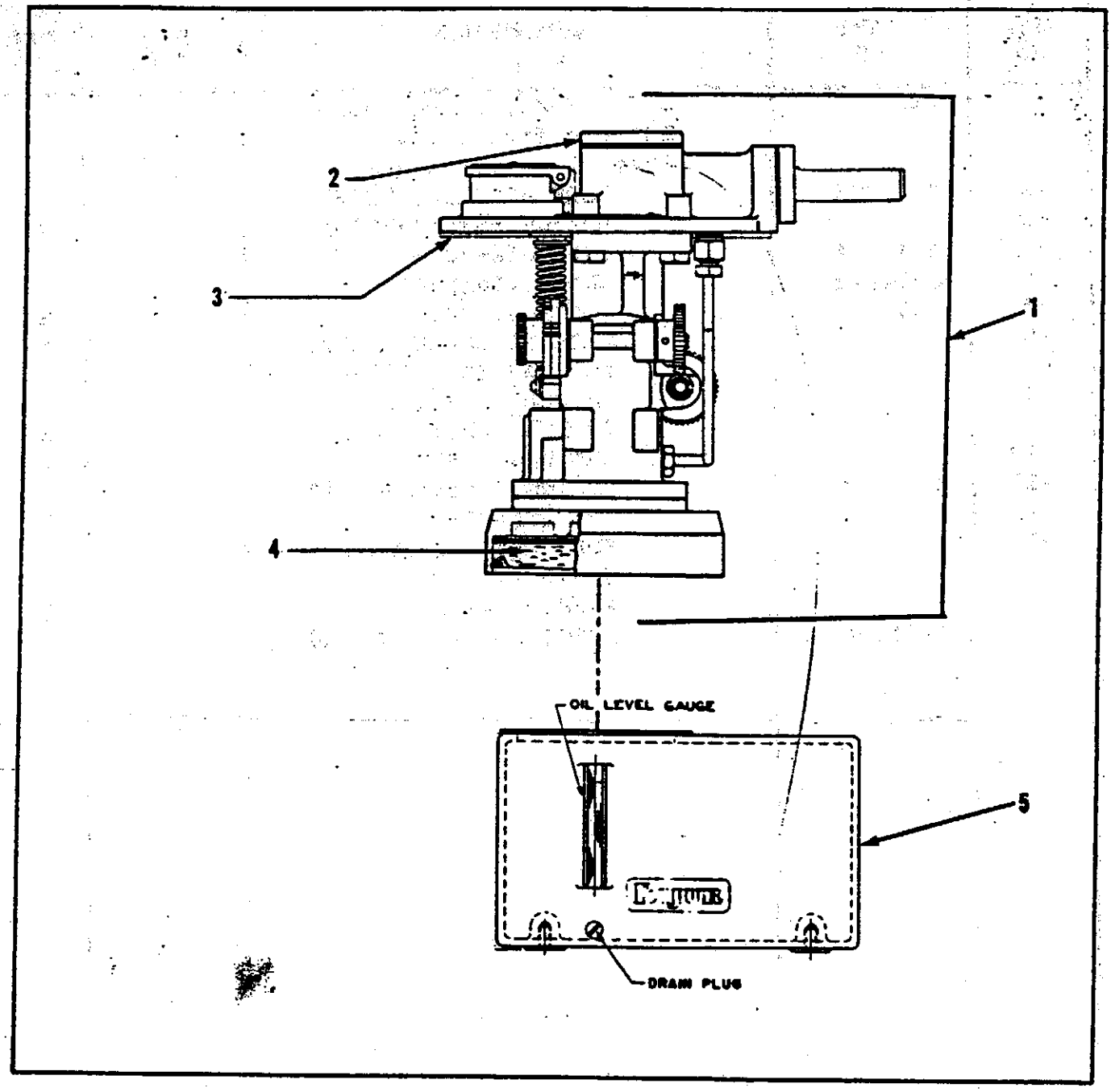


Figure B-15. Bijur Lube Reservoir

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
15 --	ref	LUBE RESERVOIR ASSY (See figures B-3, B-4, and B-5, items 55, 59, and 57 for nha.)		1
-1	C-30281	LUBRICATOR UNIT, type AAB-L3 (D2232).	70925	1
-2		PLATE, cover (S-128)	70925	1
-3		GASKET (B-3453)	70925	1
-4		FILTER ASSY (S-129)	70925	1
-5	X-100323	3/4" dia RESERVOIR ASSY, 6 pint (D-2250)	70925	1

Bijur filter #5101
X100307 1 5/8" dia

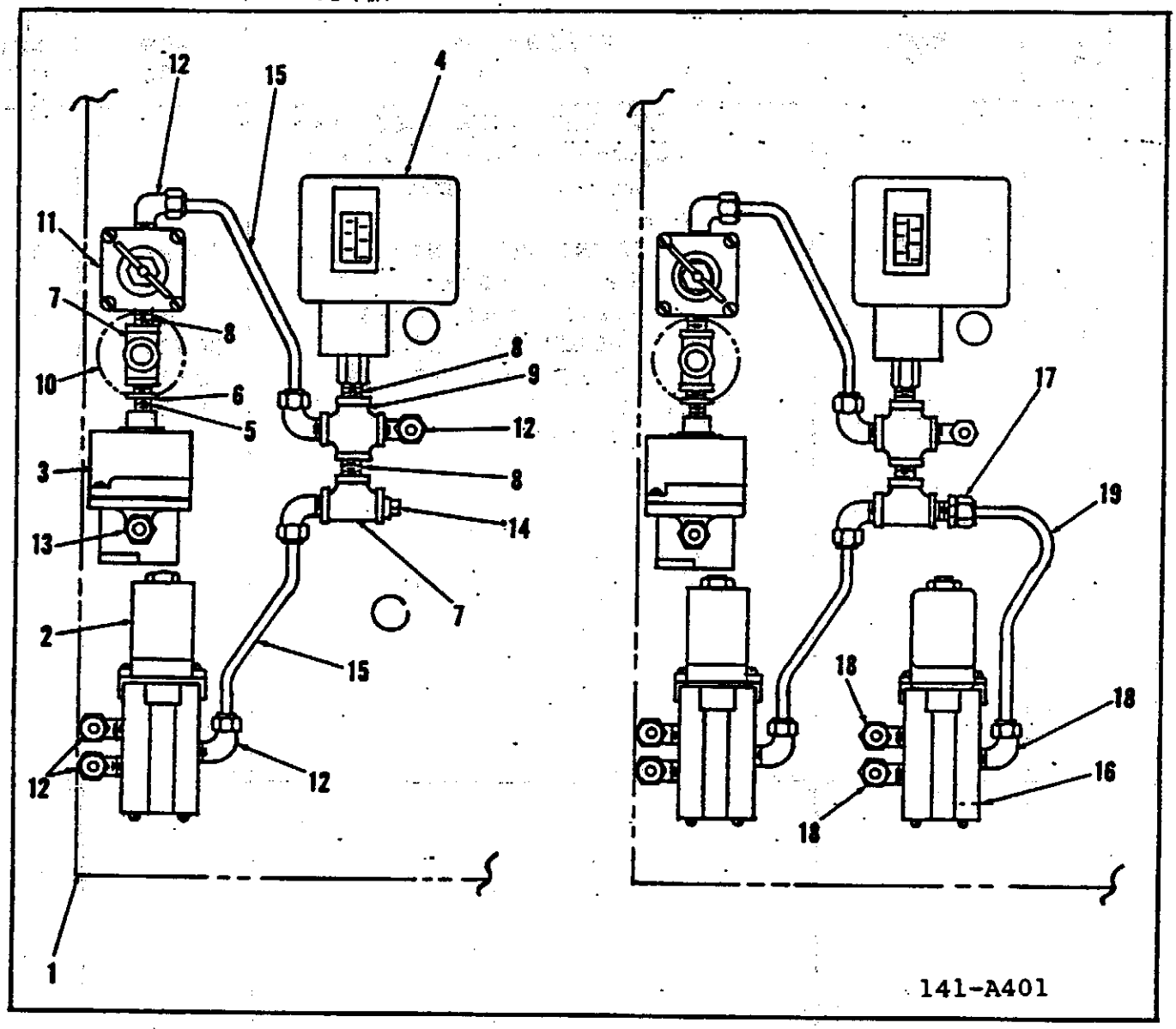


Figure B-16. Application of Air Tubing and Fittings, for Electrical Control Box

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
16--	141-A401	APPLICATION OF AIR TUBING AND FITTINGS,for electrical control box		ref
-1	ref	CONTROL BOX,electrical		ref
-2	C-77911	VALVE,rolls solenoid(For breakdown see figure B-17.)	81978	1
-3	C-77829	VALVE,brake solenoid(A5DB-2127)(For breakdown see figure B-18.)	81978	1
-4	2226 0504	SWITCH,pressure		1
-5	C-46082	NIPPLE,close 1/8 mi		1
-6	C-19661	BUSHING,reducing 1/4x1/8 mi		1
-7	C-70609	TEE,1/4 mi		2
-8	C-46124	NIPPLE,close 1/4 mi		3
-9	C-24205	CROSS,1/4 mi		1
-10	C-32080	GAGE,pressure 0-06 1/4 bc		
-11	C-77008	REGULATOR(N-26-1/4 pt)		1
-12	C-30827	FITTING, 1/4 p x 1/4 t(69F)	30327	7
-13	C-30855	FITTING, 1/4 p x1/4 t(68F)	30327	1
-14	C-56011	PLUG,1/4 sq hd pipe		1
-15	M-92392	TUBING,copper 1/4		a/r
-16	C-77911	VALVE,inverted cylinder solenoid(For breakdown see figure B-17.)	81976	1
-17	C-30855	FITTING,1/4 p x 1/4 t(68F)	30327	1
-18	C-30827	FITTING,1/4 p x 1/4 t(69F)	30327	3
-19	M-92392	TUBING,copper 1/4		a/r

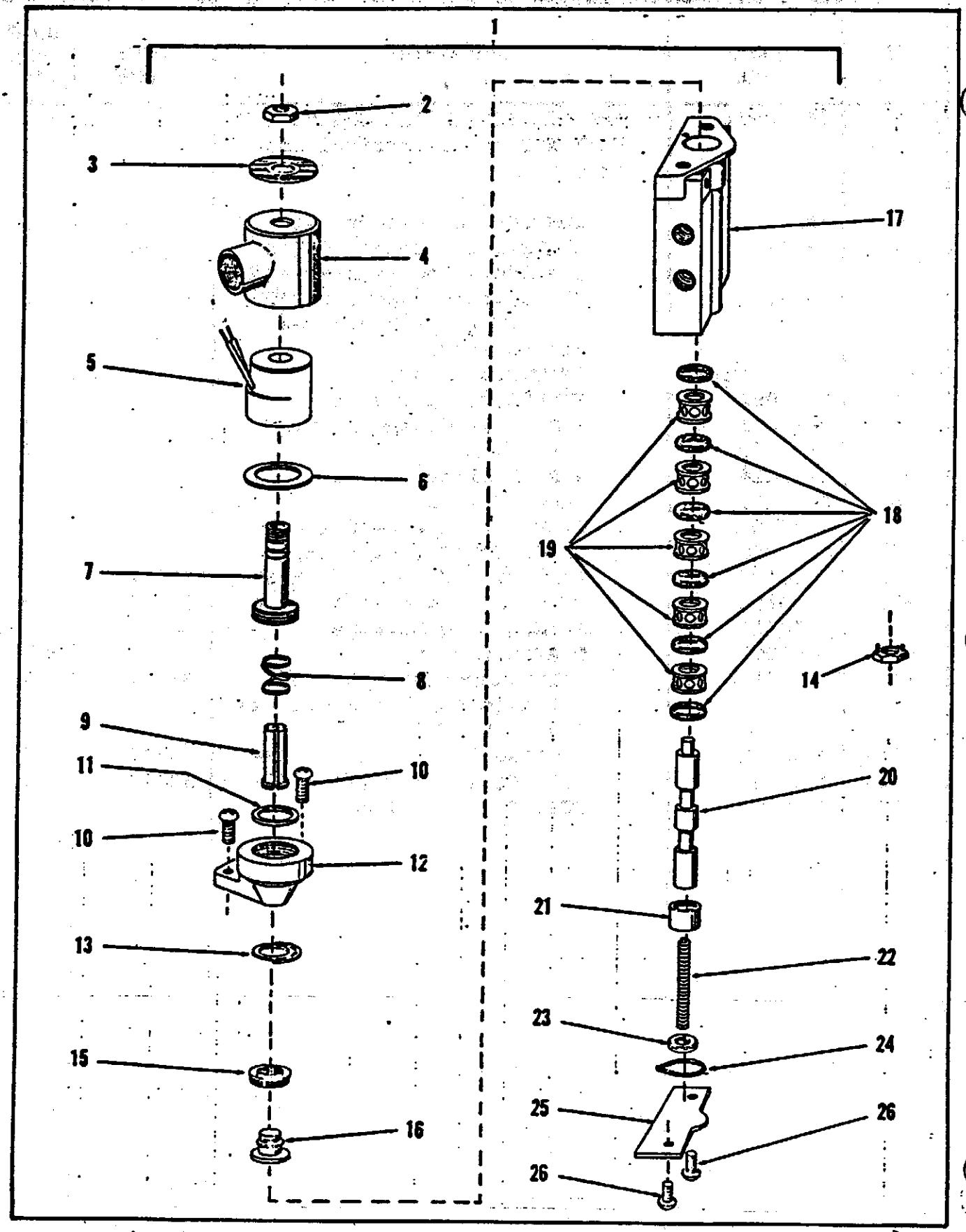


Figure B-17. Solenoid Valve, Rolls and Inverted Chest

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
17-1	C-77911	VALVE,rolls and inverted chest 4-way solenoid(H935DB2150)(See figure B-16,items 3,16 for nha)		2
-2		NUT,housing(V5-114)	81978	1
-3		NAMEPLATE,conduit housing (V5-4)	81978	1
-4		CONDUIT HOUSING,1/2in.NPT (V5-1726M)	81978	1
-5	C-21049	COIL,240v/60cy(V5-634F-24)	81978	1
-6	C-80642	WASHER,spring(V5-3036)	81978	1
-7	C-65585	SLEEVE ASSEMBLY(M3-121)	81978	1
-8	C-68266	PLUNGER SPRING(V5-3810)	81978	1
-9	C-56361	*PLUNGER ASSEMBLY(V5-13-35)	81978	1
-10		SCREW,cover(H31-002)	81978	2
-11	C-65377	FLANGE SEAL(V5-113)	81978	1
-12		COVER(H16-003)	81978	1
-13		COVER GASKET(H14-002)	81978	1
-14		WRENCH NUT(VO-233)	81978	1
-15	C-59875	*U-CUP(H14-001)	81978	1
-16	C-55140	*PISTON DRIVE(H15-001)	81978	1
-17		BODY(H01-801)	81978	1
-18	C-59876	O-RING(H14-003)	81978	6
-19		SPACER CAGE(H26-001)	81978	5
-20	C-65586	SPOOL(H32-001)	81978	1
-21	C-18863	BUSHING RETAINER(H13-001)	81978	1
-22	C-68368	SPOOL SPRING(H04-001)	81978	1
-23	C-23290	SNUBBER(H99-004)	81978	1
-24	C-59877	* O-RING(V1-2019)	81978	1
-25		COVER STOP(H18-001)	81978	1
-26		SCREW,stop(H31-001)	81978	2

*Kit C-40551

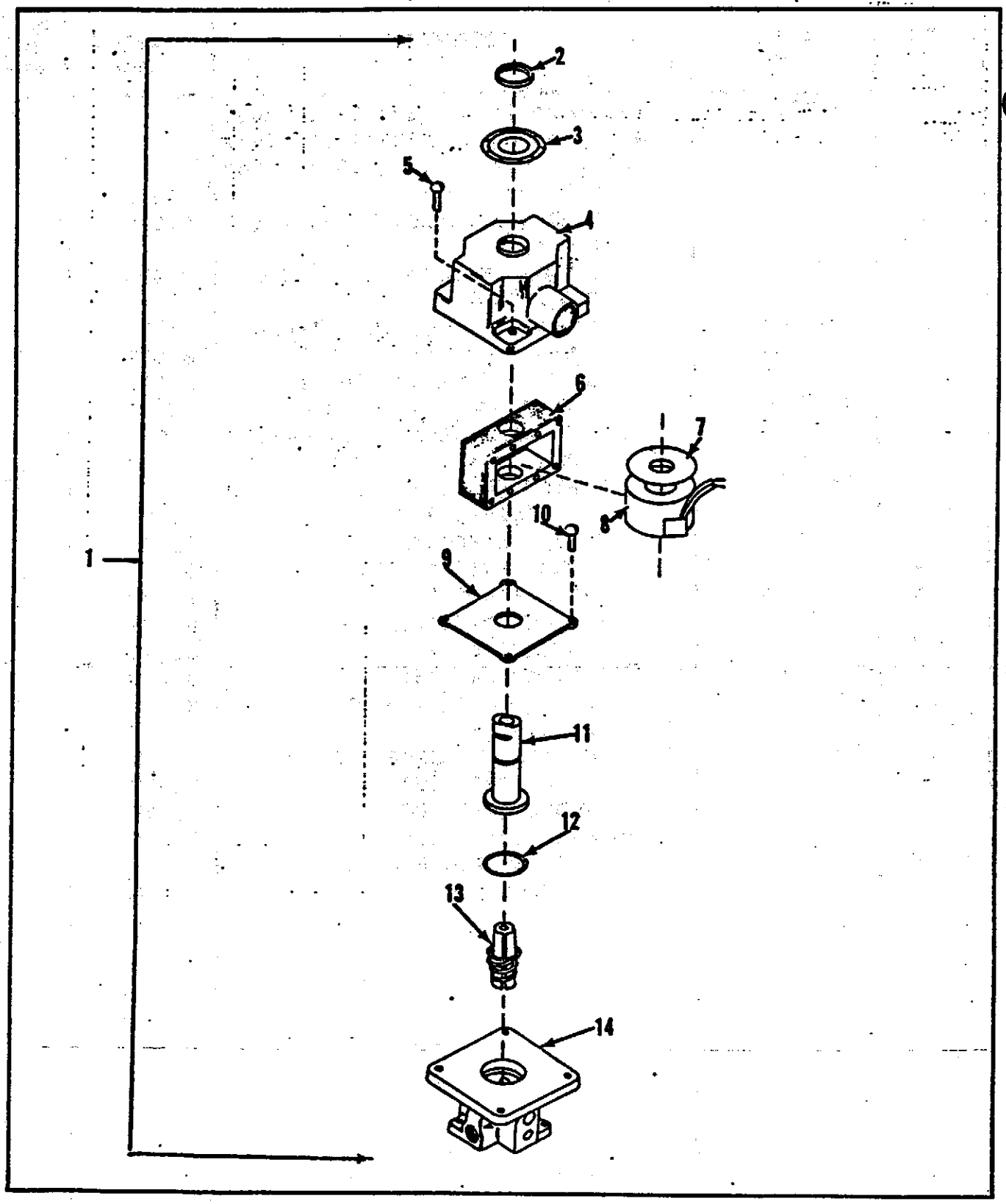
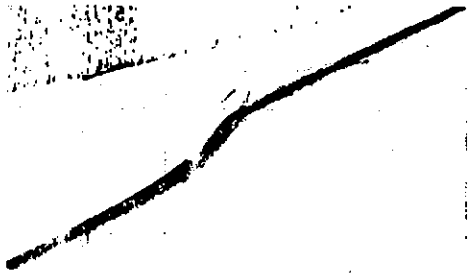
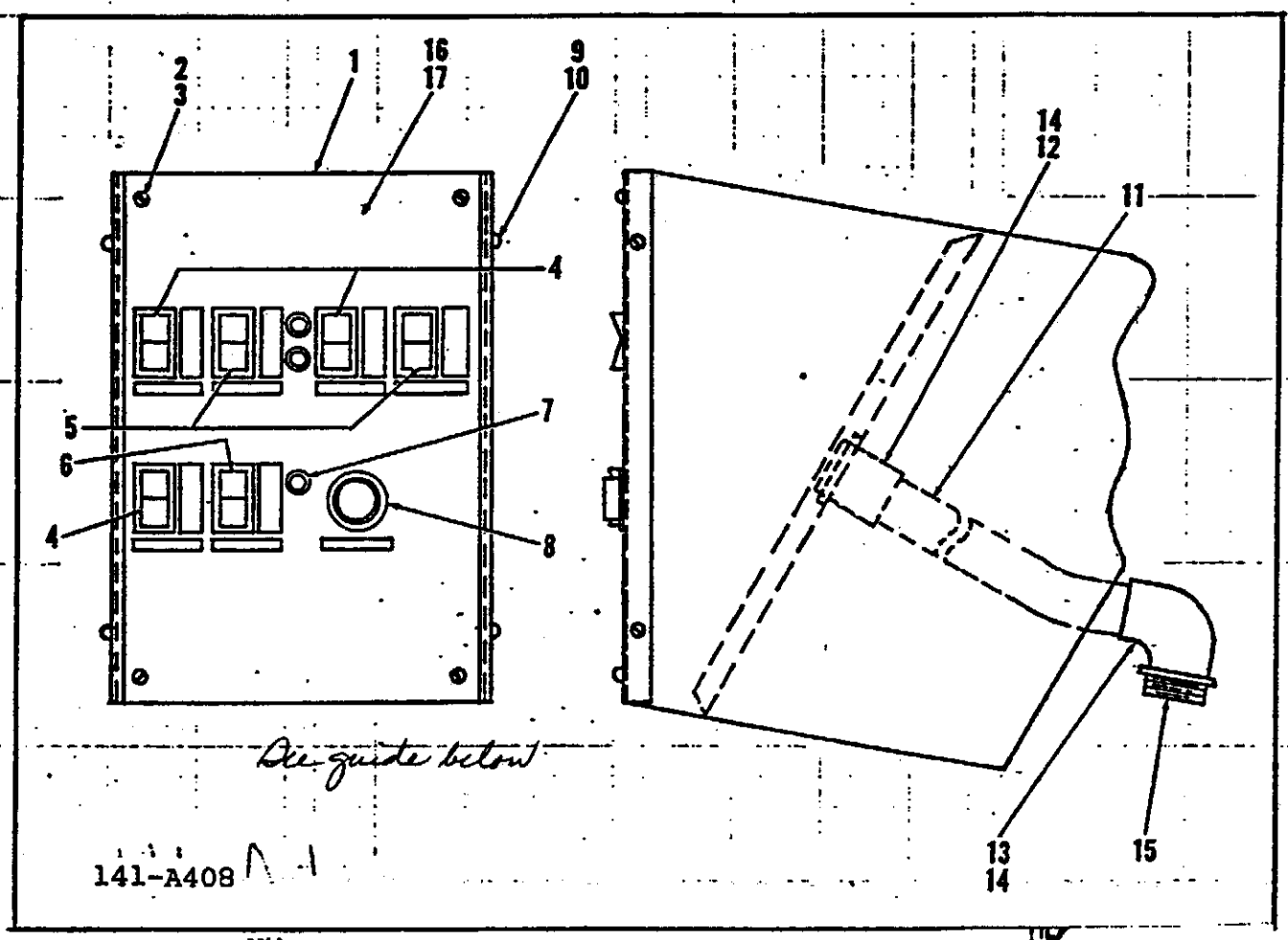


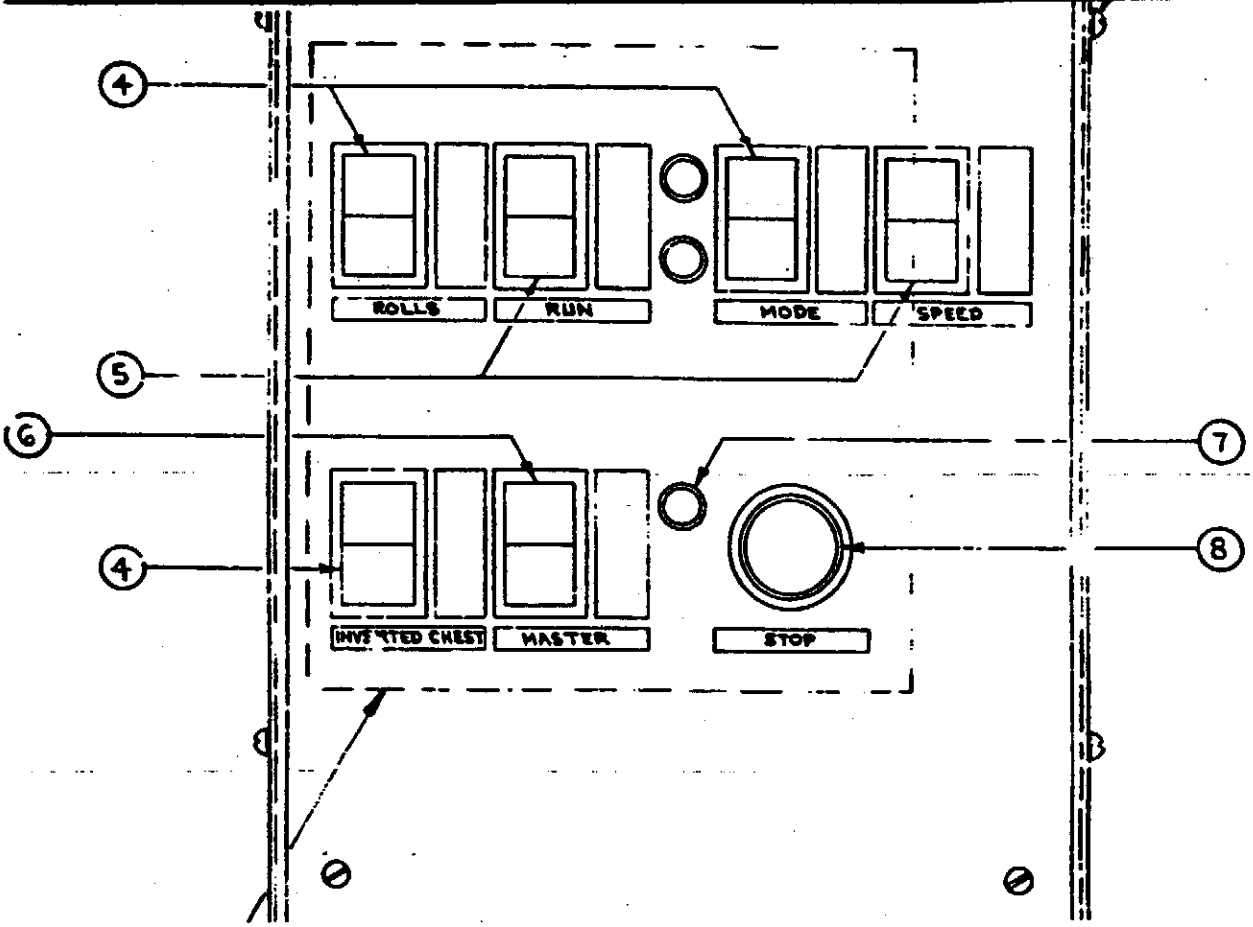
Figure B-18. Solenoid Valve, Brake

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
18-1	C-77829	VALVE,Class 141 solenoid brake(A3DB2127)(See figure B-16,item 3 for nha.)	81978	1
-2		RETAINER,nameplate (A99-009)	81978	1
-3		NAMEPLATE(A23-001)	81978	1
-4		HOUSING,1/2in.NPT conduit outlet(A07-002K)	81978	1
		(ATTACHING PARTS)		
		SCREW,(A99-004)	81978	2
		- - - * - - -		
-6	C-78178	YOKE ASSEMBLY(A20-003U)	81978	1
-7	C-80628	WASHER,coil(A99-006)	81978	1
-8	C-26871	COIL	81978	1
-9		PLATE,housing(A18-001M)	81978	1
		(ATTACHING PARTS)		
-10		SCREW(A99-003)	81978	2
		- - - * - - -		
-11	C-65564	SLEEVE ASSEMBLY 5/32in. orifice(A05-009)	81978	1
-12		FLANGE,o-ring(V1-2215)	81978	1
-13	C-56363	PLUNGER AND SPRING ASSEMBLY TYPES A3, A36, 5/32in orifice(A03-023)	81978	1
-14		BODY	81978	np
		NOTE WHEN ORDERING REPAIR PARTS SPECIFY VALVE NUMBER AND VOLTAGE. OBTAIN THIS DATA FROM THE NAMEPLATE (3, FIGURE		





Die guide below



ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
19---	141-A408	CONTROL ASSEMBLY(all voltages/ 3ph/50-60cy w/ inverted chest		ref
-1	141-6746	COVER,control	02432	1
-2	C-60018	SCREW,rd hd self tapping 10x1/2in.lg cad.pl		4
-3	C-43275	WASHER,internal (10)	78189	4
-4	C-69448	SWITCH,rolls mode and inverted chest(TILA61)	73559	3
-5	C-79625	SWITCH,run and speed (TIGM6M)	73559	2
-6	C-68859	SWITCH,master(TIGG51)	73559	1
-7	C-42346	LIGHTS,pilot(1060-A62)		3
-8	C-19847	PUSHBUTTON,stop(BJQ2J)	23826	1
-9	C-62748	SCREW,rd hd mach 1/4-20x1/2 in.lg cad.pl		4
-10	C-43276	WASHER,internal 1/4	78189	4
-11	M-92621	CONDUIT,flexible steel 1 in.		5 ft
-12	C-22864	FITTING,flexible straight 1 in.		1
-13	C-22822	ELBOW,1 in. 90° flexible fitting		1
-14	C-37156	INSULATION,1 in. anti-short		2
-15	M-99553	WIRE,16 awm 105°C black control		75 ft
-16	10-1406	NAMEPLATE,control w/o inverted chest	02432	1
-17	10-1407	NAMEPLATE,control w/ inverted chest	02432	1

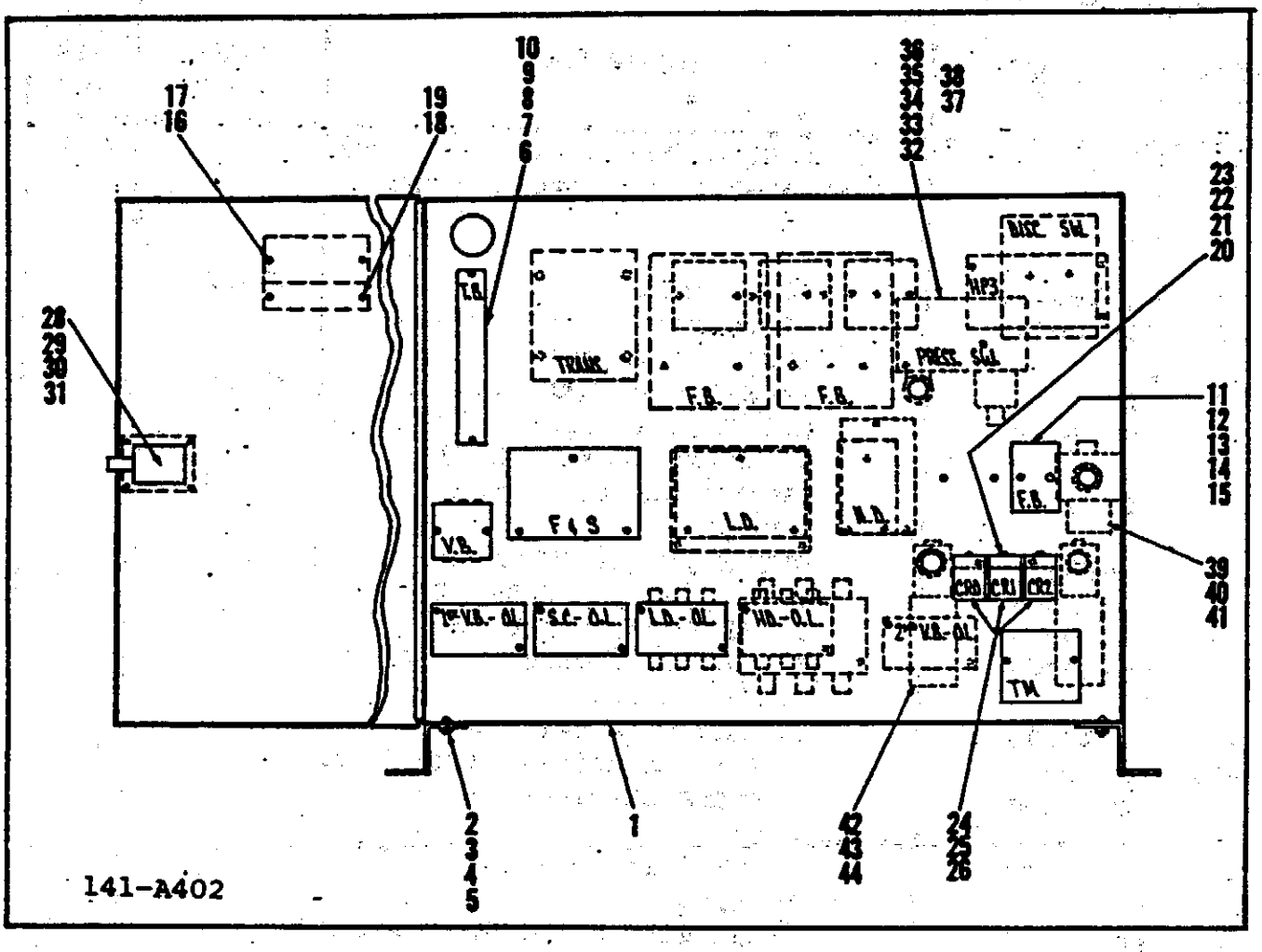


Figure B-20. Control, Electrical (Parts Common to all voltages/ Phase/Cycle and hp for Class 141)

NOTE

PARTS LISTED AND ILLUSTRATED IN FIGURE B-20 ARE CONTAINED IN ALL ELECTRICAL CONTROLS. THESE PARTS ARE COMMON TO ANY VOLTAGE, PHASE, AND CYCLE. FIGURE 20, HOWEVER, IS NOT A COMPLETE ELECTRICAL CONTROL. THE PARTS LISTED IN FIGURE B-20 WHEN COMBINED WITH EITHER FIGURE B-21, B-22, B-23, AND EITHER B-24 OR B-25 LIST AND ILLUSTRATE ALL THE PARTS USED IN A SINGLE ELECTRICAL CONTROL.

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
20--	141-A402	CONTROL,electrical(parts common to all voltage/phase/cycle and hp for Class 141		
-1	141-06130	ENCLOSURE,electrical control	02432	1
-2	141-6743	LEG,enclosure	02432	2
		(ATTACHING PARTS)		
-3	C-62619	SCREW,rd hd mach 1/4-20x3/4 in.lg		4
-4	C-43209	WASHER,lock 1/4		4
-5	C-48023	NUT,jam 1/4-20		4
		- - - * - - -		
-6	C-70901	BLOCK,terminal(22000)		21
-7	C-70902	END PIECE(24000)		1
		(ATTACHING PARTS)		
-8	C-61384	SCREW,rd hd mach 8-32x1/2in. lg cad.pl		2
-9	C-43226	WASHER,internal	78189	2
-10	C-48127	NUT,hex.hd 8-32		2
		- - - * - - -		
-11	C-17244	BLOCK,fuse(F30A2)		1
-12	C-31688	FUSETRON(FRN	71400	2
		(ATTACHING PARTS)		
-13	C-61384	SCREW,rd hd mach 8-32x1/2in. lg		2
-14	C-43226	WASHER,internal	78189	2
-15	C-48127	NUT,hex.hd 8-32		2
		- - - * - - -		
-16	10-100	NAMEPLATE,(ALMI)	02432	1
		(ATTACHING PARTS)		
-17	C-61667	SCREW,self tapping 6x5/16in. lg		2
		- - - * - - -		
-18	10-101	NAMEPLATE(electrical)	02432	1
		(ATTACHING PARTS)		
-19	C-61667	SCREW,self tapping 6x5/16in. lg		2
		- - - * - - -		
-20	141-1814	BRACKET,relay	02432	1
		(ATTACHING PARTS)		
-21	C-61185	SCREW,rd hd mach 10-24x1/2 in.lg		2
-22	C-43275	WASHER,internal (10)	78189	2

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
20-23	C-48117	NUT,hex.hd 10-24		2
		- - - * - - -		
-24	C-58455	RELAY(P AND B 11AY)	01121	3
		(ATTACHING PARTS)		
-25	C-61257	SCREW,rd hd mach 8-32x1/4 in.lg		
-26	C-43226	WASHER,internal(8)	78189	
		- - - * - - -		
-27	C-99827	WIRE,12 ga 105°C 19 strd black(not shown)		
-28	C-42717	CATCH (4859)	19220	1
		(ATTACHING PARTS)		
-29	C-61334	SCREW,rd hd mach 6-32x1/4in. lg		4
-30	C-43267	WASHER,internal (6)	78189	4
-31	C-48126	NUT,hex.hd 6-32		4
		- - - * - - -		
-32	2226-0504	SWITCH,pressure	92578	1
-33	C-46348	NIPPLE,1/2 chase		1
-34	C-28299	ELBOW,short 1/2-90°		
		(ATTACHING PARTS)		
-35	C-61384	SCREW,rd hd mach 8-32x1/2in. lg		2
-36	C-43226	WASHER,internal (8)	78189	2
-37	C-48127	NUT,hex.hd 8-32		2
-38	C-43051	LOCKNUT, 1/2		2
		- - - * - - -		
-39	C-77829	VALVE,brake solenoid(A5DB-2127)(For breakdown see figure B-18.)	81978	1
-40	C-46348	NIPPLE, 1/2 chase		1
-41	C-43051	LOCKNUT, 1/2		1
-42	C-77911	VALVE,rolls 4-way solenoid (H935D32150)(For breakdown see figure B-17.)		1
-43	C-46348	NIPPLE,1/2 chase		1
-44	C-43051	LOCKNUT, 1/2		1

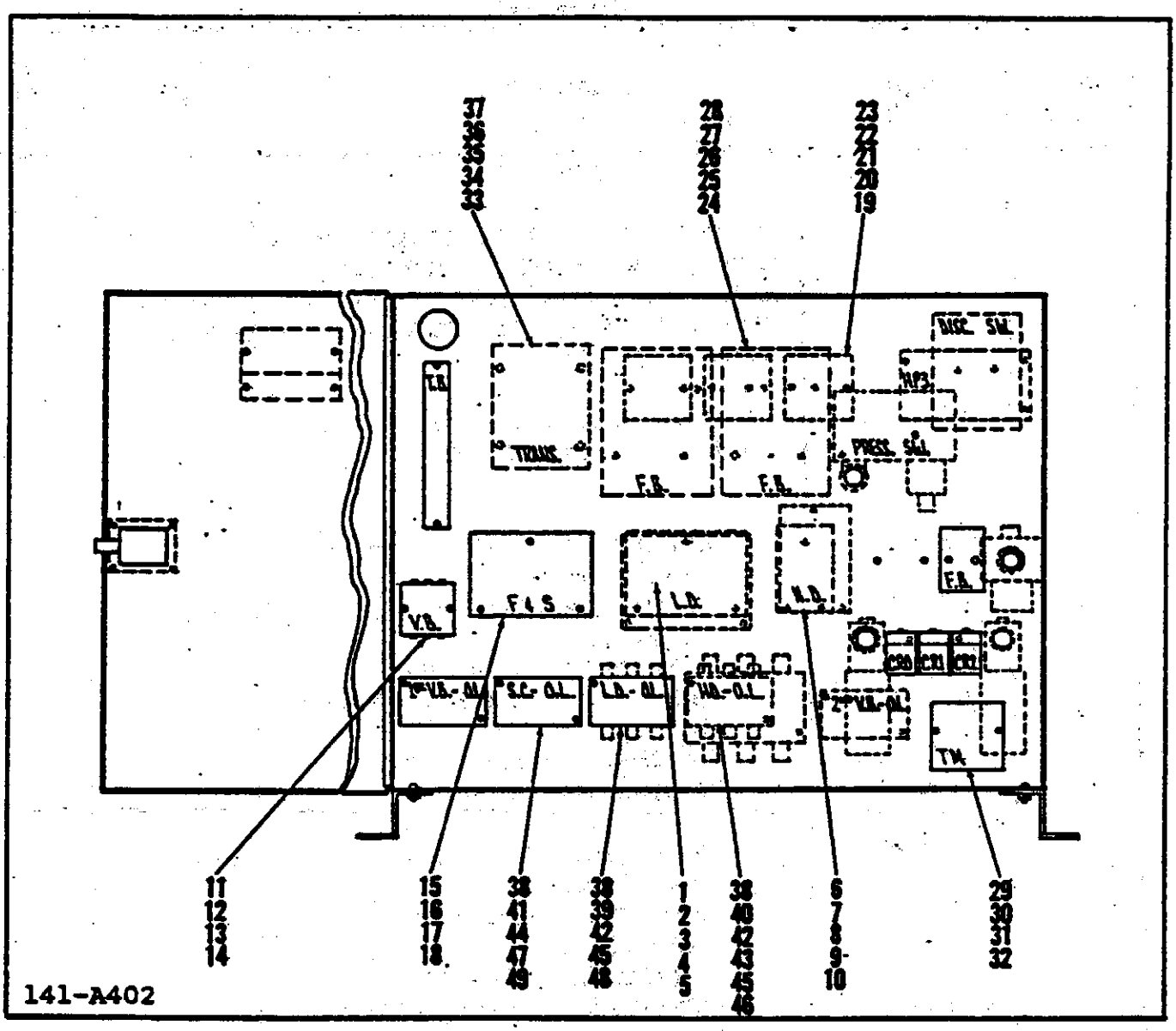


Figure B-21. Control, Electrical (7-1/2hp/all Voltages/3ph/60cy)

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
		NOTE THE FOLLOWING PARTS LISTED, WHEN COMBINED WITH THE COMMON PARTS LIST FIGURE B-20 AND EITHER B-23 OR B-24 COMPRISE A COMPLETE ELECTRICAL CONTROL WITHOUT OPTIONS.		
21--	141-A402	CONTROL,electrical 7-1/2 hp all voltages/3ph/60cy		ref
-1	C-57889	CONTACTOR,low-high drive (44CD30AG)	23826	1
-2	C-25007	CONTACT,auxiliary(49D221252) (49D221252)	23826	1
		(ATTACHING PARTS)		
-3	C-61094	SCREW,rd hd mach 10-24x3/4in. lg cad.pl		3
-4	C-43275	WASHER,internal (10)	78189	3
-5	C-48117	NUT,hex.hd 10-24		3
		- - - * - - -		
-6	C-57890	CONTACTOR, H2 drive (42CD35AG)	23826	1
-7	C-25008	CONTACT,high auxiliary (49D221251)	23826	1
		(ATTACHING PARTS)		
-8	C-61094	SCREW,rd hd mach 10-24x3/4 in.lg cad.pl		3
-9	C-43275	WASHER,internal(10)	78189	3
-10	C-48117	NUT,hex.hd 10-24		3
		- - - * - - -		
-11	C-69599	CONTACTOR,vacuum blower (41NA30AG-B)		1
		(ATTACHING PARTS)		
-12	C-61262	SCREW,rd hd mach 8-32x1-1/8 in.lg cad.pl		2
-13	C-43226	WASHER,internal (8)	78189	2
-14	C-48127	NUT,hex.hd 8-32		2
		- - - * - - -		
-15	C-57887	CONTACTOR,speed changer (44BD30AG)	23826	1
		(ATTACHING PARTS)		
-16	C-61094	SCREW,rd hd mach 10-24x3/4in lg		3

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
21 -17	C-43275	WASHER,internal (10)		3
-18	C-48117	NUT,hex.hd 10-24		3
		- - - * - - -		
-19	C-17245	FUSEBLOCK,motor and aux. equipment(F30A3)(used only on 208-220-240voltages		2
-20	C-31612	FUSETRONS,motor and aux. equipment(FRN15)(used only on 208-220-240 voltages)		3
		(ATTACHING PARTS)		
-21	C-61384	SCREW,rd hd mach 8-32x1/2in. lg		3
-22	C-43226	WASHER,internal (8)	78189	3
-23	C-48127	NUT,hex.hd 8-32		3
		- - - * - - -		
-24	C-17341	FUSEBLOCK,motors and aux. equipment(6F30A3)(used only on 440-480-550-600 voltages)		2
-25	C-31586	FUSETRONS,aux.equipment (FRS10)(used only on 440-480-550-600 voltages)		3
		(ATTACHING PARTS)		
-26	C-61384	SCREW,rd hd mach 8-32x1/2in. lg		4
-27	C-43226	WASHER,internal (8)	78189	4
-28	C-48127	NUT,hex.hd 8-32		4
		- - - * - - -		
-29	C-71504	TIMER,14 sec.240v/60cy(DA11-031)	27780	1
		(ATTACHING PARTS)		
-30	C-61384	SCREW,rd hd mach 8-32x1/2in. lg cad.pl		2
-31	C-43226	WASHER,internal (8)	78189	2
-32	C-48127	NUT,hex.hd 8-32		2
		- - - * - - -		
-33	C-73104	TRANSFORMER,type SXO(used only on 440-480 voltages)		1
-34	C-73101	TRANSFORMER,type SXO(used only on 550-600 voltages)		
		(ATTACHING PARTS)		
-35	C-61185	SCREW,rd hd mach 10-24x1/2 in.lg		4
-36	C-43275	WASHER,internal (10)	78189	4
-37	C-48117	NUT,hex.hd 10-24		4
		- - - * - - -		

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
21-38	C-57656	RELAY,overload(815BOV16)	01121	3
-39	C-22035	COILS,low drive(N-36)(used only on 208 voltages)	01121	3
-40	C-21088	COILS,high drive(N-39)(used only on 208 voltages)	01121	3
-41	C-21289	COILS,speed changer(N-9) (used only on 208 voltages)	01121	3
-42	C-21085	COILS,low drive(N-35)(used only on 220-240 voltages)	01121	3
-43	C-21087	COILS,high drive(N-38)(used only on 220-240 voltages)	01121	3
-44	C-21068	COILS,speed changer(N-8) (used only on 220-240 voltages)	01121	3
-45	C-21079	COILS,low drive(N-28)(used only on 440-480/550-600 voltages)	01121	3
-46	C-21082	COILS,high drive(N-31)(used only on 440-480 voltages)	01121	3
-47	C-21369	COILS,speed changer(N-2) (used only on 440-480 voltages)	01121	3
-48	C-22030	COILS,low drive(N-25)(used only on 550-600 voltages)	01121	3
-49	C-21435	COILS,speed changer(N-1) (used only on 550-600 voltages)	01121	3
-50	M-99543	WIRE,speed changer black 14 ga 105°C (not shown)(used on all voltages		20 ft
-51	M-99569	WIRE,low and high drive black 10 ga 105°C(not shown) (used only on 208-220-240 voltages)		20 ft
-52	M-99827	WIRE,low drive black 12 ga 105°C(not shown)(used only on 220-240 voltages)		5 ft

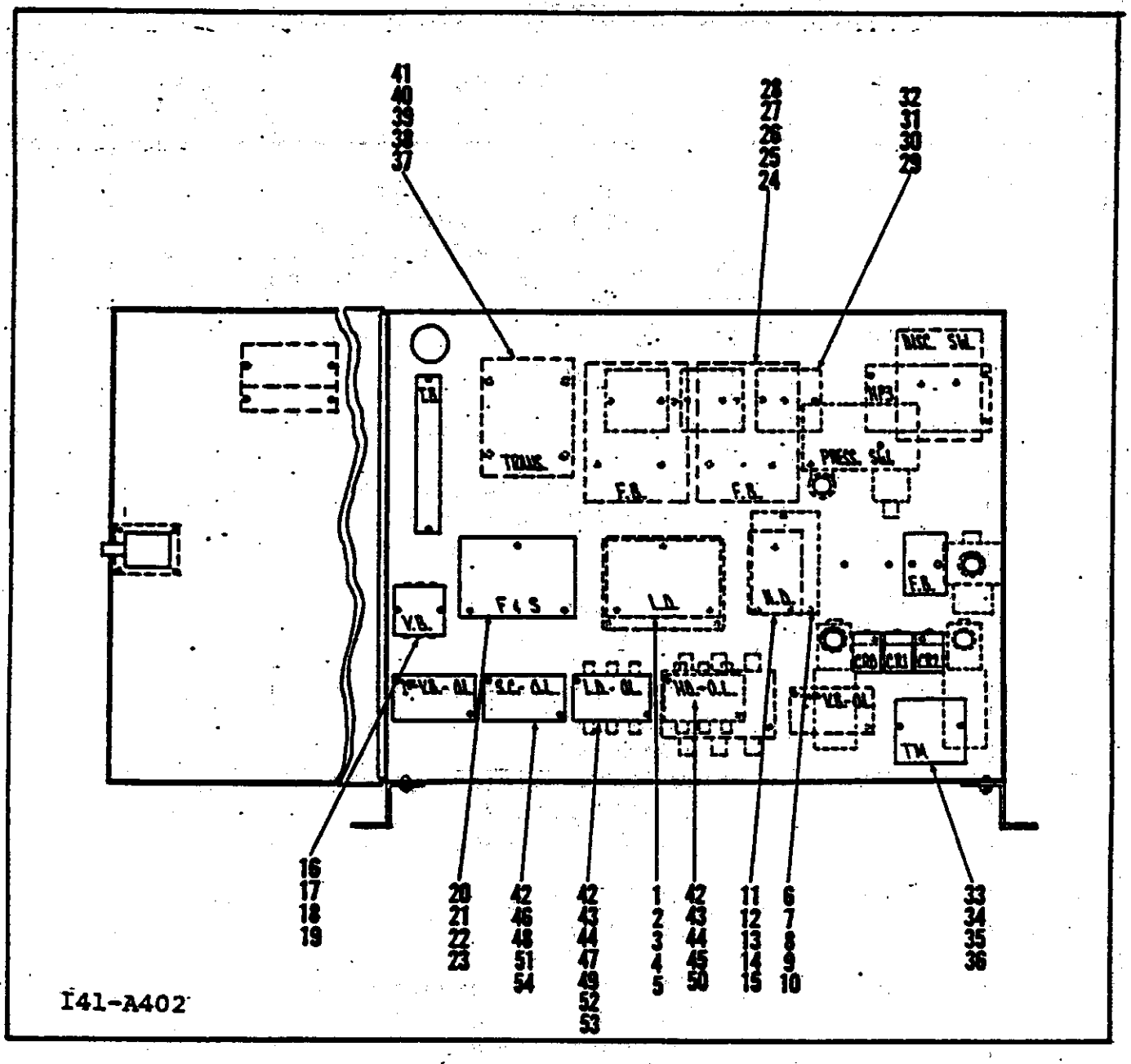


Figure B-22. Control, Electrical (15hp/all voltages/3ph/60cy)

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
		NOTE THE FOLLOWING PARTS LISTED WHEN COMBINED WITH THE COMMON PARTS LIST FIGURE B-20, AND EITHER B-23 OR B-24 COMPRISE A COMPLETE ELECTRICAL CONTROL WITHOUT OPTIONS.		
22 --	141-A402	CONTROL,electrical 15hp all voltages/3ph/60cy		ref
-1	C-57889	CONTACTOR,low-high drive (44CD30AG)	23826	1
-2	C-25007	CONTACT,aux.(49D221252) (ATTACHING PARTS)		
-3	C-61094	SCREW,rd hd mach 10-24x3/4 in.lg		3
-4	C-43275	WASHER,internal(10)	78189	3
-5	C-48117	NUT,hex.hd 10-24		3
		- - - * - - -		
-6	C-57891	CONTACTOR,H2 drive(42ED35AG) (used only on 208/220-240 voltages)	23826	1
-7	C-25008	CONTACT,aux.high(49D221251) (ATTACHING PARTS)	23826	1
-8	C-61094	SCREW,rd hd mach 10-24x3/4 in.lg		3
-9	C-43275	WASHER,internal(10)	78189	3
-10	C-48117	NUT,hex.hd 10-24		3
		- - - * - - -		
-11	C-57890	CONTACTOR,H2 drive(42CD35AG) (used only on 440-480/ 550-600 voltages)	23826	1
-12	C-25008	CONTACT,aux.high(49D221251) (ATTACHING PARTS)		1
-13	C-61094	SCREW,rd hd mach 10-24x3/4in lg		
-14	C-43275	WASHER,internal	78189	3
-15	C-48117	NUT,hex.hd 10-24		3
		- - - * - - -		
-16	C-69599	CONTACTOR,vacuum blower(41 NA30AG-B) (ATTACHING PARTS)		1
-17	C-61262	SCREW,rd hd mach 8-32x1-1/8 in.lg cad.pl		2
-18	C-43226	WASHER,internal (8)	78189	2
-19	C-48127	NUT,hex.hd 8-32		2
		- - - * - - -		

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
22-20	C-57887	CONTACTOR,speed changer(44 BD30AG)		1
		(ATTACHING PARTS)		
-21	C-61094	SCREW,rd hd mach 10-24x3/4 in.lg		3
-22	C-43275	WASHER,internal (10)		3
-23	C-48117	NUT,hex.hd 10-24		3
		- - - * - - -		
-24	C-17341	FUSEBLOCK,motors and aux. equipment(6F30A3)(used only on 440-480/550-600 voltages)		2 2
-25	C-31586	FUSETRONS,aux equipment (FRS10)		3
		(ATTACHING PARTS)		
-26	C-61384	SCREW,rd hd internal 8-32x 1/2in.lg		4
-27	C-43226	WASHER,internal (8)	78189	4
-28	C-48127	NUT,hex.hd 8-32		4
		- - - * - - -		
-29	~~C-17245~~ 123416	FUSEBLOCK,motor and aux equipment(F30A3)(used only on 208/220-240 voltages)		2
-30	C-31612	FUSETRONS,aux.equipment (FRN15)		3
		(ATTACHING PARTS)		
-31	C-61384	SCREW,rd hd mach 8-32x1/2in. lg		3
-32	C-43226	WASHER,internal (8)	78189	3
		- - - * - - -		
-33	C-71504	TIMER,14 sec 240v/60cy(DA11-031)	27780	1
		(ATTACHING PARTS)		
-34	C-61384	SCREW,rd hd mach 8-32x1/2in. lg cad.pl		2
-35	C-43226	WASHER,internal (8)	78189	2
-36	C-48127	NUT,hex.hd 8-32		2
		- - - * - - -		
-37	C-73104	TRANSFORMER,type SXO(used only on 440-480 voltages)		
-38	C-73101	TRANSFORMER,type SXO(used only on 550-600 voltages)		
		(ATTACHING PARTS)		
-39	C-61185	SCREW,rd hd mach 10-24x1/2in lg		4
-40	C-43275	WASHER,internal(10)	78189	4

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
22-41	C-48117	NUT,hex.hd 10-24		4
		- - - * - - -		
-42	C-57656	RELAY,overload(speed changer) (815BOV16)	01121	1
-43	C-57657	RELAY,overload(low drive high drive)(815COV16)(used only on 208/220-240 voltages)	01121	2
-44	C-21091	COILS,low high drive(N-44) (used only on 208/220-240 voltages)	01121	6
-45	C-21355	COILS,high drive(N-46)(used only on 208 voltages)	01121	3
-46	C-21289	COILS,speed changer(N-9) (used only on 208 voltages)	01121	3
-47	C-21090	COILS,low drive(N-43)(used only on 220-240 voltages)	01121	3
-48	C-21068	COILS,speed changer(N-8) (used only on 220-240 voltages)	01121	3
-49	C-22035	COILS,low drive(N-36)(used only on 440-480 voltages)	01121	3
-50	C-21087	COILS,high drive(N-38)(used only on 440-480 voltages)	01121	3
-51	C-21369	COILS,speed changer(n-2) (used only on 440-480 voltages)	01121	3
-52	C-21084	COILS,low drive(N-34)(used only on 550-600 voltages)	01121	3
-53	C-21085	COILS,high drive(N-35)(used only on 550-600 voltages)	01121	3
-54	C-21435	COILS,speed changer(n-1) (used only on 550-600 voltages)	01121	3
-55	M-99543	WIRE,14ga 105°C black(speed changer)(not shown)		20 ft
-56	M-99838	WIRE,6ga 90°C black(high drive)(used only on 208/220-240 voltages)(not shown)		10 ft
-57	M-99552	WIRE,8ga 90°C black(low drive)(not shown)(used only on 208/220-240 voltages)		10 ft
-58	M-99569	WIRE,10ga 105°C black(low and high drive)(used only on 440-480 voltages)		10 ft

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
22-59	M-99827	WIRE,12ga 105°C black(low and high drive)(not shown) (used only on 550-600 voltages)		10 ft

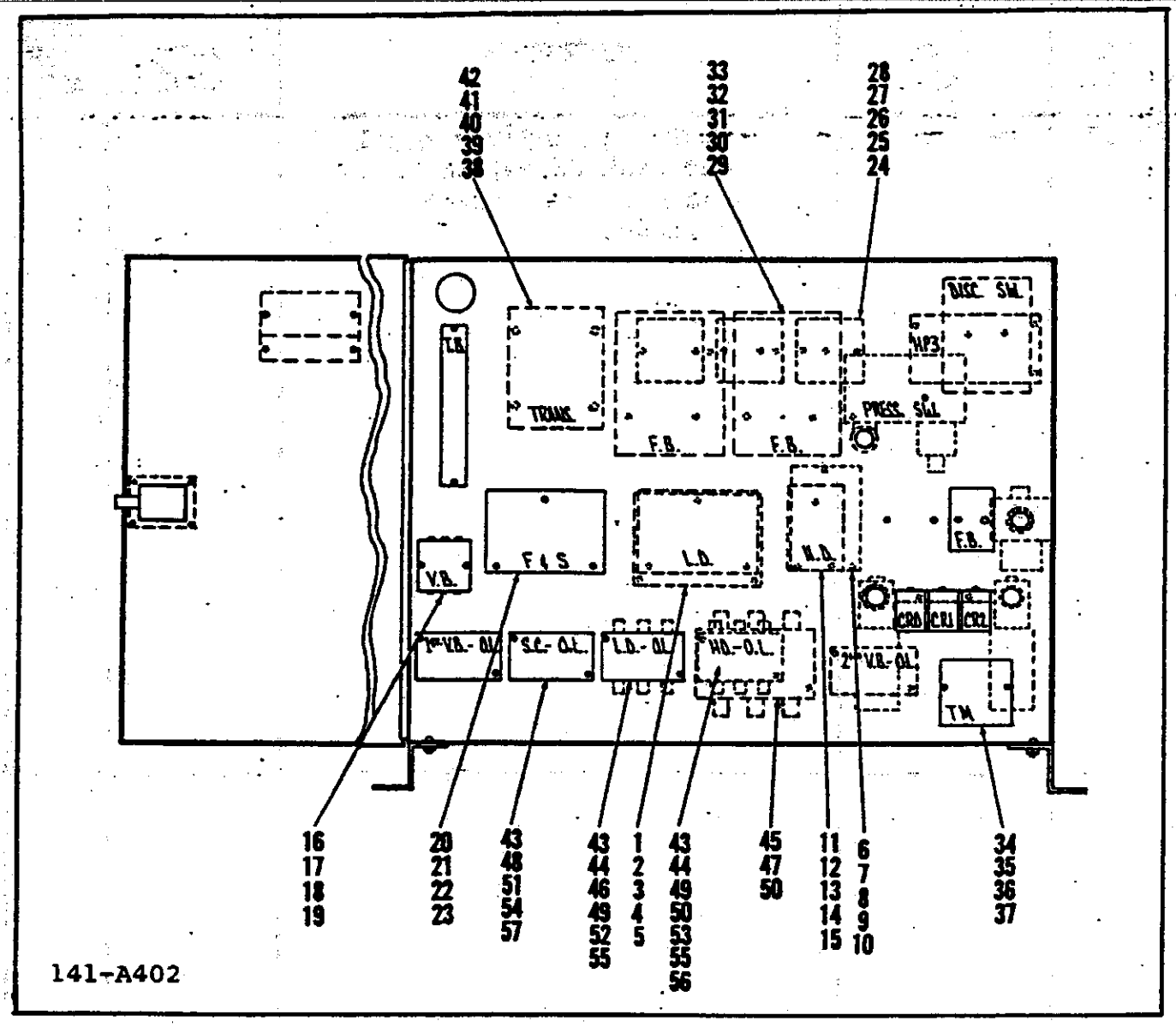


Figure B-23. Control, Electrical (20hp/all voltages/3ph/60cy)

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
		NOTE THE FOLLOWING PARTS LISTED, WHEN COMBINED WITH THE COMMON PARTS LIST FIGURE B-20, AND EITHER FIGURE B-23 OR B-24 COMPRISE A COMPLETE ELECTRICAL CONTROL WITHOUT OPTIONS.		
23--	141-A402	CONTROL, electrical 20hp all		ref
-1	C-57892	voltages/3ph/60cy		
-1	C-57892	CONTACTOR,low-high drive	*	1
-2	C-25010	CONTACT,aux (2200-EB2)	*	1
		(ATTACHING PARTS)		
-3	C-61094	SCREW,rd hd mach 10-24x3/4 in.lg cad.pl		3
-4	C-43275	WASHER,internal(10)	78189	3
-5	C-48117	NUT,hex.hd 10-24		3
		- - - * - - -		
-6	C-57891	CONTACTOR,H2 drive(42ED35AG) (used only on 208/220-240 voltages)	23826	1
-7	C-25011	CONTACT,high aux(2200-EB1)	*	1
		(ATTACHING PARTS)		
-8	C-61094	SCREW,rd hd mach 10-24x3/4 in.lg cad.pl		3
-9	C-43275	WASHER,internal (10)		3
-10	C-48117	NUT,hex.hd 10-24		3
		- - - * - - -		
-11	C-57890	CONTACTOR,H2 drive(42CD35AG) (used only on 440-480/550-600 voltages)		3
-12	C-25011	CONTACT,high aux(2200-EB1)		1
		(ATTACHING PARTS)		
-13	C-61094	SCREW,rd hd mach 10-24x3/4 in.lg cad.pl		3
-14	C-43275	WASHER,internal(10)		3
-15	C-48117	NUT,hex.hd 10-24		3
		- - - * - - -		
-16	C-69599	CONTACTOR,vacuum blower (4INA30AG-B)		1
		(ATTACHING PARTS)		
-17	C-61262	SCREW,rd hd mach 8-32x1-1/8 in.lg cad.pl		2
-18	C-43226	WASHER,internal (8)	78189	2
-19	C-48127	NUT,hex.hd 8-32		2
		- - - * - - -		

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
23-20	C-57887	CONTACTOR, speed changer (44BD30AG)	23826	1
		(ATTACHING PARTS)		
-21	C-61094	SCREW, rd hd mach 10-24x3/4 in.lg		3
-22	C-43275	WASHER, internal (10)		3
-23	C-48117	NUT, hex.hd 10-24		3
		- - - * - - -		
-24	C-17245	FUSEBLOCK, motor and aux equipment (F30A3) (used only on 208/220-240 voltages)		2
-25	C-31612	FUSETRONS, aux equipment (FRN-15)		3
		(ATTACHING PARTS)		
-26	C-61384	SCREW, rd hd mach 8-32x1/2 in.lg cad.pl		2
-27	C-43226	WASHER, internal (8)		2
-28	C-48127	NUT, hex.hd 8-32		2
		- - - * - - -		
-29	C-17341	FUSEBLOCK, motors and aux equipment (6F30A3) (used only on 440-480/550-600 voltages)		2
-30	C-31586	FUSETRONS, aux equipment (FRS-10) (used only on 440-480/550-600 voltages)		
		(ATTACHING PARTS)		
-31	C-61384	SCREW, rd hd mach 8-32x1/2 in.lg cad.pl		4
-32	C-43226	WASHER, internal (8)	78189	4
-33	C-48127	NUT, hex.hd 8-32		4
		- - - * - - -		
-34	C-71504	TIMER, 14 sec 240v (DA11-031)	27780	1
		(ATTACHING PARTS)		
-35	C-61384	SCREW, rd hd mach 8-32x1/2in. lg cad.pl		2
-36	C-43226	WASHER, internal (8)	78189	2
-37	C-48127	NUT, hex.hd 8-32		2
		- - - * - - -		
-38	C-73104	TRANSFORMER, type SXO (used only on 440-480 voltages)		
-39	C-73101	TRANSFORMER, type SXO (used only on 550-600 voltages)		
		(ATTACHING PARTS)		
-40	C-61185	SCREW, rd hd mach 10-24x1/2 in.lg		4

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
23-41	C-43275	WASHER,internal (10)	78189	4
-42	C-48117	NUT,hex.hd 10-24		4
		- - - * - - -		
-43	C-57656	RELAY,overload speed changer (815BOV16)	01121	1
-44	C-57657	RELAY,overload low drive (815COV16)(used only on 208/220-240 voltages)	01121	1
-45	C-57658	RELAY,overload high drive (815DOB16)(used only on 208/220-240 voltages)	01121	1
-46	C-21092	COILS,low drive(N-45)(used only on 208 voltages)	01121	3
-47	C-26932	COILS,high drive(N-70)(used only on 208 voltage)	01121	3
-48	C-21289	COILS,speed changer(N-9) (used only on 208 voltage)	01121	3
-49	C-21091	COILS,low drive(N-44)(used only on 220-240 voltages)	01121	3
-50	C-21355	COILS,high drive(N-46) (used only on 220-240 voltages)	01121	3
-51	C-21068	COILS,speed changer(N-8) (used only on 220-240 voltages)	01121	3
-52	C-21086	COILS,low drive(N-37)(used only on 440-480 voltages)	01121	3
-53	C-21089	COILS,high drive(N-41)(used only on 440-480 voltages)	01121	3
-54	C-21369	COILS,speed changer(N-2) (used only on 440-480 voltages)	01121	3
-55	C-21085	COILS,low drive(N-35)(used only on 550-600 voltages)	01121	3
-56	C-21087	COILS,high drive(N-38)(used only on 550-600 voltages)	01121	3
-57	C-21435	COILS,speed changer(N-1) (used only on 550-600 voltages)	01121	3
-58	M-99543	WIRE,speed changer 14ga 105°C black(not shown)		20 ft
-59	M-99838	WIRE,low drive 6ga 90°C black(not shown)(used only on 208/220-240 voltages)		10 ft

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
23-60	M-99576	WIRE,high drive 4ga 90°C black(not shown)(used only on 208 voltages)		5 ft
-61	M-99569	WIRE,low drive 10ga 105°C black(not shown)(used only on 440-480/550-600 voltages)		10 ft
-62	M-99552	WIRE,high drive 8ga 90°C black(not shown)(used only on 440-480 voltages)		5 ft
-63	M-99827	WIRE,low drive 12ga 105°C black(not shown)(used only on 550-600 voltages)		5 ft

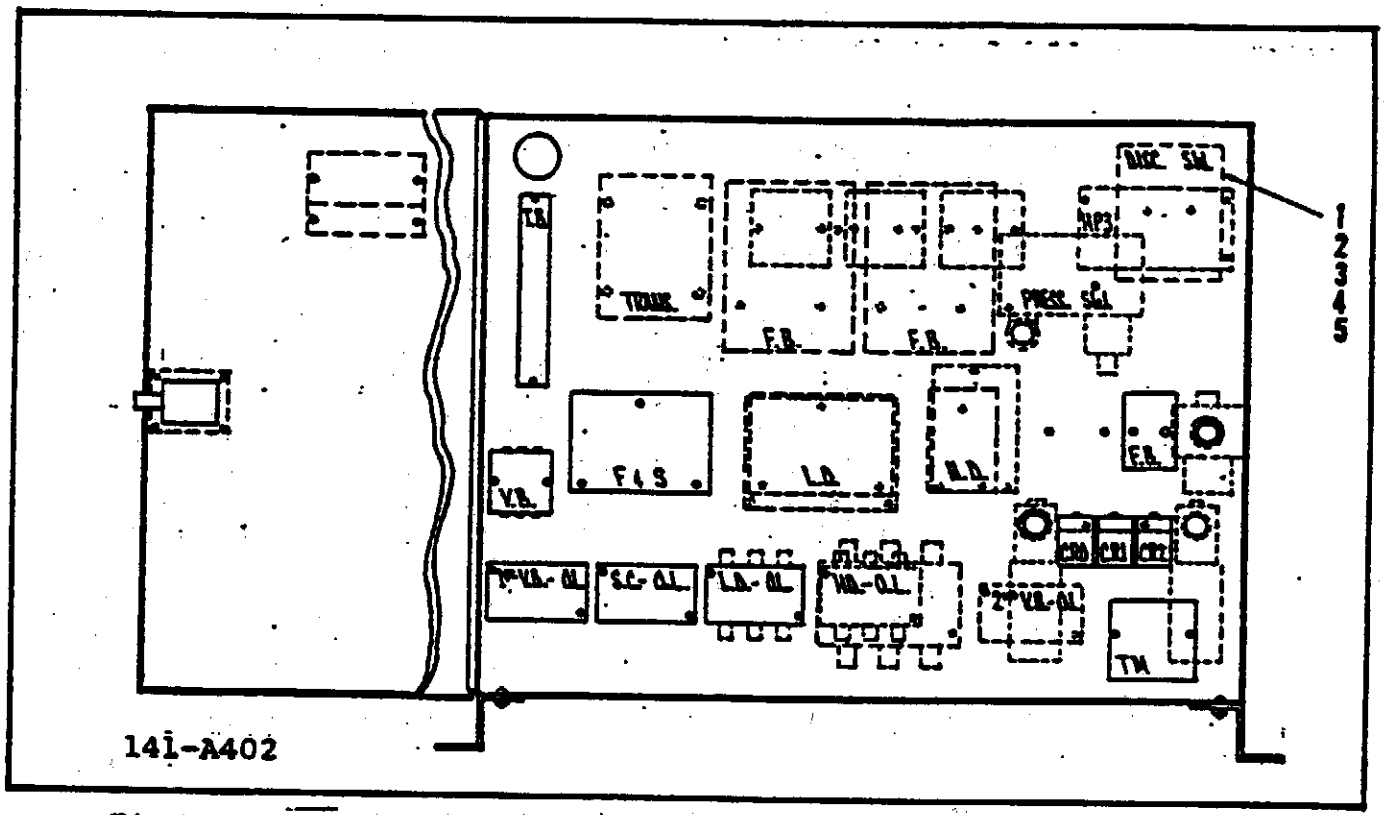


Figure B-24. Control, Electrical with disconnect switch (all voltages/3ph/60cy)

NOTE

THE FOLLOWING PARTS LISTED, WHEN COMBINED WITH THE COMMON PARTS LIST FIGURE B-20, AND EITHER FIGURE B-21, B-22, OR B-23 COMPRISE A COMPLETE ELECTRICAL CONTROL.

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
24--	141-A402	CONTROL,electrical w/ disconnect switch all voltages/3ph/60cy		ref
-1	C-79669	SWITCH,disconnect (THMC33-V)	93199	1
-2	C-79663	DOOR RING(343L483G1)	93199	1
-3	C-40510	NO FUSE KIT(THMC3300) (ATTACHING PARTS)	93199	1
-4	C-43275	WASHER,internal(10)	78189	2
-5	C-48035	NUT,hex.hd 10-32		2
		- - - * - - -		

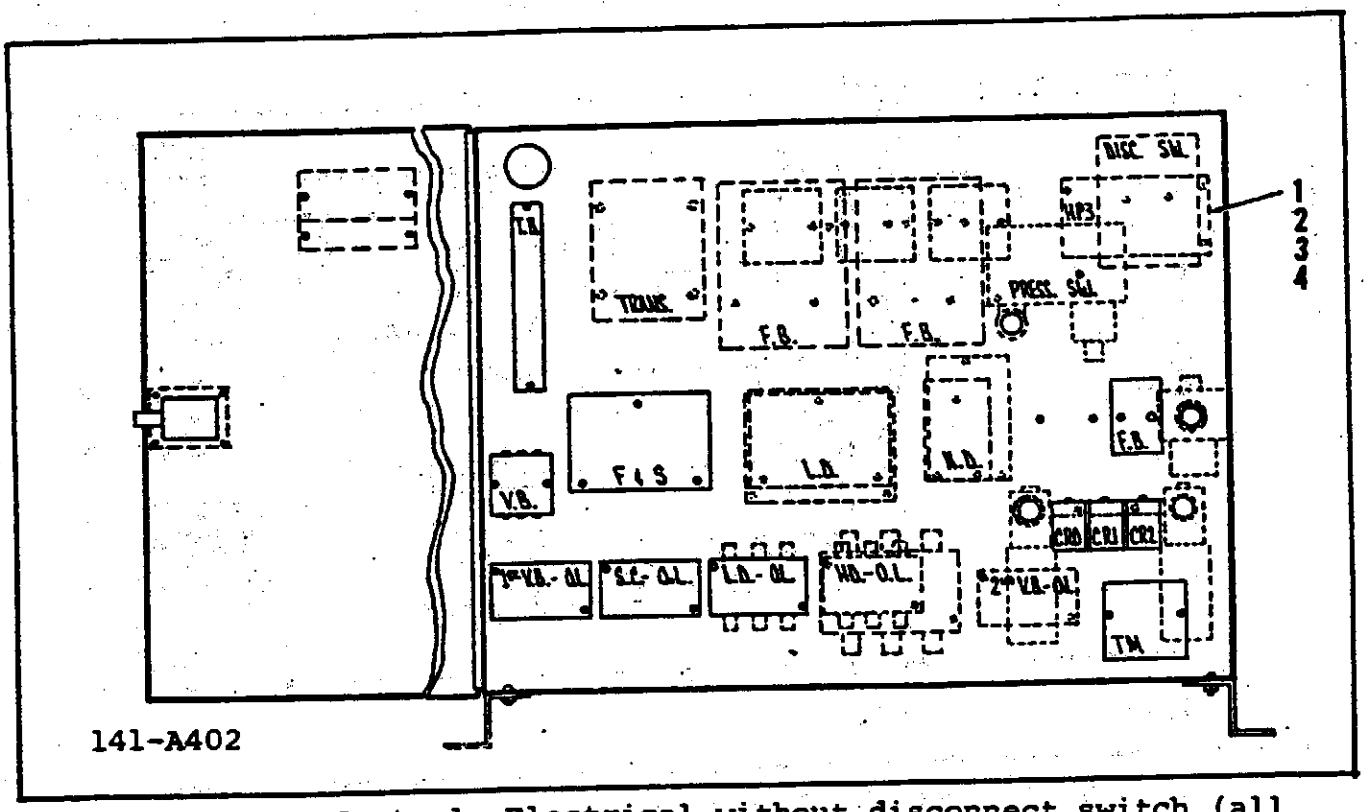


Figure B-25. Control, Electrical without disconnect switch (all voltages/3ph/60cy)

NOTE

THE FOLLOWING PARTS LISTED, WHEN COMBINED WITH THE COMMON PARTS LIST FIGURE B-20, AND EITHER FIGURE B-21, B-22, OR B-23 COMPRISE A COMPLETE ELECTRICAL CONTROL.

ITEM NO.	PART NO.	DESCRIPTION 1 2 3 4 5 6 7	MFRS. CODE	UNITS PER ASSY
25--	141-A402	CONTROL,electrical w/o disconnect switch all voltages/3ph/60cy		ref
-1	C-17270	BLOCK,terminal(HP3)		1
		(ATTACHING PARTS)		
-2	C-61271	SCREW,rd hd mach 10-24x7/8 in.lg cad.pl		3
-3	C-43275	WASHER,internal(10)	78189	3
-4	C-48117	NUT,hex.hd 10-24		3
		- - - * - - -		