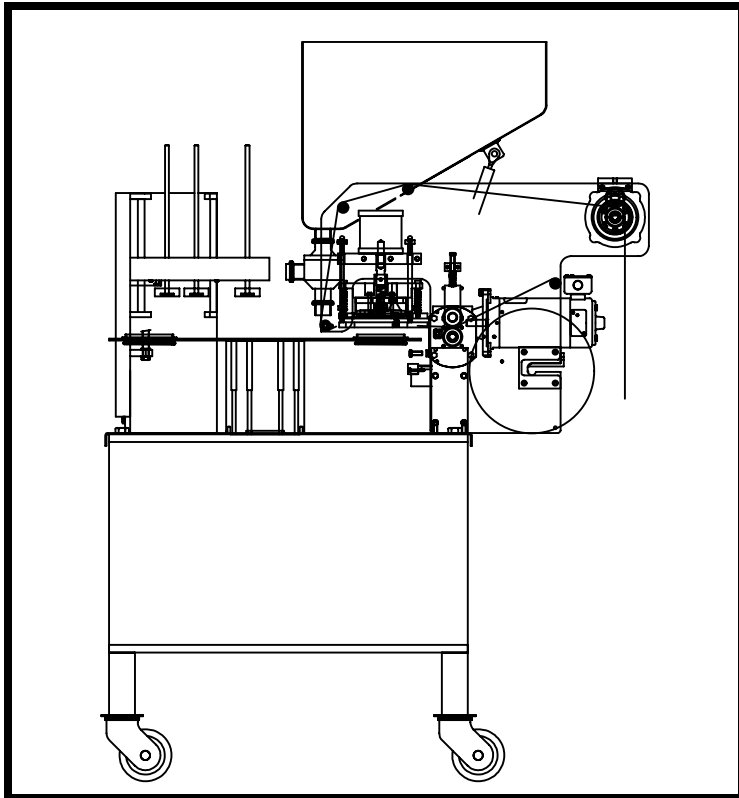


PI Holmatic
Filling and Sealing Systems



Model QC-32
Cup Filler

Packaging Technologies

807 West Kimberly Road
Davenport, Iowa 52806 U.S.A.
Phone (563) 391-1100

Manual Part No.: 074-32000-000

OPERATOR, SERVICE & PARTS

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FOREWORD

Although packaging industries are fairly well established, changes do occur. Over the years, ***Packaging Technologies*** has made improvements in its publications to keep pace with those changes.

This manual has been prepared to provide correct operating and maintenance procedures. Read and understand this manual before attempting operation, cleanup, or maintenance. Instructions in this manual are intended to guide your safe, efficient operation of the machine. Please pay particular attention to safety instructions.

We have tried to make this manual as complete and comprehensive as possible. It is now your responsibility to read and to adhere to the procedures, **CAUTIONS!**, **WARNINGS!**, and instructions.

If there is something in this manual you do not understand, cannot find, or is in error, contact the ***Packaging Technologies*** **Technical Publications Department** at (563) 391-1100.

Trademarks and registered trademarks indicated within this document are owned by their respective companies.

Throughout this manual, safety related information is displayed with a signal word. The signal word designates the level of hazard. The following examples explain the level of hazard connected with each signal word.

DANGER

DANGER statements refer to immediate hazards or unsafe practices which **WILL** result in severe personal injury or death; including extensive machine or property damage.

WARNING

WARNING statements refer to hazards or unsafe practices which **COULD** result in severe personal injury or death; including major machine or property damage.

CAUTION

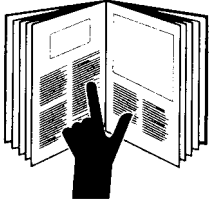
CAUTION statements refer to hazards or unsafe practices which **COULD** result in minor personal injury, or minor personal injury and damage to the machine or property.

IMPORTANT

IMPORTANT statements refer to special instructions to avoid unnecessary steps, avoid damage to parts, or to make a procedure easier. These statements are **NOT USUALLY** safety related.

SAFETY

Safety should be a constant concern of **EVERYONE**. This concern must not be taken lightly when working in or around any type of machinery. While normal safety precautions were taken in the design and manufacture of this machine, there are some potential safety hazards.



I M P O R T A N T

EVERYONE involved with the operation and maintenance of this machine should read and follow the instructions in this manual.

Operate the machine only as stated in this manual. Incorrect use of this machine can damage the machine or injure personnel.

Operating, service, and maintenance personnel should carefully read, understand and fully comply with all machine mounted warnings and instruction plates. Do not cover, paint, alter, deface or remove the plates from the machine. Replace all plates that become unreadable.

Only qualified personnel instructed in safety and all machine functions, should be entrusted to operate the machine.

The main electrical disconnect switch must be turned “OFF” and “LOCKED OUT” before servicing the machine.

The main air supply disconnect valve must be turned “OFF” and “LOCKED OUT” before servicing the machine.

ALWAYS replace the safety guards after servicing the machine. **NEVER** operate the machine with the safety guards removed -- **SERIOUS INJURY CAN RESULT!**

Before starting machine, make sure **EVERYONE** is clear of machine. Be certain machine is clear of any possible jams.

NEVER wear loose fitting clothing or jewelry when working around the machine, conveyors or related equipment.

PERSONS WITH LONG HAIR should wear a hat or net to prevent their hair from being caught in moving machinery.

SAFETY

When working with materials which are caustic, toxic or flammable, use extreme caution. Wear protective clothing and use adequate face protection. Follow the manufacturer's instructions.

NEVER CLIMB on the machine. Use a safe step ladder when making adjustments or installing components.

KEEP THE AREA AROUND THE MACHINE CLEAN AND DRY.

Filling toxic, irritating, volatile (fume producing), flammable, and/or bio-hazard substances **MAY EXPOSE YOUR PERSONNEL TO HEALTH RISKS**. Make the necessary installations, modifications, or procedure changes to ensure health and safety.

Avoid undue or repetitive bending to remove packaged product. Back strain or injury may result.

Avoid prolonged abnormal posture during periods of setup, cleanup, or service. Muscle strain and back related pain can result from prolonged exposure to unnatural posture.

Avoid back injury when lifting supplies and related components. Always lift using your legs. If the object is too heavy, get help!

Excessive heat (run away) of the heat seal in areas where toxic or volatile (fume producing) materials are present, can produce fire, explosion, or other health risks. Take proper steps to ensure personnel safety.

Electric motor surfaces can become quite hot to the touch. First degree burns to skin are possible if contact is made. **DO NOT** touch electric motor enclosures during or shortly after operation.

Wear adequate hearing protection while in the vicinity of the machine during operation. It is possible that prolonged exposure to noise levels generated by the machine during operation could have an affect on hearing.

If **ANY** machinery is to be operated in an area where combustible or explosive gases or materials may be present, check **FIRST** with your local authorities and your insurance carrier to determine applicable codes, regulations and appropriate safety measures.

SAFETY

DANGER

DO NOT reach into any of the top horizontal guard panel openings, or into the discharge area. Moderate to severe injury including burns, cuts, and amputation are highly possible. These openings are provided only for supply items to enter or finished product to exit.



WARNING

Only qualified electricians should work on the electrical components of this machine. To prevent bodily injury and machine malfunction, the machine must be electrically grounded in accordance with the 1999 National Electrical Code, Section 501-16, or the applicable sections of any later editions.

Power supplied to this machine must be of the proper voltage and frequency. Check the manufacturer's nameplate (located on the Control Enclosure) for electrical requirements before making any power connections. All electrical power connections must be made in accordance with the 1999 National Electrical Code, Section 501-6, or the applicable sections of any later editions.

Avoid directing the release of air pressure from the machine toward yourself or others. Loose material within the air lines can become imbedded beneath skin or cause eye injuries.

Use caution when touching or handling sheet metal parts along edges. Some edges may be sharp enough to cut.

NEVER reach into the machine when the machine is running. If product becomes entangled, **STOP** the machine.

DO NOT OVERRIDE ANY SAFETY INTERLOCKS ON THE MACHINE! SERIOUS OR FATAL INJURY MAY OCCUR!

Packaging or handling hot products (above 250° F [121° C]) is not recommended on this machine. Failure of product contact parts, resulting in spills, leaks, and subsequent burns to personnel may occur.

Packaging or handling toxic, irritating, volatile (fume producing), flammable, and/or biohazard products may expose your personnel to health risks. Such risks may affect and are not limited to, respiratory, nervous system, skin disorders, or other vital human functions. It is your responsibility to inform your personnel and take the proper steps to ensure their safety. Contact a professional familiar with the hazards you may encounter, and make the necessary installations, modifications, or procedure changes. Such installations may include but are not limited to special guarding, ventilation systems, and/or fire suppression systems. This machine is not designed nor intended to fill all such products. Therefore, further consideration by you is important.

Packaging or handling food related products, if not completely or properly cleaned from all contact surfaces of the machine, may pose a sanitary health hazard. Contact a professional familiar with the products and sanitary health hazards you may encounter, and make the necessary installations, modifications, or procedure changes. This machine is not designed nor intended to fill all food related liquids or products. Therefore, further consideration by you is important.

When packaging food-related products, use only edible lubricants on the machine.

If packaging food related products with this machine, avoid use and contact with oils and lubricants that could contaminate those products. Some oils and lubricants may be hazardous to humans.

If packaging food related products with this machine, **ALWAYS** thoroughly clean the machine to remove all product residue. Spoiled product serves as a host to a wide variety of bacterium and will contaminate fresh product if contact is made.

Clean the machine on a daily basis to avoid health hazards. See *Cleanup* on page 10-1.

The machine must be in good operating condition at all times. If any unusual sounds, smoke, heat, or damaged parts occur, turn the machine off. Report the condition to your supervisor immediately.

This machine is designed for installation, use, and operation in a classified non-hazardous location, free from explosive or flammable gasses, dusts, and vapors.

NEVER make adjustments while the machine is in operation.

SAFETY

Keep all wire covers and sealite connectors tight to prevent electrical shock.

WARNING

Customer supplied control devices and other components must meet or exceed the electrical requirements for the area in which they will be located. Failure to meet requirements could result in electrical shock or a serious fire.



WARNING

ELECTROCUTION SHOCK HAZARD

Servicing machine while standing on wet surface subjects personnel to increased electrical shock hazards. Such hazards may cause severe or fatal injury.

CAUTION

Do not touch drive motor or other energized device surfaces during or shortly after operation. Surface temperatures can cause a burn. Pull back reaction can lead to an impact injury with surrounding components.

There are live terminals even when the isolator is OFF. For complete isolation remove the power supply from the machine.

Know all machine stop methods before operating the machine, in case of an emergency.

Use proper shutdown procedures to stop the machine. The safety guards should only be used to stop the machine in an emergency.

Open the safety guard doors to stop the machine if unable to reach the **EMERGENCY STOP** or other stop switches.

ALWAYS replace the safety guards after working on the machine.

Illuminating lamps, if used, should be adjusted so light is not directed into the operator's eyes.

DANGER

Do not alter any Control Enclosure or electrical connections on the machine in any way. Also, do not connect external wiring with any wiring in the machine controls other than as shown on installation or wiring diagrams. Alterations to this system could defeat safety features resulting in malfunction of the machine and/or other serious hazards.

EXPOSED TERMINALS AND COMPONENTS INSIDE ELECTRICAL ENCLOSURES, THAT ARE ELECTRICALLY ENERGIZED, MAY CAUSE DEATH BY ELECTROCUTION, IF TOUCHED. Only qualified and properly trained personnel are to open the control cabinet door and work or replace components contained inside.

NEVER assume power is off. **ALWAYS** turn “OFF” and “LOCK OUT” the main electrical disconnect switch to the machine before attempting repairs, service, or other maintenance.

Check daily that all stopping devices (for example: **EMERGENCY STOP** and **CYCLE STOP** switches) and all guards are operating correctly; for example machine stops when devices are activated.



WARNING

Never bypass or otherwise defeat any safety device or interlock.

Never remove, override or change the settings of any electrical safety switches or devices to reduce the level of safety originally provided. SERIOUS OR FATAL INJURY MAY OCCUR!

Use caution around the filler area if filling a **HOT** product during production. Failure to use caution could result in scalds or burns.

Severe pinch, crush, and shear points exist beneath the top horizontal guard panel. **DO NOT reach through these openings under any circumstances.** Serious injury can result. These openings are provided for supply entry into the machine (cups, seals, lids, and product).

SAFETY



WARNING

Never attempt to correct a fault or malfunction of any description while the machine is in motion.

WARNING

The heat seal and tack seal air cylinders ram up when power to the machine is turned “off”. This can occur during a guard door opening. Stay clear of the heat and tack seal area during this phase to avoid a pinch point injury.

DANGER

Always keep hands out of the path of moving parts during operation. Severe cuts, broken bones, and/or amputation can occur requiring trauma medical attention.



WARNING

Heat seal adapters and the tack seal remain hot for some time after power is removed. Wear protective gloves when handling to avoid injury.



WARNING

Electrical power is not removed from the heat seal adapters or the tack seal when the guard doors are opened. Use caution when performing maintenance in this area to avoid injury.

-NOTICE-

ANY CHANGES TO THE MACHINE MAY REDUCE THE SAFETY LEVEL OF THE MACHINE. PRIOR TO MAKING ANY CHANGES, ALTERATIONS, OR MODIFICATIONS TO THE MACHINE, CONTACT THE *Packaging Technologies* ENGINEERING DEPARTMENT, REGARDING SUCH CHANGES

Do not allow lubricants to come in contact with the skin to avoid irritation. Always wear protective clothing and a barrier cream on exposed skin when handling lubricants. If lubricant comes in contact with skin, wash skin immediately with soap and water. If irritation persists, seek medical attention.

Wear safety glasses when working with lubricants to avoid contact with the eyes. If lubricant comes in contact with the eyes, rinse with water. If irritation persists, seek medical attention.

Do not inhale spray lubricants. Repeated or prolonged inhalation of spray may lead to respiratory problems. If symptoms persist, seek medical attention.

Do not swallow lubricants. If swallowed, seek medical advice. Do not induce vomiting.

Always dispose of lubricant waste in accordance with local health and safety regulations.

W A R N I N G

The lower portion of the machine contains various drive mechanisms and components. These pose various hazards that could result in broken bones, mild to severe cuts and abrasions, and in extreme cases, amputation.

Some of the hazards that exist in the lower portion of the machine are:

Actuating air cylinders (pinch, crush hazard)

Rotating shafts (cut, abrade hazard)

Rotating eccentrics (cut, abrade, pinch, crush, amputate hazard)

Timing belt and pulleys (pinch, crush, abrade hazard)

Transformer (burn hazard)

DO NOT OPERATE the machine with the lower guard panels removed.

SAFETY

Notes

SPECIFICATIONS

MACHINE FOOT PRINT

Width 36" (914.4 mm)
Depth 40" (1016 mm)
Height 65" (1651 mm)

NOTE: Dimensions do not include overhanging assemblies such as filler, heat seal, and lidder. See Figure 4-3 on page 4-5, Figure 4-4 on page 4-6, and Figure 4-5 on page 4-8 for overhanging assembly dimensions.

CONTAINER DISCHARGE HEIGHT

Without Casters 39" (990.6mm) High
With Casters 37" (939.8 mm) High

SERVICE REQUIREMENTS

Air Supply (Clean & Dry). 80 - 90 psi / 15 CFM
(560 kPa - 630 kPa)
Maximum air supply not to exceed 150psi
Electrical Requirements 110 V / Single Phase / 60 Hz

SPECIFICATIONS

Notes

PRINCIPLE OF OPERATION

The **QC-32 Cup Filler** has twelve stations with a cup dropper (A), filler (B), roll stock heat seal unit (C) or pre-cut foil pick 'n' place unit (G), pre-cut foil "Tamper-Evident" heat seal unit (H), spin lidder unit (D), and container discharge unit (E).

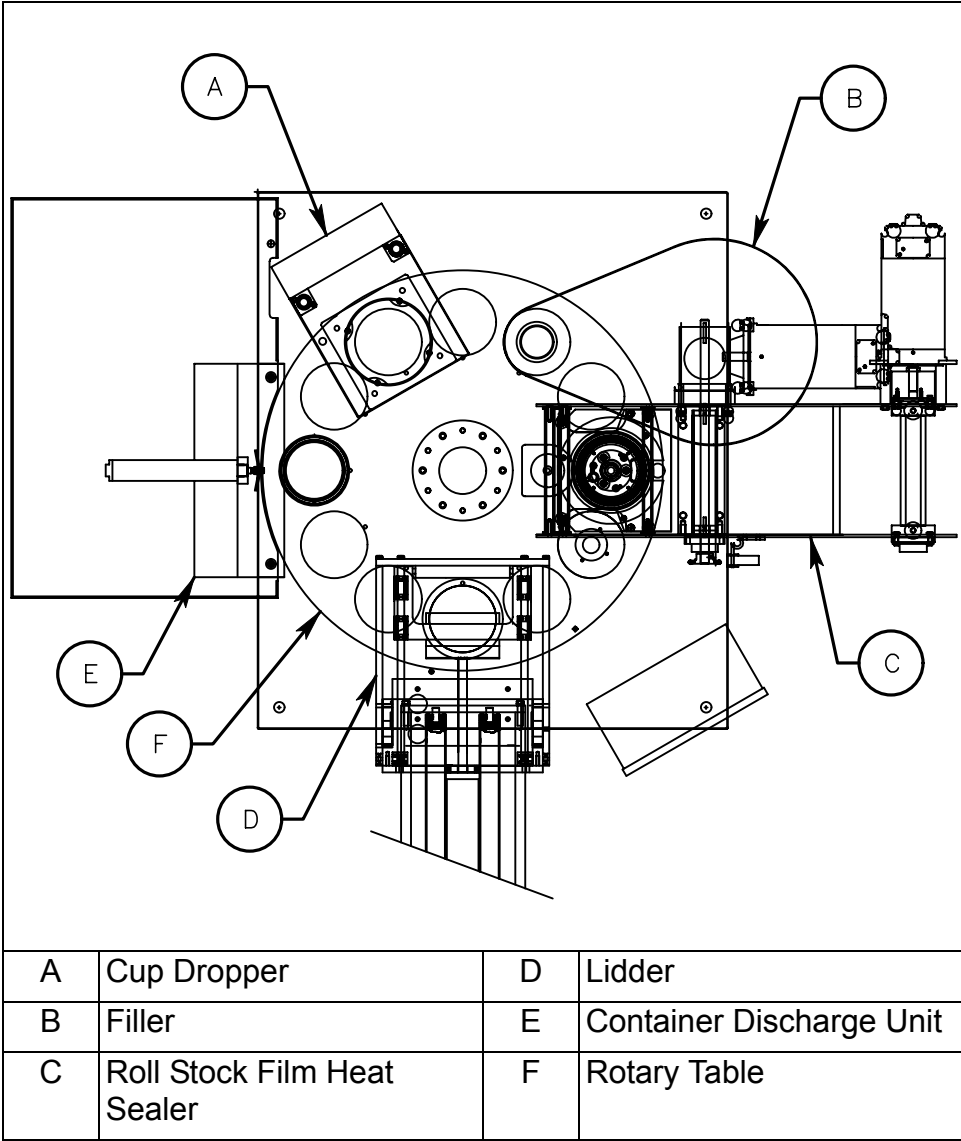


Figure 3-1: Top View Layout - with Film Heat Seal

PRINCIPLE OF OPERATION

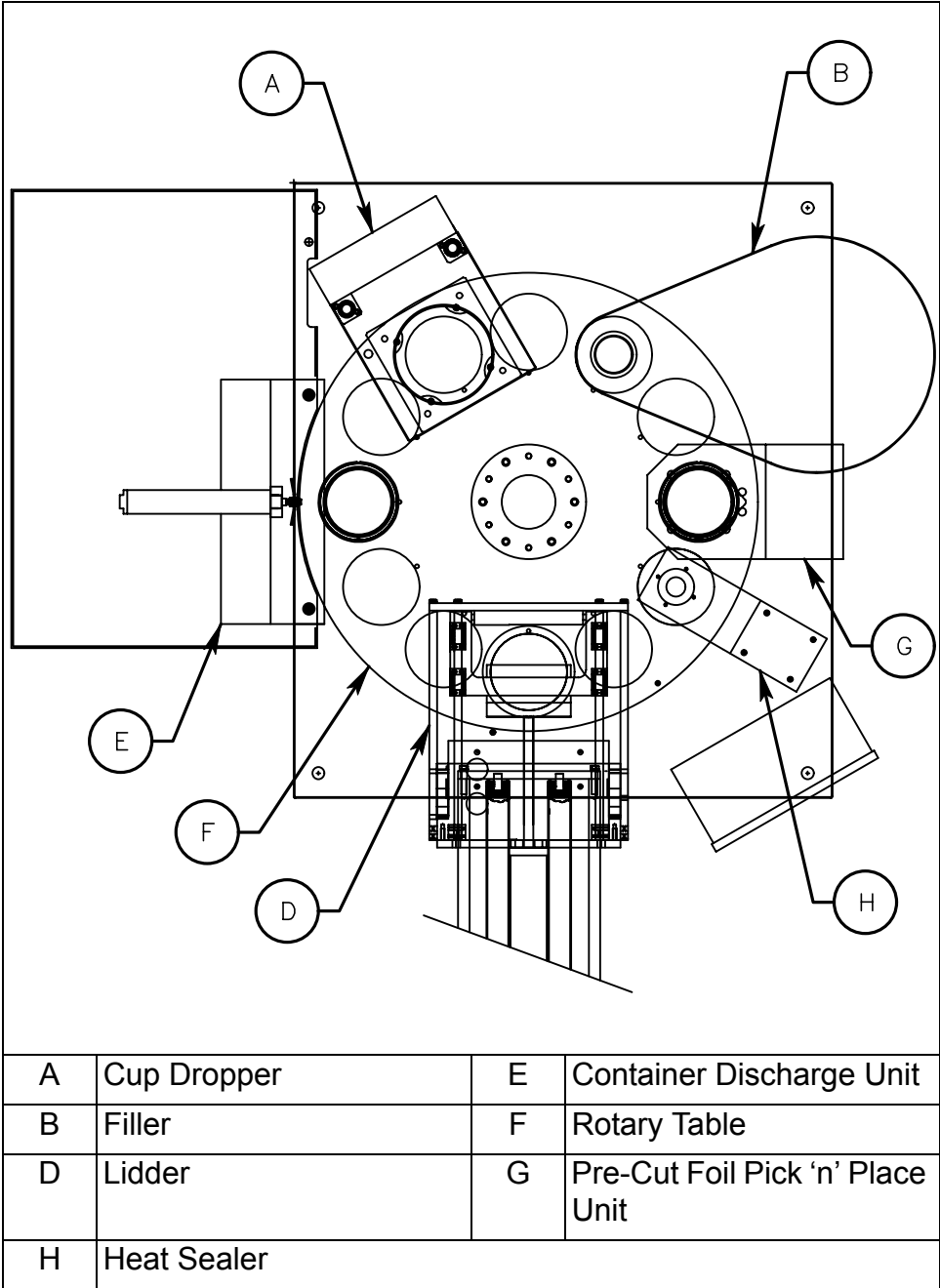


Figure 3-2: Top View Layout - with Foil Seal

The **QC-32 Cup Filler** is a fast, efficient, automatic packaging system that runs with minimal operator and maintenance experience. The basic machine has mechanical and pneumatic devices and will only require occasional minor maintenance. Machine logic is PLC controlled, providing a “no cup-no function” control.

PRINCIPLE OF OPERATION

This machine fills a container and seals with either roll stock film or a pre-cut foil peelable seal, for a wide variety of products, including salads, puddings, cultured dairy products, and liquids.

The **QC-32 Cup Filler** has been designed for simplicity of operation and maintenance.

Cups stacked in the Cup Dropper (A), drop one at a time into a station opening in the Rotary Table (F). The Rotary Table indexes in a clockwise direction transferring the cup below the Filler (B).

Once the empty cup is beneath the Filler (B) a sensor signals the Filler to open and dispense the product, filling the cup.

Next the Rotary Table (F) transfers the filled cup to the Roll Stock / Heat Sealer Unit (C) where either roll stock film or a pre-cut seal is placed and sealed onto the filled cup.

NOTE: Pre-cut foil is a two station operation where a foil seal is placed at one station, then indexed to the next station where a pre-cut foil is sealed on the cup. Roll stock film is a single station operation where the film is cut and sealed to the cup at one station.

Following the seal operation, the filled and sealed cup is transferred to the Lidder (D), where a lid is positioned and snapped into place onto the container.

Finally, the Rotary Table (F) rotates to deliver the finished cup to the Container Discharge Unit (E). Here, an air cylinder raises a pad to lift the cup up and clear of the Rotary Table so the cup can be swept onto either an optional accumulation table or a customer supplied take-away conveyor.

PRINCIPLE OF OPERATION

Notes

INSTALLATION

Carefully follow the instructions below to unload the machine and check for damage. Contact the delivery carrier immediately if damage is noticed. Hold all shipping papers for the **Packaging Technologies** Service Representative.

If your machine needs to be stored for a period of time prior to installation, keep it in an area void of traffic, dust, and moisture. Keep the machine covered with a plastic sheet or canvas.

UNLOADING THE MACHINE

The machine will be shipped from **Packaging Technologies** either on a skid or, if required, in a crate. Observe the gross weight, orientation markings if in a crate, and lifting points shown in Figure 4-1 before unloading.

1. Stand the crate or skid on its base (as indicated by the orientation markings) on a firm, flat floor with adequate space for maneuvering.
2. Remove the top, front and side panels of the transport crate, or unwrap if on a skid.
3. Remove loosely packed items from the skid.



CAUTION

Check the gross weight before lifting any boxes or packages and use appropriate lifting and moving devices to prevent damage to the machine.

4. Remove the transport plates used to secure the machine to the skid. The transport plates are located on the bottom of the machine and must be removed to install the leveling screws.

INSTALLATION

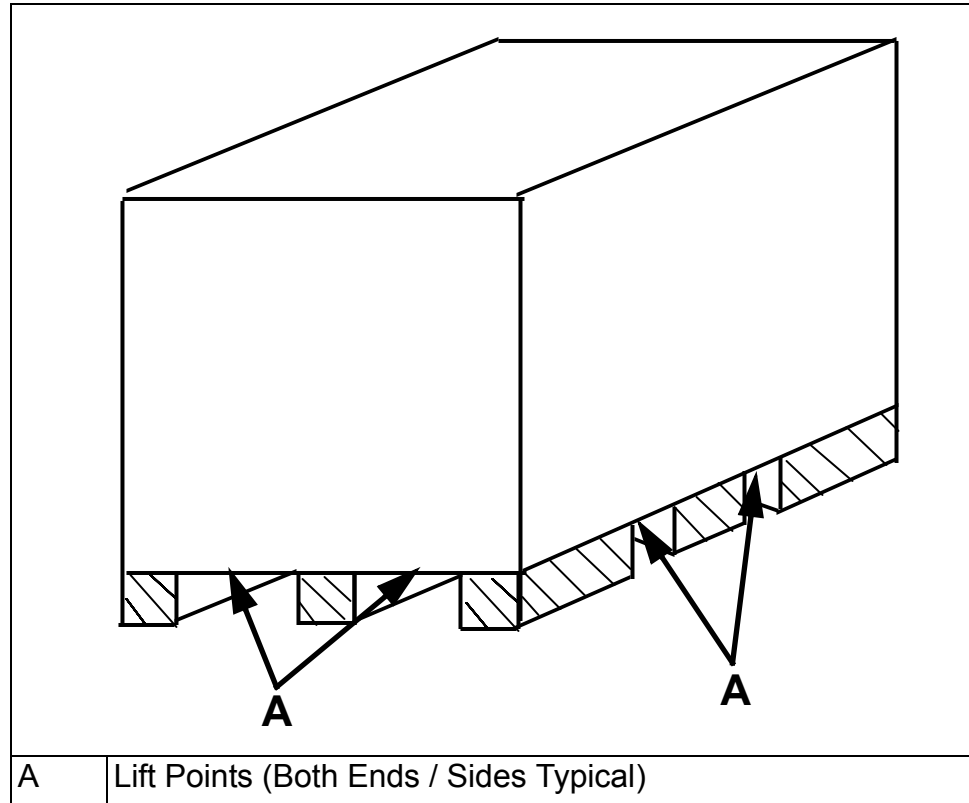


Figure 4-1: Lift Points

LIFTING AND MOVING THE MACHINE

Perform the following procedure to lift and move the machine.



IMPORTANT

When lifting and moving the machine, always use a fork lift or similar transport equipment with proper lifting capacity. Lift the machine to allow just enough height for transporting.



CAUTION

Ensure the machine is stable before lifting to prevent damage to the machine.

Do not remove the restraints until the equipment is securely located in its final position to prevent damage to the machine.

INSTALLATION

1. Support the weight of the machine under the base of the equipment.
2. Secure the machine to the fork lift by using ropes, slings, or chains.
3. Transport the machine to the prepared position. Remove the restraints after the equipment is securely in position.

LEVELING THE MACHINE

Perform the following to level the machine.

1. Remove the weight of machine as mentioned previously in *Lifting and Moving the Machine* on page 4-2.
2. Adjust the legs to allow for floor variation, as shown in Figure 4-2 on page 4-4.

NOTE: The machine base (A) must be horizontal with the weight evenly distributed over all of the support legs.

3. Loosen locknut (C).
4. Turn foot (D) to raise or lower machine.
5. Tighten locknut (C) to secure adjustment.
6. Repeat at remaining legs until machine is level.

INSTALLATION

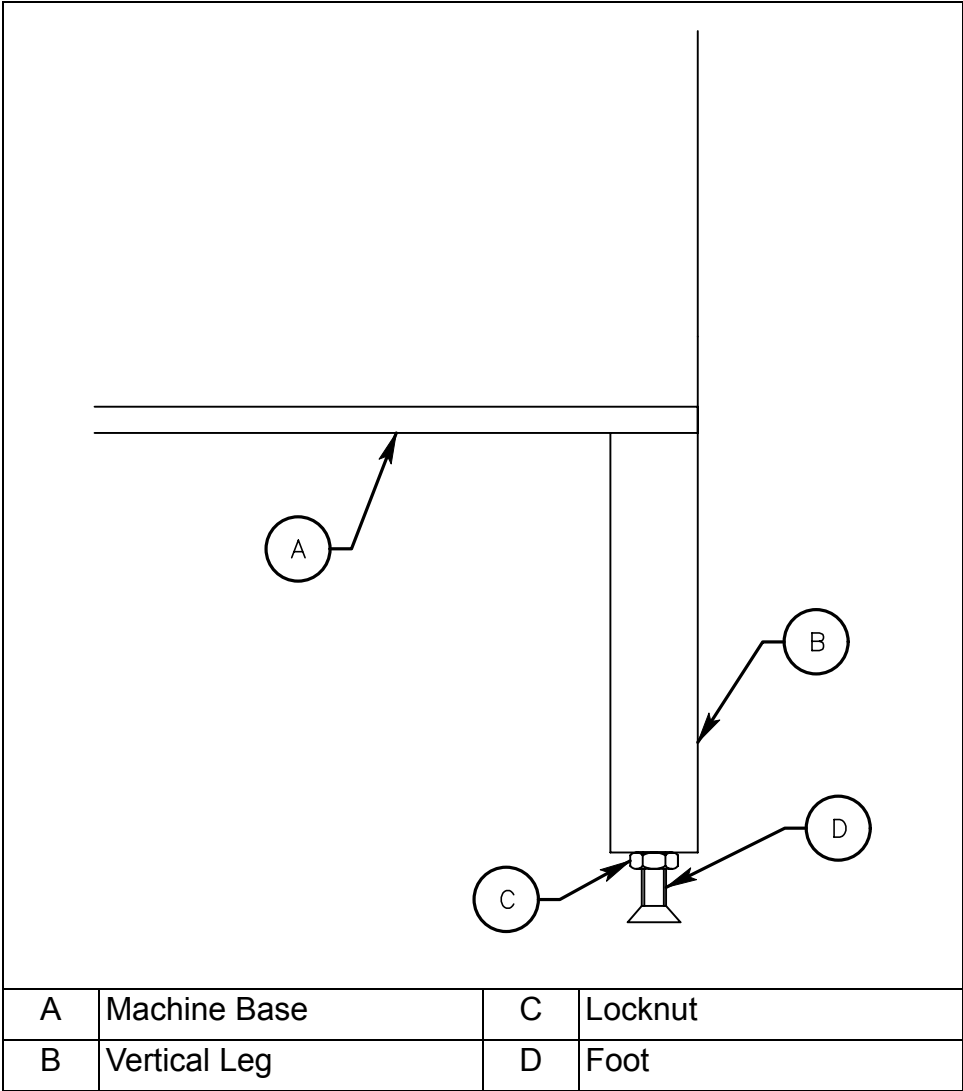


Figure 4-2: Leveling Screw

INSTALLATION

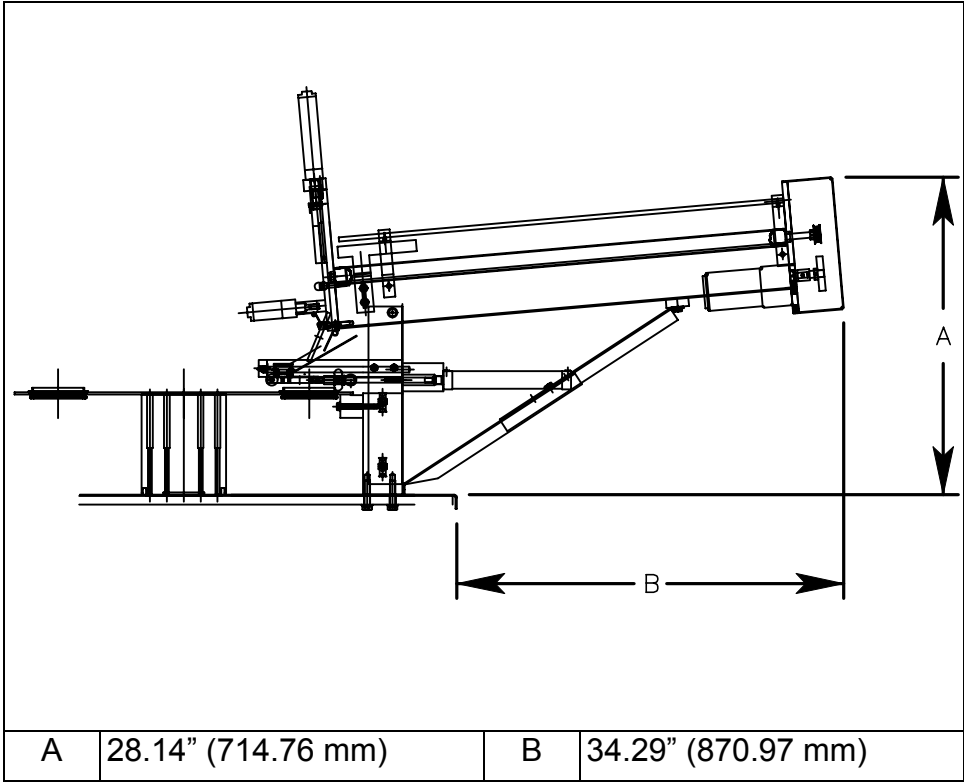


Figure 4-3: Installation Drawing - Lidder Assembly

INSTALLATION

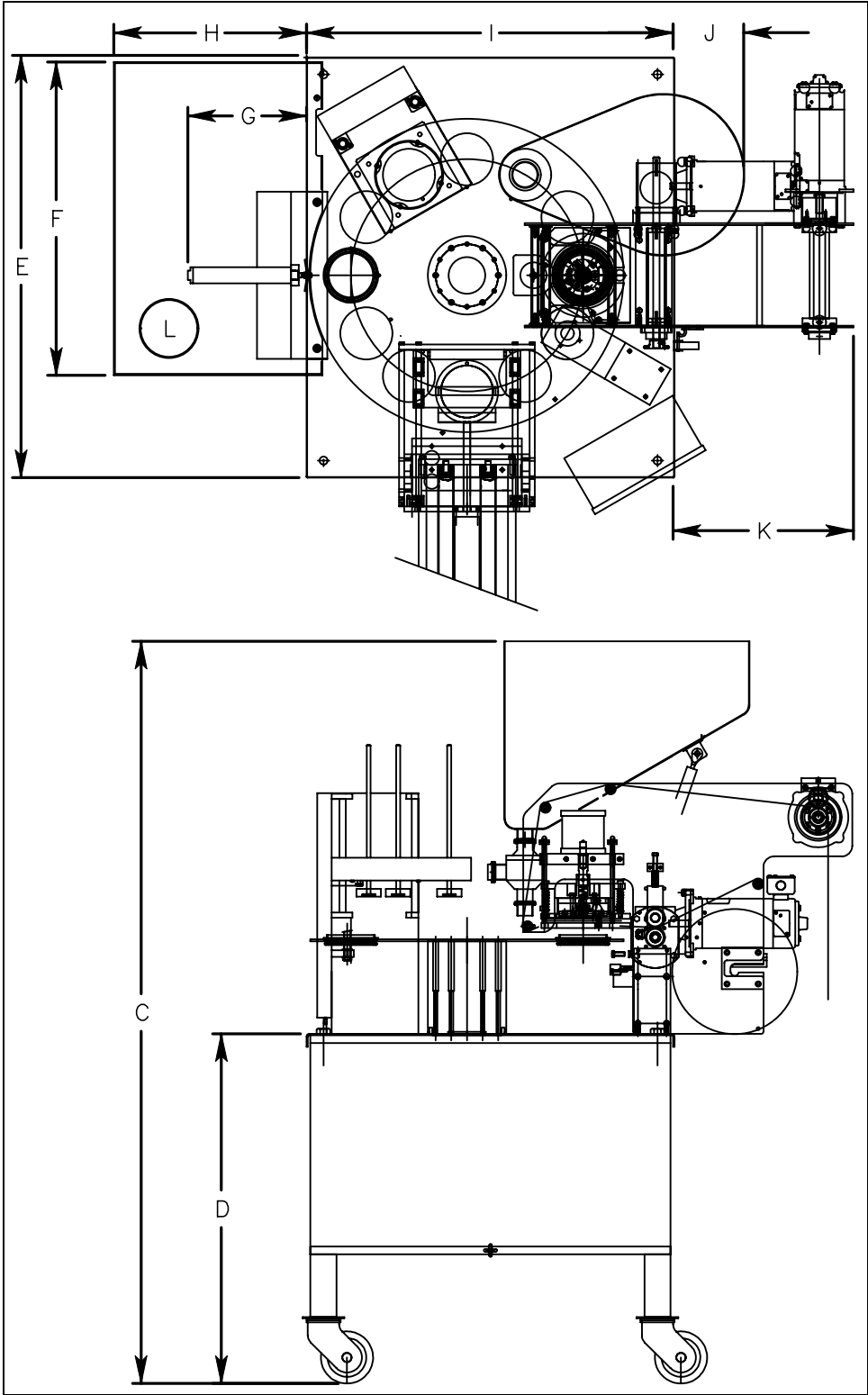


Figure 4-4: Installation Drawing - QC-32 with Film Heat Seal

INSTALLATION

ITEM	DESCRIPTION	ITEM	DESCRIPTION
C	71.10" (1805.94 mm)	H	18.50" (469.9 mm)
D	33.50" (850.9 mm)	I	35.25" (895.35 mm)
E	40.25" (1022.35 mm)	J	6.71" (170.43 mm)
F	30.00" (762 mm)	K	17.27" (438.66 mm)
G	11.38" (289.05 mm)	L	Optional Accumulation Table

Table 4-1: Callouts for Figure 4-4

INSTALLATION

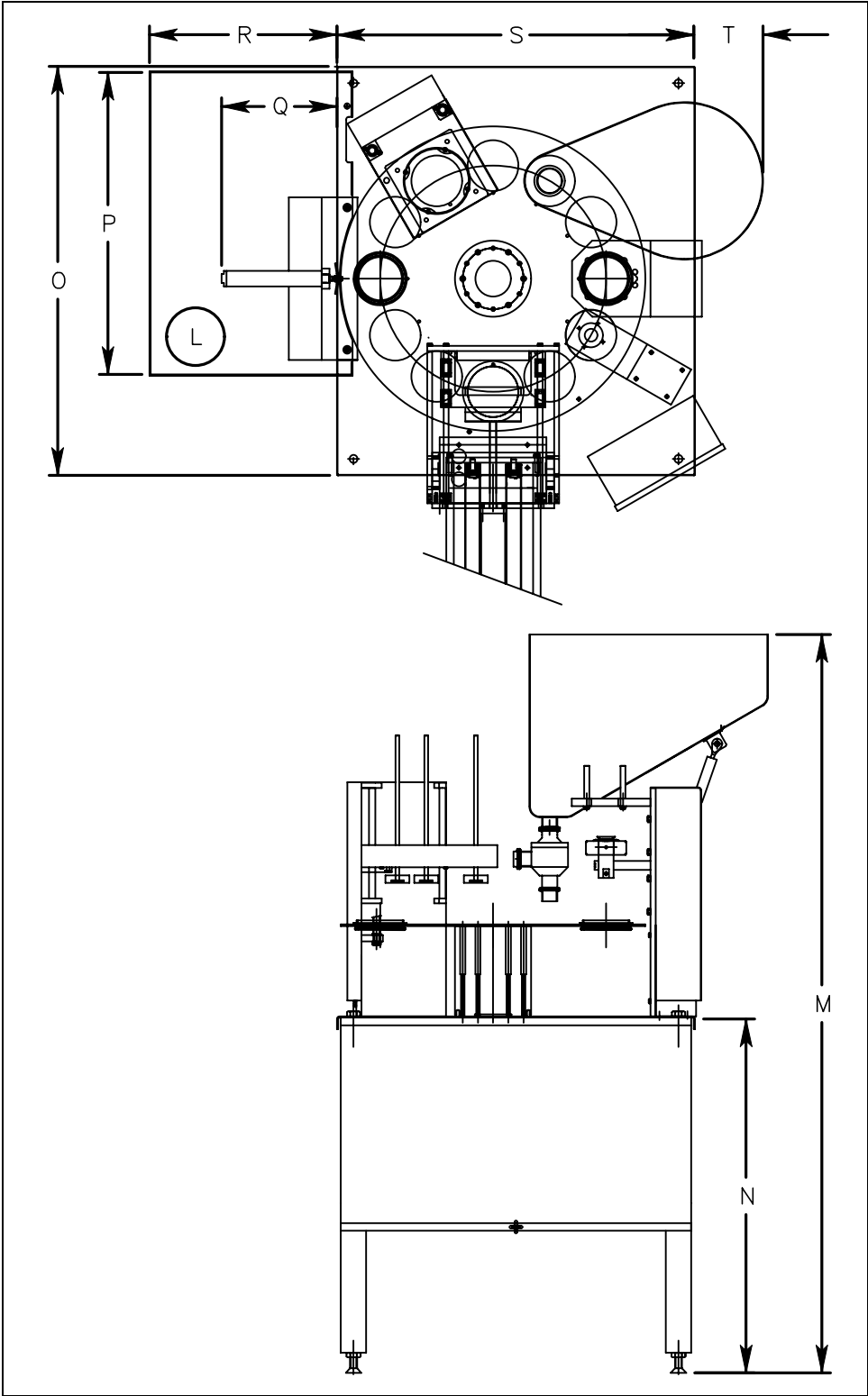


Figure 4-5: Installation Drawing - QC-32 with Foil Seal

INSTALLATION


ITEM	DESCRIPTION	ITEM	DESCRIPTION
L	Optional Accumulation Table	P	30.00" (762 mm)
M	72.73" (1847.34 mm)	Q	11.38" (289.05 mm)
N	35.12" (892.05 mm)	R	18.50" (469.9 mm)
O	40.25" (1022.35 mm)	S	35.25" (895.35 mm)
T	6.71" (170.43 mm)		

Table 4-2: Callouts for Figure 4-5

INSTALLATION

Notes

OPERATOR CONTROLS

 I M P O R T A N T
<p>Know the location of the MACHINE POWER button before operating the machine.</p> <p>Check daily that the MACHINE POWER button is operating correctly before starting the machine.</p>

MAIN OPERATOR CONTROLS

Emergency Stop Latching Pushbutton: Completely stops the machine by disengaging the electrical circuits. (The PLC is still powered after an Emergency Stop.) This function is not to be used as a normal means of stopping the machine. The machine is equipped with a table stop command, which is used for normal stopping. Refer to Figure 5-3 on page 5-2. Press the red mushroom button to activate the **EMERGENCY STOP**, pull to disengage.

NOTE: Electrical and pneumatic power are still provided to the machine during an Emergency Stop. The electrical and pneumatic power supplied to the machine must be disconnected if any base side shields are removed for inspection, maintenance, or cleaning.

Drive Speed: The **RATE** (+ or -) keys increase or decrease the machine speed while in continuous operation. Press and hold the “+” key to increase the machine speed. Press and hold the “-” key to decrease the machine speed.

RUN	FILL	8:00:30 AM 16-OCT-01	
JOG	FOIL	∅	
REV	SEAL	RATE	
MAN FILL	LID	-	+
EMPTY HOPPER		HEATER	
PRODUCT 1-4	PRODUCT 5-8	TEMP	

Figure 5-1: Drive Speed Touch Screen

Table Run/Stop/Jog: Press the **RUN** key to send the machine into continuous operation. Press the **STOP** key on the control panel to stop machine operation and table rotation. After pressing **RUN** the text changes to **STOP**. See

OPERATOR CONTROLS

Figure 5-2 and Figure 5-3. Press the **JOG** key to jog the machine. This will index the table one position. To index more than one position, press and hold the **JOG** key.

NOTE: In the **RUN** mode the machine is equipped with a detector to ensure a container is in the proper position before the filling, sealing, lidding, or discharge functions will operate. The **JOG** mode bypasses the container detection and permits the machine to index with or without a container, or even if the container is not properly positioned. This can cause a jam condition. It is the responsibility of the operator to make certain the machine and containers are in the proper position before operating the **JOG** control.

RUN	FILL	8:00:30 AM 16-OCT-01	
JOG	FOIL	∅	
REV	SEAL	RATE	
MAN FILL	LID	-	+
EMPTY HOPPER		HEATER	
PRODUCT 1-4	PRODUCT 5-8	TEMP	

Figure 5-2: Table Run Touch Screen

STOP	FILL	8:00:30 AM 16-OCT-01	
JOG	FOIL	∅	
REV	SEAL	RATE	
MAN FILL	LID	-	+
EMPTY HOPPER		HEATER	
PRODUCT 1-4	PRODUCT 5-8	TEMP	

Figure 5-3: Table Stop Touch Screen

Filler Off/On: The **FILL** key controls the filler. The filler is “off” when the key is not highlighted. The filler is “on” when the key is highlighted. The filler will cycle if there is a cup present (no cup / no fill option). During a normal run, if the dropper should inadvertently miss a container and the filler is on (highlighted), the machine will continue to run, but will not fill at the missed cup index. The filler switch activates the “No Cup/NoFill” sequence.

OPERATOR CONTROLS

Foil Off/On: The **FOIL** key activates the vacuum. Wait until the first container has reached the filler station then press the key to the **ON** position (highlighted). The **FOIL** key should stay on until the last container has a foil.

Heater Off/On: The **HEATER** key energizes the heater control unit and seal function with the key in the **ON** position (highlighted). The LED in the control will blink a few times and then the seal plate temperature will display. Press the **TEMP** key to advance to the next control screen to set the temperature. See Figure 5-4 and Figure 5-5. Press the control key next to **SET** and key in desired temperature. Temperatures may be keyed in using the set temperature touch screen or the (+) and (-) keys. See Figure 5-6 on page 5-4. Press the **ENTER** key to lock in temperature.

RUN	FILL	8:00:30 AM 16-OCT-01	
JOG	FOIL	∅	
REV	SEAL	RATE	
MAN FILL	LID	-	+
EMPTY HOPPER		HEATER	
PRODUCT 1-4	PRODUCT 5-8	TEMP	

Figure 5-4: Heat Off/On Touch Screen

RUN	FILL	8:00:30 AM 16-OCT-01	
JOG	FOIL	SET	∅
REV	SEAL	ACUAL	∅
MAN FILL	LID	-	+
EMPTY HOPPER		HEATER	
PRODUCT 1-4	PRODUCT 5-8	TEMP	

Figure 5-5: Temperature Touch Screen

OPERATOR CONTROLS

207				MINIMUM 0
7	8	9		MAXIMUM 500
4	5	6		CURRENT 13
1	2	3	ENTER	
	0	CLR	CANCEL	

Figure 5-6: Set Temperature Touch Screen

	I M P O R T A N T
<p>Do not use the reverse function as a normal means of operation. It will cause all stations to work in reverse, including the filler, causing double filling to occur.</p>	

Reverse: The reverse **REV** key is for situations that require reverse table rotation, such as jammed containers. To initiate reverse, press **STOP** to discontinue table rotation. Press the **REV** key and hold until the desired position is achieved, then release the **REV** key.

Seal Off/On: The **SEAL** key activates the air cylinder enabling the seal head to move up and down and disables the seal head at the end of sealing. Wait until the first container has reached the filler station, then press the key to **ON** (highlighted). This should stay on until the last container has been sealed.

Lidder Off/On: The **LID** key activates and deactivates the lidder. Press the **LID** key to turn “on” the lidder. The **LID** key becomes highlighted to indicate the lidder is on. This should stay on until the last container has a lid.

Manual Fill Function: The **MAN FILL** key allows the operator to fill one cup to determine if the fill is set correctly.

Press **STOP** to discontinue table rotation. Press **JOG** to index cup to filler location. Press the **MAN FILL** key to fill cup.

OPERATOR CONTROLS

Empty Hopper Function: The **EMPTY HOPPER** key activates continuous filler cycling to clean product out of hopper. The cycle will continue until the **EMPTY HOPPER** key is turned “off” (unhighlighted).

Pre-Set Controls: The **PRODUCT 1-4** and **PRODUCT 5-8** keys allow the operator to pre-set working conditions for up to eight different product types and cups. Set the **RATE** and the **TEMP** on touch screen. Log in the fill setting for the manually adjustable filler. See Figure 5-7.

PRODUCT	RATE	TEMP	FILL
1	25	200	1
2	25	205	2
3	27	206	3
4	29	207	4
5-8	TEMP	RATE	

Figure 5-7: Pre-Set Temperature Touch Screen

Fault Message

When the machine is not setup properly a fault message screen will appear indicating the location of the problem.

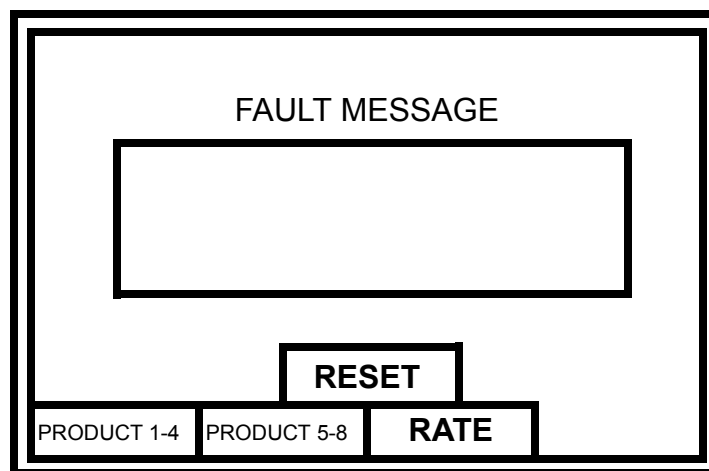


Figure 5-8: Fault Message Touch Screen

OPERATOR CONTROLS

Notes

COMPONENT DESCRIPTION

CUP DROPPER ASSEMBLY

The cup dropper assembly for the **QC-32 Cup Filler** is a mechanical drive, continuous screw type feed system. It is driven from the base machine and will dispense containers relative to the speed of the machine. There are four cup separator screws which retain and separate the containers.

Timing the Cup Dropper Assembly

If double cups have dropped or the cup dropper head is improperly set, the unit may misfeed causing a jam. This is evident by multiple containers missing the hole in the rotary table or the cup separator screws not rotating.

To start the timing procedure follow the steps below.

1. Turn the machine speed down to a lower setting. Jog the machine until the table has stopped moving and is just beginning the dwell cycle.
2. Remove the cover from the dropper head so the chain sprockets and the drive chain are visible. This position of the table is where the cup should leave the cup separator screws. The cup separator screw shafts are drill pointed at the factory. If one of the shafts is out of time, it will cause the containers to leave the screws at an angle.
3. Look through the dropper insert and confirm that all the screw drop off points have rotated past the edge of the container opening. If not, loosen the set screws for the corresponding screw and rotate it until the lower edge of the screw is past the container opening.

If all the screws are aligned by means of looking through the dropper insert, the main shaft has apparently lost time. In this case, proceed with the following steps.

COMPONENT DESCRIPTION

1. Loosen the set screws in the main drive sprocket under the rear cover of the cup dropper.
2. Rotate the main shaft until the container drops onto the table. At this point, tighten the set screws and replace the covers.
3. Jog the machine to see if you have successfully re-timed the dropper unit.

If you still are experiencing difficulty, contact the **Packaging Technologies** Service Department.

OPEN OR SECOND FILLER STATION (OPTIONAL)

This is an open station in the rotary table and may or may not be used on your machine. It can be used for manual loading, gas flush, or a second filler.

ROLL STOCK FILM (OPTIONAL)

The Roll Stock/Heat Seal assembly for the **QC-32 Cup Filler** is a mechanical drive film feed system. It is driven from a DC motor and feeds film stock and seal at a speed relative to the machine.

Loading New Film

Follow the steps below for loading new film stock. (Refer to page 18-41).

1. Fold corners of film into a point. Feed film between take-up spools just behind the seal head assembly.
2. Press the manual film advance button located on the side of the control panel once to advance the film, and feed film between the upper and lower film plates.
3. It may be necessary to hold the film against the spool by hand for a few rotations before the film catches.
4. Thread film over the three front idler rollers, into the stretch take-up spools. Place the scrap film

COMPONENT DESCRIPTION

tail in waste collector at the back of the heat seal unit. Once the film is installed, it is ready to run.

Replacement of Low or New Film Rolls

1. Cut the film between the take-up spool and the stretch roller.
2. Replace old roll with new roll of film. Tape the old film that is already threaded through the unit to the new film.
3. Press the film advance button to thread unit with new film. Cutting the film eliminates re-feeding.

NOTE: If film is allowed to run out completely, refer to *Loading New Film* on page 6-2.

Cleaning Heat Seal Heads

Whenever heat seal heads, or adapters, begin to have buildup, they become less effective in sealing film to containers. Periodic cleaning is normal and should be done as needed. There are, however, several important issues regarding the cleaning and maintenance of heat seal heads.

CAUTION

DO NOT use any metal scrapers, metal scour pads, wire wheels, or wire brushes to clean the heat seal adapters. These cause removal of protective coatings, create grooves and scratches, and promote more aggressive buildup to occur.



WARNING

Heat seal adapters remain hot for some time after power is removed. Wear protective gloves when handling and cleaning to avoid serious burns.

COMPONENT DESCRIPTION

1. Put on protective leather gloves to keep from getting burned.
2. Allow the machine to cycle stop.
3. Open the guard doors near the heat seal areas.
4. Inspect the heat seal heads or adapters for buildup.

NOTE: Buildup may consist of adhesive like residue, melted film residue, or a combination.

5. Remove film from between upper and lower hold down.
6. Remove an insert and index the empty pocket until it is under the heat sealer. (Refer to *Main Operator Controls* on page 5-1 for indexing directions).
7. Reach under the rotary table and use a piece of wood lath (similar to a paint stir stick) cut to a comfortable length to scrape any residue off, while the heat seal heads or adapters are warm.



CAUTION

Avoid contact with the residue. It may be hot enough to cause minor burns.

8. Once the bulk of the residue has been scraped off with the wood lath, use a non-metallic mesh scour pad (such as a 3M ScotchBrite™ Pad) to remove the remaining residue.
9. Repeat for each remaining heat seal head or adapter.

COMPONENT DESCRIPTION

FOIL PLACEMENT UNIT (OPTIONAL)

The **QC-32 Cup Filler** has a pneumatic pick and place unit for placing foils onto containers. The pre-cut foils are to be carefully placed in the foil magazine so as not to damage the edges of the foil or crimp the foils together. The foils must be placed with the printed or non-adhesive side facing toward the machine table (upside down).

During operation the vacuum cup travels up to the underside of the foil magazine, attaches itself by vacuum to a foil, then travels downward with the foil attached, rotates 180° and accurately places the foil onto the container.

If the foil unit is out of adjustment, adjust as follows:

For side to side adjustment

If the foils are not being properly placed on the container in the side to side position, follow the steps below.

1. Remove the side shield on the base of the machine, under the foil pick and place unit.
2. Locate the four 1/2-13 bolts holding the guide block in place and loosen to adjust the guide block.
3. Carefully adjust the guide block to the desired location and snug the bolts for testing.
4. When the guide block is in the desired location tighten the four 1/2-13 bolts.
5. Replace the side shield.

In & Out Adjustment

1. If the suction cup is not positioned on the center of the foil in the “in and out” position, remove the stainless steel cover from the foil magazine block.
2. Jog the machine so the vacuum cup arm is in the lower most position of its travel. Note the

COMPONENT DESCRIPTION

set screw on the vacuum rod retaining collar and the set screw in the rotary cam.

3. Loosen both set screws and slide the vacuum cup rod in or out until it is centered over the cup hole in the rotary table. Be careful not to move the rotational position of the rod.
4. Tighten both setscrews.
5. Replace the cover.

Foil Magazine Height Adjustment

The foil magazine should be positioned so when the suction cup arm is in the upper most position, the suction cup is in contact with the foil in the magazine. Adjust the foil magazine as follows:

1. Remove the stainless steel cover from the lid magazine block.
2. Locate the two 5/16-18 bolts holding the foil magazine plate. Loosen the two bolts and adjust the plate to the desired height.
3. Tighten the bolts and test.
4. Readjust if necessary.
5. Replace the cover.

Heat Seal Unit

The “Tamper Evident” heat seal unit on the **QC-32 Cup Filler** is a pneumatically driven system that exerts force on the container seal face. The force is adjustable at the heat seal regulator. The heat is produced with an electric heating element that is controlled electronically by a controller with a thermocouple feed back. (See *Operator Controls* on page 5-1.)

The pneumatic style heat seal gives the operator a greater amount of versatility in controlling the sealing process by allowing the operator to control the pressure. To adjust pressure, adjust the regulator on

COMPONENT DESCRIPTION

the top of the heater air cylinder. A recommended pressure range is 45-60 psi.

Cleaning Heat Seal Heads

Whenever heat seal heads, or adapters, begin to have buildup, they become less effective in sealing film to containers. Periodic cleaning is normal and should be done as needed. There are, however, several important issues regarding the cleaning and maintenance of heat seal heads.

CAUTION

DO NOT use any metal scrapers, metal scour pads, wire wheels, wire brushes, steel wool, or sandpaper to clean the heat seal adapters. These cause removal of protective coatings, create grooves and scratches, and promote more aggressive buildup and rust contamination to occur.



WARNING

Heat seal adapters remain hot for some time after power is removed. Wear protective gloves when handling and cleaning to avoid serious burns.

1. Put on protective leather gloves to keep from getting burned.
2. Jog the machine until the heat seal head is positioned exactly between two container openings in the table.
3. Remove the lock nut located on top of the heat seal column.
4. Lift and rotate heat seal head 180°, so the heat seal face is pointing “up”.
5. Inspect the heat seal head or adapter for buildup.

NOTE: Buildup may consist of adhesive like residue, melted film residue, or a combination.

COMPONENT DESCRIPTION

6. Use a piece of wood lath (similar to a paint stir stick) cut to a comfortable length to scrape any residue off, while the heat seal heads or adapters are warm.



CAUTION

Avoid contact with the residue. It may be hot enough to cause minor burns.

7. Once the bulk of the residue has been scraped off with the wood lath, use a non-metallic mesh scour pad (such as a 3M ScotchBrite™ Pad) to remove the remaining residue.
8. Rotate the heat seal head 180° and return to proper position.
9. Install the lock nut on top of the heat seal column.

SPIN LIDDER UNIT

The **QC-32 Cup Filler** has a lid spinning magazine, a pick and drop cylinder assembly, and a lid application assembly. These components work as follows:

- The magazine section contains two spinning rails that orient the lids so they can be correctly introduced onto the machine.
- The pick and drop cylinder assembly pulls one lid from the magazine and releases it into the chute that guides it to the proper position to be applied to the cup.
- The application assembly contains either one or two rollers that pull across the lid to snap it onto the cup.

The spinning rail section is powered by a variable speed electric motor that is controlled by a DC Drive. A rubber timing belt propels the rails, transferring the power from the motor to the rail drive system.

COMPONENT DESCRIPTION

CONTAINER DISCHARGE UNIT

The Container Discharge Unit elevates and removes the filled/sealed/lidded containers from the machine. This is controlled by vertical and horizontal air cylinders and by the PLC.

The push up cylinder elevates the containers up and free of the rotary table. There is a locking collar on the push up cylinder to adjust the cup height for elevation. The push up cylinder should be adjusted so the push up pad is approximately 1/16 of an inch above the cup insert.

The sweep cylinder removes the filled/sealed containers from the push up pad. There are flow valves on these cylinders to control speed.

COMPONENT DESCRIPTION

Notes

The volumetric piston filling system is a pneumatic filler using piston displacement as its basis for operation. It consists of a hopper for product holding area, a valve, a product barrel, and a valve actuator.

This system is easily setup, adjusted, and removed for cleaning. An adjustment screw located at the top of the filler air cylinder controls the product piston. Turning the adjustment screw clockwise reduces the amount of product dispensed. Turning the adjustment screw counter-clockwise increases the amount of product dispensed.

When adjusting the filler, remove the white (lower cylinder) airline to eliminate return pressure on the adjusting screw. When adjustments are necessary during production, the adjusting screw should only be set when the air cylinder is in the down stroke.

Two pneumatic control valves located on the filler cylinder control the rate of the stroke. The upper valve controls how fast the product is extracted from the holding area (hopper or compensator). The lower valve controls the amount of force at which the product is dispensed into the container. If the product is filled with excessive speed, indicated by blowing product out of the container, the filler stroke is too fast.

To compensate for this, turn the white air line flow control screw clockwise for forward stroke. This will decrease the exhaust speed and slow the fill stroke. In the opposite extreme, if the return (product draw) stroke speed is excessive, severe inconsistency in the fill weights will be noticed. Adjusting the blue airline flow control clockwise for the return stroke controls excessive stroke speed.

A balance should be maintained to the extent that as soon as the cylinder is fully retracted, it should stand still for a split second before starting the downward fill stroke. If the fill weights vary, check the filler seals, o'rings, and valve packing for damage or excessive wear.

DISASSEMBLY

1. **Disconnect incoming air supply to the machine!**
2. Empty product from hopper (A).
3. Remove the hopper (A).

FILLER

CAUTION

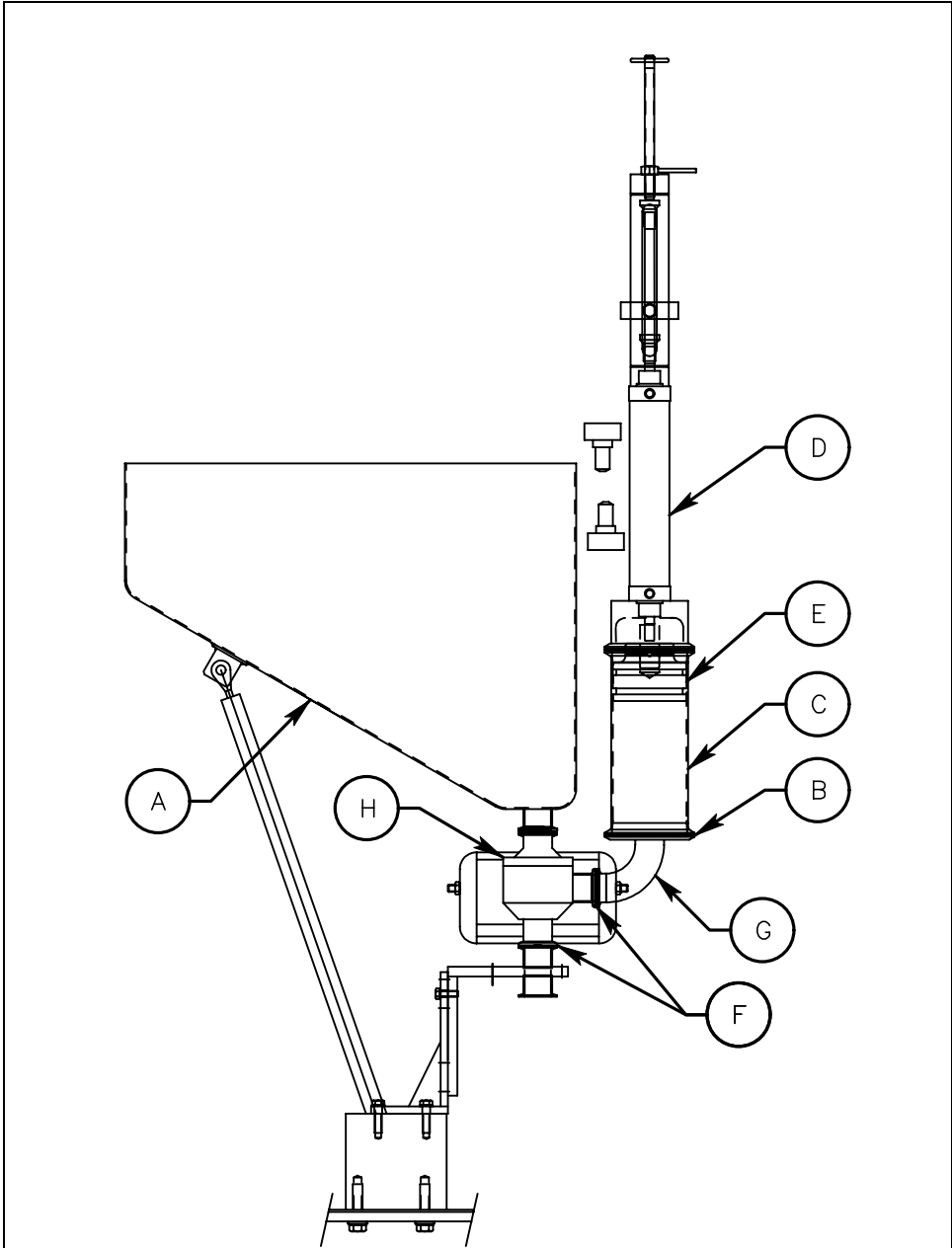
Ensure all airlines have been discharged before removing the filler unit to prevent personal injury or damage.

4. Remove the airlines.
5. Remove lower product barrel clamp (B).
6. Unclamp and remove product barrel (C) from air cylinder (D).
7. Remove pin retention o'ring.
8. Remove pin in piston (E).
9. Unclamp (F) and remove product barrel elbow (G).
10. Remove actuator with thumbscrews on mounting bracket. Note the UP stamp on the coupler for assembly. Refer to Figure 7-3 on page 7-7.
11. Raise nozzle (H) vertically to remove.
12. Clean components. Refer to Cleanup.

IMPORTANT

It is essential that the valve be disassembled and cleaned after each production run, especially where crystalline particles will form, such as sugar syrup. Failure to do so will bind the ball to the seals and make operation difficult or impossible without destroying the seals.

FILLER



NOTE: Illustration depicts the 32 oz. Filler.

A	Hopper	E	Piston
B	Product Barrel Clamp	F	Clamp
C	Product Barrel	G	Product Barrel Elbow
D	Air Cylinder	H	Nozzle

Figure 7-1: Disassembly of Filler Assembly

FILLER

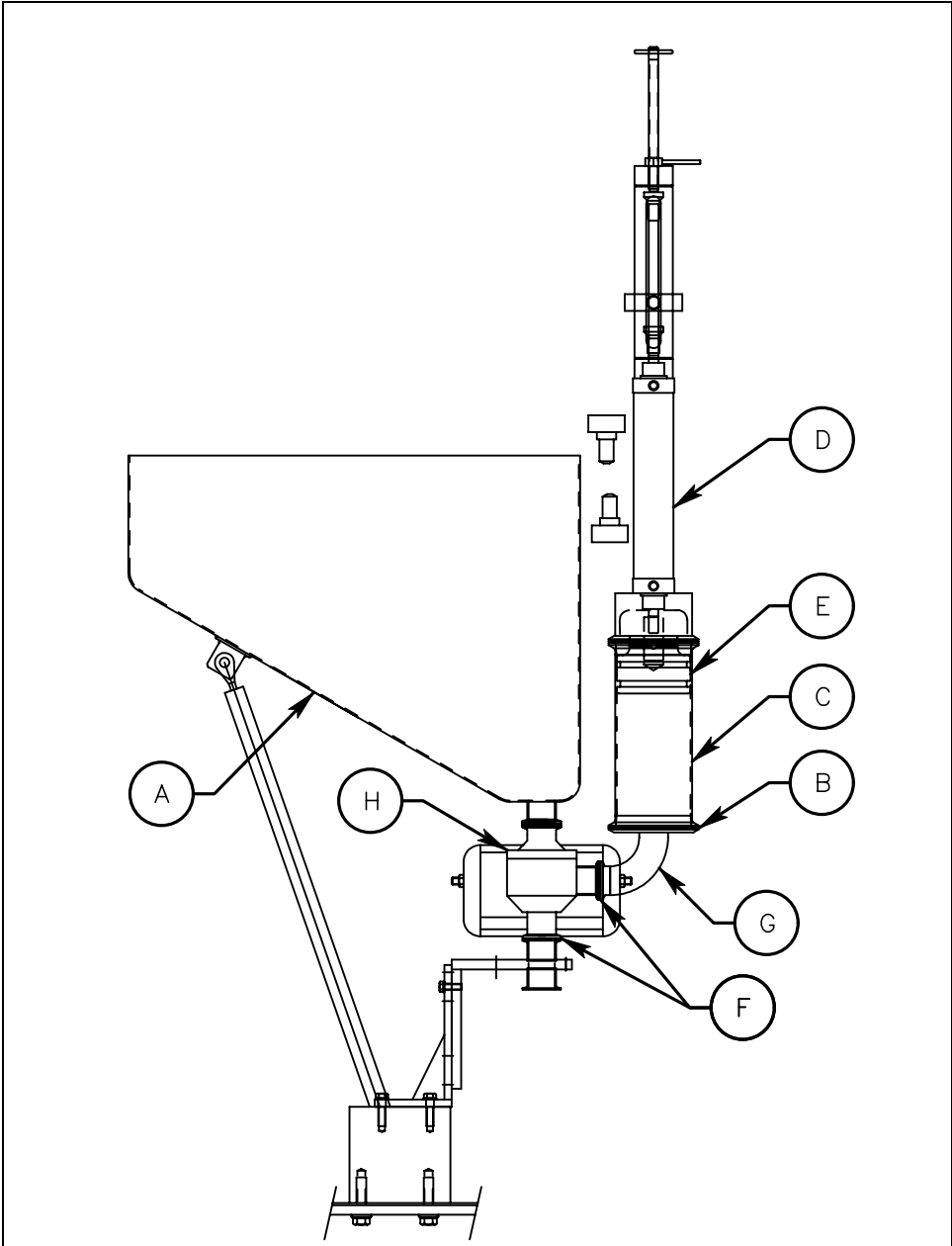
ASSEMBLY

1. Install nozzle (H).
2. Install actuator with thumbscrews on mounting bracket. Ensure the UP stamp on the coupler is on the top. Refer to Figure 7-3 on page 7-7.
3. Install and clamp (F) product barrel elbow (G).

NOTE: Lightly coat piston and barrel with Petro Gel during assembly. Piston should move freely in barrel.

4. Install pin in piston (E).
5. Install pin retention o'ring.
6. Install and clamp product barrel (C) to air cylinder (D).
7. Install lower product barrel clamp (B).
8. Install airlines.
9. Install the hopper (A).

FILLER



NOTE: Illustration depicts the 32 oz. Filler.

A	Hopper	E	Piston
B	Product Barrel Clamp	F	Clamp
C	Product Barrel	G	Product Barrel Elbow
D	Air Cylinder	H	Nozzle

Figure 7-2: Assembly of Filler Assembly

FILLER

INLINE BALL VALVE

1. Piping should be independently supported prior to valve installation, so as not to impair valve operation.
2. Install valve using separable inlet flange as inlet.
3. Refer to sticker on valve body for “open” and “close” positions. Full handle rotation against the stops is essential.



W A R N I N G

Do not operate two-way in-line ball valves above 300 PSIG (2,100 kPa) or 450°F (232°C)

Do not operate three-way in-line ball valves above 150 PSIG (1,050 kPa) or 300°F (149°C)

Valve Disassembly

Refer to Figure 7-3 on page 7-7 for the following steps.

1. Loosen wing nuts (L) on inlet adapter (K). Remove inlet adapter.
2. Remove o’ring (J) on top of intake seal (C) inside of valve body (B).
3. Remove actuator coupler (H) from packing nut (G). Note position of UP stamp for assembly.
4. Unscrew packing nut (G) from stem (E).
5. Slide remaining stem seal (D) from stem (E).
6. Remove intake seal (C) from ball (F).
7. Remove ball (F) from valve body (B).
8. Remove stem (E) from side hole of valve body (B).
9. Remove stem seal (D) from stem (E).

FILLER

10. Using the small angle hook or straight hook provided, remove discharge seal (A) from the valve body (B).

NOTE: On the 1-1/2" size, the intake seal (C) and discharge seal are identical, on the 2", 3", and 4" sizes the discharge seal will be shorter than the intake seal.

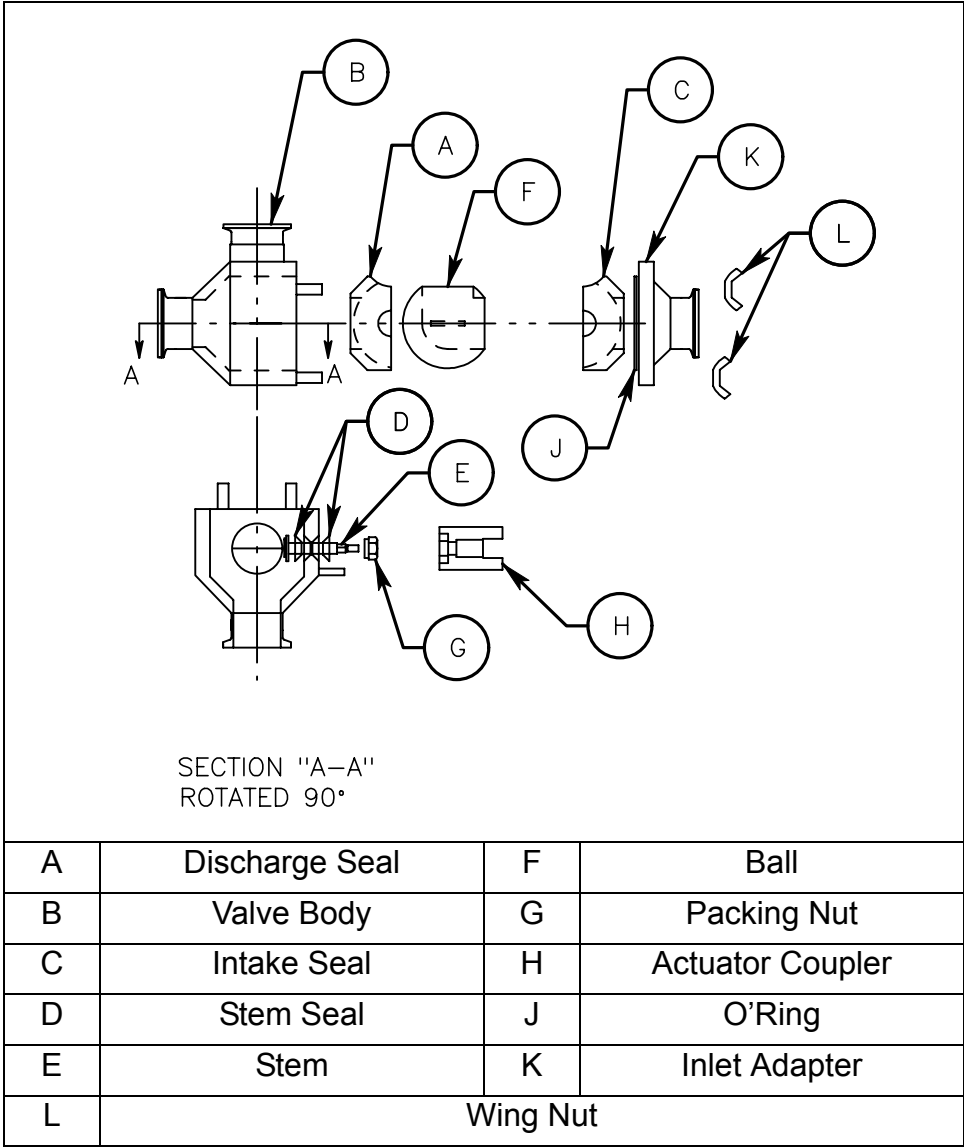


Figure 7-3: Disassembly of Nozzle Assembly

FILLER

Valve Assembly

Refer to Figure 7-3 on page 7-7 for the following steps.

NOTE: Lightly coat seals and ball with petroleum jelly during assembly.

1. Insert the discharge seal (A) into the valve body (B) (on the 1-1/2" size, the intake seal (C) and discharge seal are identical, on the 2", 3" and 4" sizes the discharge seal will be shorter than the intake seal). Align cut-out portion of seal with stem hole in valve body.
2. Slide stem seal (D) on stem (E) placing flat side of seal over threaded portion first.
3. Insert stem (E) through side hole of valve body (B) from inside (ensure tongue on inside end of stem is vertical).
4. Place ball (F) in valve body (B) so that stem (E) slides through slot in ball. For three-way valves, side port on ball must be opposite body side port.
5. Place intake seal (C) over ball (F) being sure to align cut out in seal with stem (E).
6. Slide remaining stem seal (D) on stem (E); ensure beveled side of seal is placed over threaded portion of stem first.
7. Screw packing nut (G) onto stem (E); hex portion of nut should be on outside. Align flat portion of stem with flat portion of hex nut. Finger tighten the packing nut to obtain alignment of the two flat portions, then use handle wrench to tighten approximately 1/6th of a turn, so flat on nut and flat on stem are parallel with inlet connection.

NOTE: Observe orientation of packing nut and lube with petroleum jelly.

8. Install actuator coupler (H) on packing nut (G) with the UP stamp on top.

FILLER

9. Place o’ring (J) on top of intake seal (C) inside of valve body (B).
10. Place inlet adapter (K) on valve and finger tighten the wing nuts (L). Check for equal spacing at the inlet adapter/valve body joint; then equally tighten the wing nuts to achieve a proper seal. Do not tighten so much as to hinder the smooth operation of the valve.

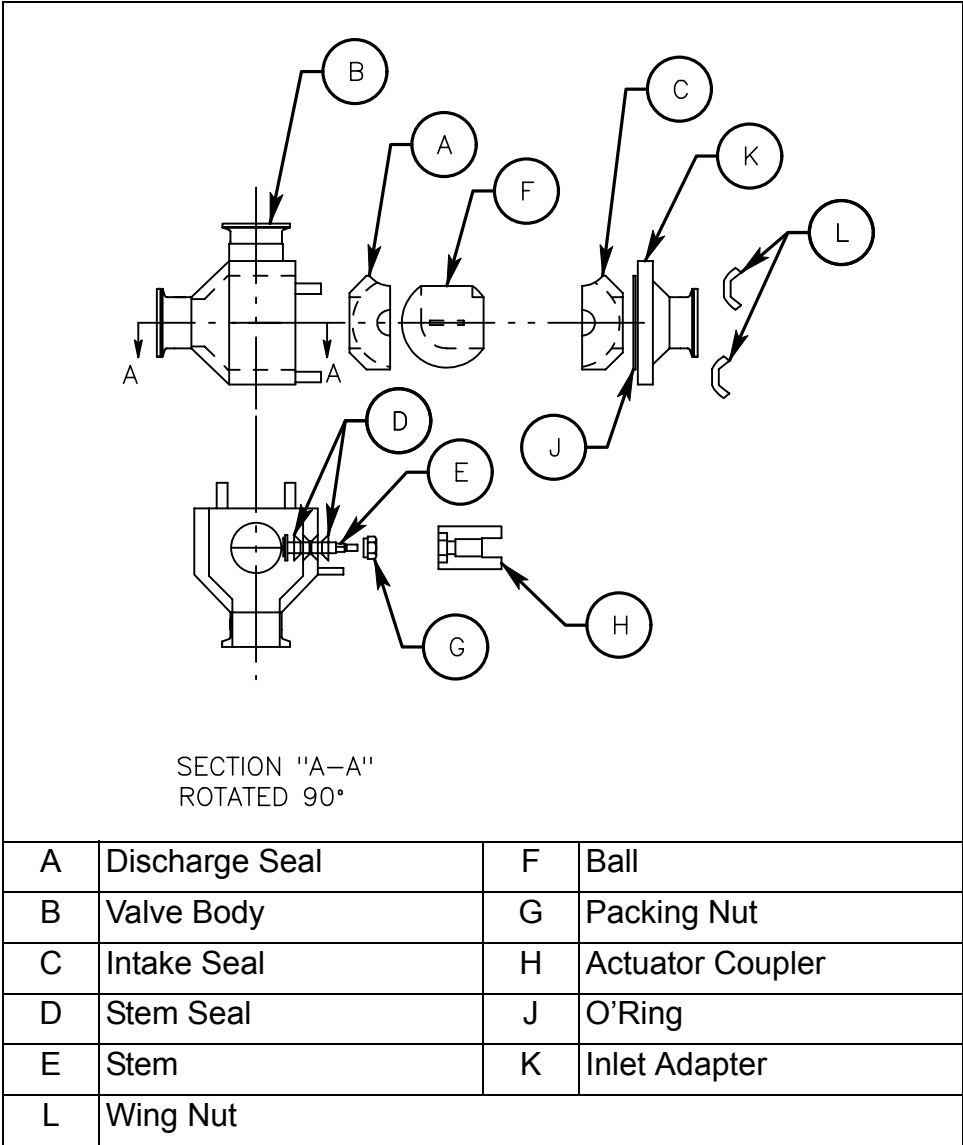


Figure 7-4: Assembly of Nozzle Assembly

FILLER

Notes

OPERATION

PRELIMINARY CHECKS

Before the machine is turned on, perform a visual inspection to avoid personal injury or damage to the machine. A visual inspection consists of, but is not limited to the following:

1. Ensure no part of the machine is disassembled.
2. Ensure all safety guards and covers are in their proper position and secured.
3. Ensure no tools, parts, or other items are laying on the machine.
4. Ensure all personnel are clear from the machine.

MACHINE SUPPLIES

1. Turn “on” the main electrical disconnect located on the main electrical enclosure.
2. Turn “on” the pneumatic supply located at inlet on the filter/regulator.

PREPARING FOR PRODUCTION

Verify the following setup before starting a production run.

1. Guards and doors are in place and the **MACHINE POWER** button is pulled out.
2. Proper change parts are installed. Refer to *Changeover* on page 9-1 for procedure.
3. Containers are loaded in cup dropper.
4. Ensure cup and screw or insert match.
5. Check cup dropper for separator. Check height of cup dropper for cup size to be run.
6. Product level in the filler is correct.
7. Pre-cut foils are loaded in the seal placer unit.

OPERATION

8. Lids are loaded in spin lidder unit. Check lidder for correct height and catcher plate.
9. Heat seal adapter has reached operating temperature.

MONITORING OPERATION

During automatic operation, the operator should monitor the stock levels (example, containers, product and seals) of the various machine stations and keep the machine supplied at all times.

If a container is missing within a pocket, the PLC program does not allow machine functions to perform on that pocket. The operator may be required to remove the empty containers at the discharge area depending on the customer's plant production regulations.

Verify the level of product in the hopper and check the weights of containers randomly to ensure consistent product weights in the containers. This is recommended when a new batch of product is delivered to the hopper(s) or filler(s).

END OF A PRODUCT RUN

Perform the following instructions to remove the product from the machine.

1. Continue to run the machine until light fills occur.
2. Touch the **STOP** key to stop table rotation.
3. Place an empty container beneath the filler.
4. Touch the **EMPTY HOPPER** key to continuously cycle the filler until the hopper is empty.
5. After all of the product has been removed from the filler, disengage the **EMPTY HOPPER** key.
6. Remove all supplies from the machine.
7. See *Cleanup* on page 10-1 for instructions on cleaning the filler and the machine, if required.

MACHINE SHUTDOWN

Follow the instructions below to properly shut down the machine.

1. Reference the procedure for *End of a Product Run* on page 8-2 for instructions on removing product and stock supplies from the machine.
2. Turn off all machine functions.
3. Refer to *Cleanup* on page 10-1 for instructions on cleaning the filler and the machine, if required.
4. Press the **MACHINE POWER** button on the main operator control panel to remove all power and isolate the air supply.
5. Turn **OFF** the main electrical disconnect and the pneumatic supply.

OPERATION

Notes

CHANGEOVER

CUP DROPPER ASSEMBLY

Follow the steps listed below to remove and assemble the changeover parts for the cup dropper assembly.

Disassembly

1. Remove the two 1/4-20 thumb screws located in the stacking plate.
2. Remove the cup stacking plate by lifting vertically.
3. Remove the cup dropper insert by lifting vertically.
4. Push the cup screws up to release from drive pins, then rotate 180° degrees in either direction. Pull down and remove the four cup separator screws from the shafts.

Assembly

When installing a different set of cup separator screws, the half slot in the screw should be facing the dropper head. The cup separator screws are universal and can be installed on any of the shafts.

1. Install the cup screws into the shafts.
2. Rotate the cup screws 180° in either direction and pull down to install into the drive pins.
3. Install the cup dropper insert.
4. Install the cup stacking plate.
5. Install the two 1/4-20 thumb screws in the stacking plate.

SPIN LIDDER UNIT

Follow the steps below to switch changeover assemblies.

1. Remove thumb screw that holds the existing lid shuttle extension rod to the lid shuttle.

CHANGEOVER

2. Loosen the two hex head cap screws on the shuttle retaining blocks.
3. Remove the existing lid shuttle and re-use the nylon tipped set screws in the replacement lid shuttle.
4. Assemble the replacement lid shuttle and adjust the nylon tipped set screws for a light hold on the new lids.

CLEANUP

Cleanup of the machine should be done after each production run, or at the end of each day. In production facilities that have state or federal inspection, or must comply with dairy industry standards, check to see if regulations require more frequent cleanup.



W A R N I N G

Before cleanup begins, make certain the main electrical disconnect switch is turned “OFF” and is “LOCKED OUT”. Do not use steam or water on the machine.

DO NOT use any caustic, acidic, or alkaline based cleaners or solvents to clean any portion of the machine. Such cleaners and solvents may cause severe surface and internal damage to critical components. **Such damage may render your machine unfit for operation under USDA (in the USA) guidelines and will void any warranty.**



C A U T I O N

When cleaning the machine, do not exceed 0.5% level of concentration of a caustic solution. The anodized aluminum may discolor or corrode.

Almost all of the machine is made from stainless steel. However, only normal cleanup procedures, involving wiping the machine with a damp cloth should be used. This will not cause rusting or corrosion if done properly, followed by adequate drying.

Wipe down lexan panels with a non-abrasive cleaner and soft cloth to prevent scratches.

Direct water spray or steam **MUST NOT** be used to clean this machine. Doing so will cause damage to critical components.

Certain portions of this machine are made from materials that may corrode from excessive moisture. These items should be thoroughly dried and protected.

If you plan to use a flowing water source **STOP!** Water infiltration into control cabinet and other components is likely, and damage to those electrical and other components may result. Water damage to electrical components is not covered by the warranty.

CLEANUP

CAUTION

All photo electric devices, heat seal heads, encoders, electrical control enclosures, and electric control devices must be covered with plastic before cleanup begins. Water infiltration into these devices may cause damage. **WATER DAMAGE TO ELECTRICAL COMPONENTS IS NOT COVERED BY THE WARRANTY.**

Packaging Technologies recommends the following general guidelines when washing your machine:

1. Remove all containers, film (or seals), and lids from the machine.

NOTE: Run the turntable, if necessary, until all of the containers have been removed from the machine.

2. Turn “OFF” and “LOCK OUT” the main electrical disconnect switch.
3. Turn “OFF” and “LOCK OUT” the main air supply shut-off valve.



WARNING

Heat seal adapters remain hot for some time after power is removed. Allow the heat seal adapters to cool before performing the cleanup procedure.

IMPORTANT

Refer to page 6-3 for cleaning heat seal heads for units with roll stock film. Refer to page 6-7 for cleaning heat seal heads for units with pick ‘n’ place foils.

4. Install plastic over electrical cabinet and any other electrical components (For example, photo electric sensors, heat seal heads, encoders.) Make certain plastic completely protects against water infiltration.

CLEANUP

5. Check to make certain the main electrical disconnect switch is turned “OFF” and is “LOCKED OUT”.



CAUTION

All photo electric devices, heat seal heads, encoders, electrical control enclosures, and electric control devices must be covered with plastic before cleanup begins. Water infiltration into these devices may cause damage. WATER DAMAGE TO ELECTRICAL COMPONENTS IS NOT COVERED BY THE WARRANTY.

6. Blow off the machine, using dry compressed air, to remove dust and debris. Make certain others are not nearby when performing this step.
7. Wipe the machine and any remaining removed components with a damp cloth, using a high foaming neutral cleaner designed for removing dirt, grease, and oil. Hand cleaning is required. Make certain the cleaner is compatible with your product, the environment, any and all regulations, and good safety practices.
8. Inspect the machine for residual grime. Repeat Step #7 as necessary.



IMPORTANT

It is very important to handle the filler parts with care. If the parts are mishandled and damaged, inaccurate product volume fills may occur.

9. Disassemble the filler and clean each of the filler components and seals by hand.

NOTE: Inspect the seals and replace as necessary.

10. Clean the filler components mounted to the machine by lightly misting them with a suitable cleaning solution and rinsing with warm water.
11. Wipe the machine off using a damp cloth rinsed in clear water.

CLEANUP

12. Dry the machine and the removed components, and coat critical parts with edible *food approved* lubricants for food applications. (Recommended: Chesterton White Grease with Teflon®.)
13. Reassemble previously removed components.
14. Remove plastic covers from all electrical components.

PREVENTIVE MAINTENANCE

Preventive maintenance on your machine will help to keep your machine running at top efficiency and reduce major downtimes. The schedules that follow are provided as a guide and are based on an eight-hour day. Your application may require more or less.



WARNING

Heat seal adapters remain hot for some time after power the is removed. Wear heat resistant protective gloves when handling to prevent burns.

WARNING

Electrical maintenance **MUST** only be performed by a qualified electrician. Severe and possibly fatal injury is possible when working on the electrical components of this machine without the proper tools and training.

SAFETY LOCK-OUT PROCEDURE

Before performing maintenance on the machine, follow the steps below for a recommended safety lock-out procedure.

1. Bring the machine to a stop.
2. Turn “OFF” and “LOCK OUT” the main electrical disconnect switch.
3. Turn “OFF”, “EXHAUST”, and “LOCK OUT” the main air supply valve.

NOTE: Use the locking mechanism, if equipped, on the switch and valve. Lock Out / Tag Out kits are available from many locksmith and lock supply companies.

4. Tag the switch and valve with **DO NOT START** tags.
5. Tag all **START** buttons with **DO NO START** tags.

PREVENTIVE MAINTENANCE

DAILY MAINTENANCE CHECK LIST

It is important to check the machine over before turning the power “on”. This check should be made before the initial startup and prior to each additional startup.

- __1. Turn “OFF” and “LOCK OUT” the main electrical disconnect switch to avoid possible injury.
- __2. Check the condition of all filler parts, including seals and piston for wear or damage. Repair or replace as needed.
- __3. Check all air tubing for breaks or loose connections. Tighten as required.
- __4. Check all o’rings and seals. Replace damaged or worn o’rings and seals.
- __5. Lubricate those items on the Lubrication Chart (Table 13-2 on page 13-2) indicated for Daily frequency.
- __6. Check condition of change parts for wear, breaks, nicks, warpage, or other abnormalities. Replace as required.
- __7. Clean and lubricate change parts as outlined under *Cleanup* on page 10-1.
- __8. Inspect the cup dropper for proper and repeatable operation.
- __9. Check integrity of all safety guards and interlocks. Replace any damaged or missing parts. **DO NOT OVERRIDE ANY SAFETY FEATURES OR OPERATE THE MACHINE WITH GUARDS MISSING.**
- __10. Verify that **EMERGENCY STOP** buttons work properly and repeatedly. Repair or replace as needed.
- __11. Clean all sensors and reflectors to ensure proper operation. Wash with a damp cloth using a mild soap solution. Dry with a soft cloth.
- __12. Jog the machine through several complete cycles. Make certain no binding exists and that the machine

PREVENTIVE MAINTENANCE

turns freely. If binding, excessive backlash (more than 1/4"), or rough spots are encountered, contact the **Packaging Technologies Service Department** for advice and assistance.

- __13. With air supply to machine "on", check all air pressure regulators for proper setting.
- __14. Remove water from air filter before startup.
- __15. Check the overall condition of the machine. Repair or replace any damaged or missing parts.
- __16. Perform a short dry run without product introduction to verify system response and operation.

WEEKLY MAINTENANCE CHECK LIST

- __1. **Turn "OFF" and "LOCK OUT" the main electrical disconnect switch to avoid possible injury.**
- __2. Check the machine drive and chains for wear and breakage. Replace as needed.
- __3. Inspect all air tubing for cracks, splits, brittleness, and clogging. Replace as needed.
- __4. Inspect the seal placer unit for visible signs of wear. Repair or replace as needed.
- __5. Inspect the vacuum cup on the pick and place unit for dry, cracked, or peeling vacuum cups. Replace as needed.
- __6. Lubricate those items on the Lubrication Chart (Table 13-2 on page 13-2) indicated for Weekly frequency.
- __7. Check all caution, danger, warning, and instructional signs for legibility. Replace any that are worn or missing.
- __8. Inspect the filler for proper and repeatable operation.
- __9. Check for fluid leaks, worn or loose parts, and damaged parts (including bearings, bushings, sprockets, gears, and chains). Repair or replace as needed.

PREVENTIVE MAINTENANCE

- __10. Check the heat seal heads for visible signs of wear, alignment, and buildup of residue. Take care not to scratch the sealing surface. Clean, repair, or replace as needed.

MONTHLY MAINTENANCE CHECK LIST

- __1. Inspect motors for secure mounting and visible signs of wear. Replace as needed.
- __2. Check all chain tensions and adjust accordingly. Remove the rear cover of the cup dropper assembly to adjust chain tension.
- __3. Lubricate those items on the Lubrication Chart (Table 13-2 on page 13-2) indicated for *Monthly* frequency.
- __4. Check the coalescing filter. Replace if needed (about every six months).
- __5. Check the entire pneumatic system and all components for wear, sluggish action, broken or missing parts, and other signs of damage. Repair or replace as needed.
- __6. Inspect and clean all exhaust mufflers. Replace if cleaning does not improve performance.

ANNUAL MAINTENANCE CHECK LIST

- __1. Drain and fill all gear drives, reducers, and cam units with recommended lubricant.
- __2. Inspect the overall integrity of the machine and control systems. Make any necessary repairs or upgrades.

MAINTENANCE

The working components of the machine require regular maintenance to ensure smooth operation. Follow the maintenance instructions in this section to prevent damage occurring due to insufficient lubrication on moving parts and machine failure because of worn or damaged parts.

Use recommended lubricants or their equivalents to maintain the unit. If other lubricants are used, it may affect the warranty of the unit (Refer to Table 13-1 on page 13-2).



WARNING

Always turn the main electrical switch to OFF and isolate the pneumatic supply before removing guards, covers, or before working on this machine. Use the isolator valve situated on the air service unit on the machine. Tag the electrical isolator switch, pneumatic isolator valve and all start buttons with a DO NOT START tag.

MAIN DRIVE

The **QC-32 Cup Filler** drive consists of an index unit and motor.

The main unit is the Camco indexer/gear reducer. This unit uses 80/90 gear lube in each section. The indexer section has a sight glass located on the side of the unit. Maintain an oil level to just below the top edge of the sight glass. The gear reducer has plugs located on the top and side. The side plug is a level inspection port. The oil level should be maintained at the bottom of the port hole. The top plug is for filling the unit. Each section should have the lube changed once a year.



IMPORTANT

Low lubrication levels will cause severe damage to the unit.

The drive unit is covered with the side shields and should stay relatively clean. **Do not use forceful cleaning with chemicals, steam, water pressure, etc.** The drive mechanisms, electrical, and pneumatic controls will be damaged with harsh cleaning.

MAINTENANCE

Drive Current Limit Adjustment

The main turret of the machine, is controlled through a drive current limit circuit. This is designed to prevent damage to the machine in the event of a jam. If a jam occurs, the electrical current draw will exceed the set limit and the drive will stop. To adjust the tension or limit:

1. Disconnect the electrical power from the machine.
2. Remove the side panel at the main electrical enclosure.
3. Open the main electrical enclosure door.
4. Locate the forward and reverse drive current limit potentiometers (Figure 12-1). They are the two on the far left, with reverse above and forward below.
5. To increase the tension allowed, by raising the limit, turn the corresponding potentiometer clockwise 1/8th turn.
6. To decrease the tension allowed, by lowering the limit, turn the corresponding potentiometer counter-clockwise 1/8th turn.
7. Close the main electrical enclosure door.
8. Reconnect power to the machine.
9. Operate the machine and observe operation.
10. If further adjustment is required repeat this procedure.

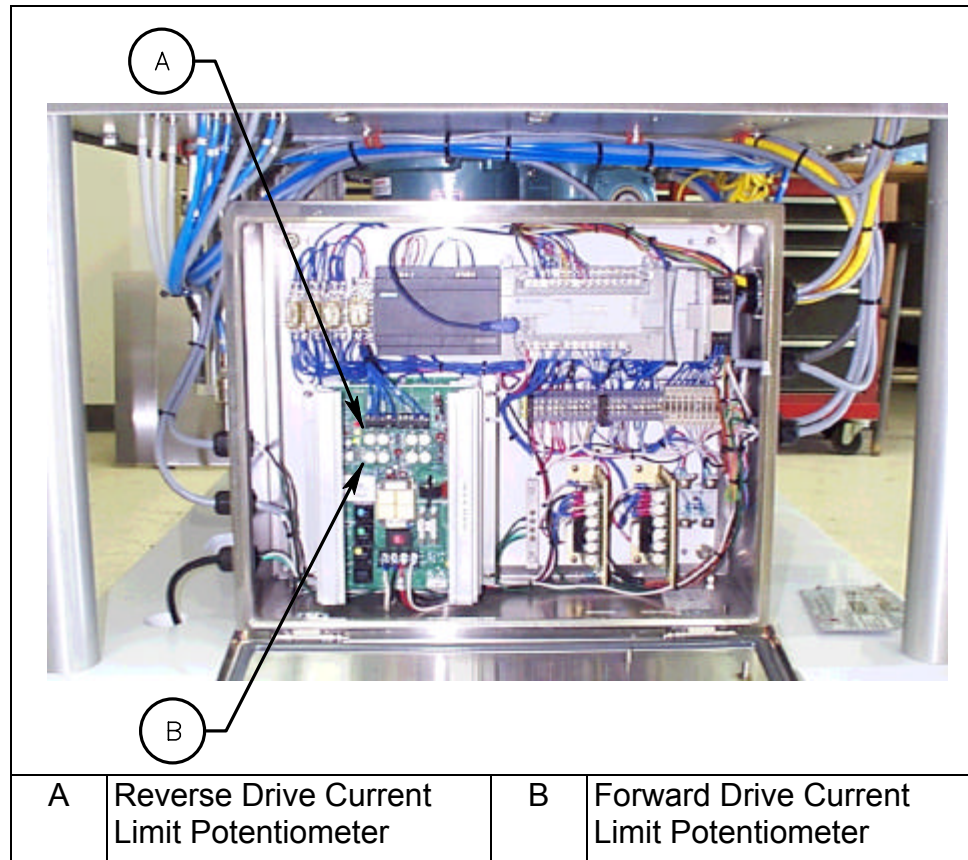


Figure 12-1: Drive Current Limit Potentiometers

LITHIUM BATTERIES

The machine may contain lithium batteries. They are used to maintain data in the PLC (programmable logic controller) when the power is turned off. Lithium batteries are not dangerous if handled in a careful and proper manner.

WARNING

Improper handling of lithium batteries can cause them to catch fire or explode.

1. **ALWAYS** protect the battery from water or other liquid.
2. **ALWAYS** follow local codes and regulations to dispose of in a proper manner.
3. **NEVER** recharge the battery.
4. **NEVER** dismantle the battery.

MAINTENANCE

5. **NEVER** expose the battery to a flame.
6. **NEVER** expose the battery to temperatures in excess of 212°F [100°C].

LUBRICATION

Maintain a regular lubrication schedule to ensure smooth operation of the machine. Do not allow lubricated parts and bearings to become dry. This can cause major damage and may affect the warranty of the unit.

MACHINE LUBRICANTS

Contact with some types of machine lubricants can be harmful, if not handled properly. It is important that the following precautions are observed when working with these materials.

1. Do not allow lubricants to come in contact with the skin to avoid irritation. Always wear protective clothing and a barrier cream on exposed skin when handling lubricants. If lubricant comes in contact with the skin, wash skin immediately with soap and water. If irritation persists, seek medical attention.
2. Wear safety glasses when working with lubricants to avoid contact with the eyes. If lubricant comes in contact with the eyes, rinse with water. If irritation persists, seek medical attention.
3. Do not inhale spray lubricants. Repeated or prolonged inhalation of spray may lead to respiratory problems. If symptoms persist, seek medical attention.
4. Do not swallow lubricants. If swallowed, seek medical attention.
5. Dispose of the lubricant waste in accordance with local health and safety regulations.
6. Immediately wipe spilled lubricant off the machine. Clean the surface with a suitable solvent or detergent cleaner.
7. Only the recommended lubricants or their equivalents should be used to maintain the unit. If other lubricants are used, it may affect the warranty of the unit (See *Table 13-1 on page 13-2*).

LUBRICATION

LUBRICANT	COMPONENT
Chesterton White Grease with Teflon® OR Bel-Ray NO-TOX HD Grease #2 USDA H-1	Chains & Sprockets
	Spinning Roll Lidder Bearings
Petro-Gel® or Petroleum Jelly	Filler & Nozzle
Food Grade Oil Aerosol Spray	Miscellaneous Use
Bel-Ray NO-TOX Gear Oil 80 USDA H-1	Indexer

Table 13-1: Recommended Lubricants

ITEM	TASK	PROCEDURE	INTERVAL
Filler Nozzle	Lubricate	Lubricate with sanitary lubricant.	Check with each cleaning.
Seal Placer	Lubricate	Lubricate with proper grease.	Check weekly or as required.
Drive Chains	Lubricate	Lubricate with proper grease, using brush.	Check monthly.
*Chain & Sprockets	Lubricate	Lubricate with white food grade grease.	Check monthly.
Indexer	Inspect & Fill	Check oil in indexer and fill as needed.	Check monthly. Change annually.

Table 13-2: Lubrication Schedule Table

*There is one chain located on the top plate for the cup dropper drive with an idler to adjust the tension. This should be checked daily for the first week and once a week for the next six months.

LUBRICATION

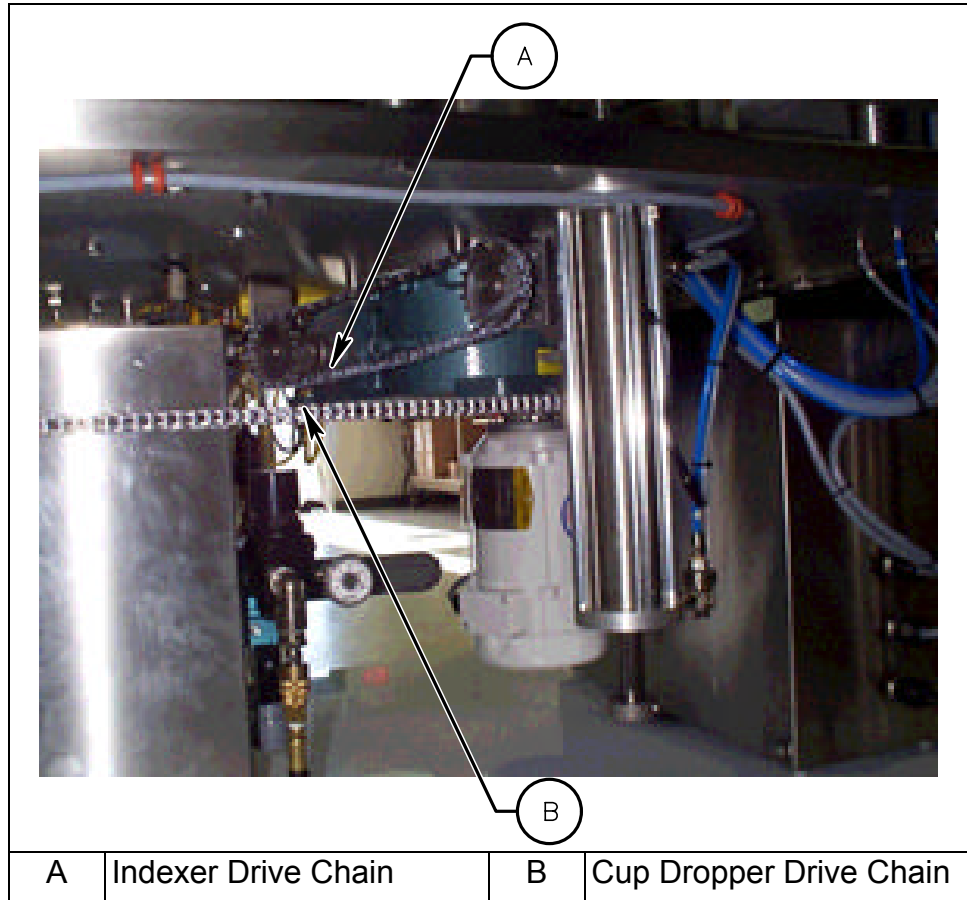


Figure 13-1: Lubricate Chains

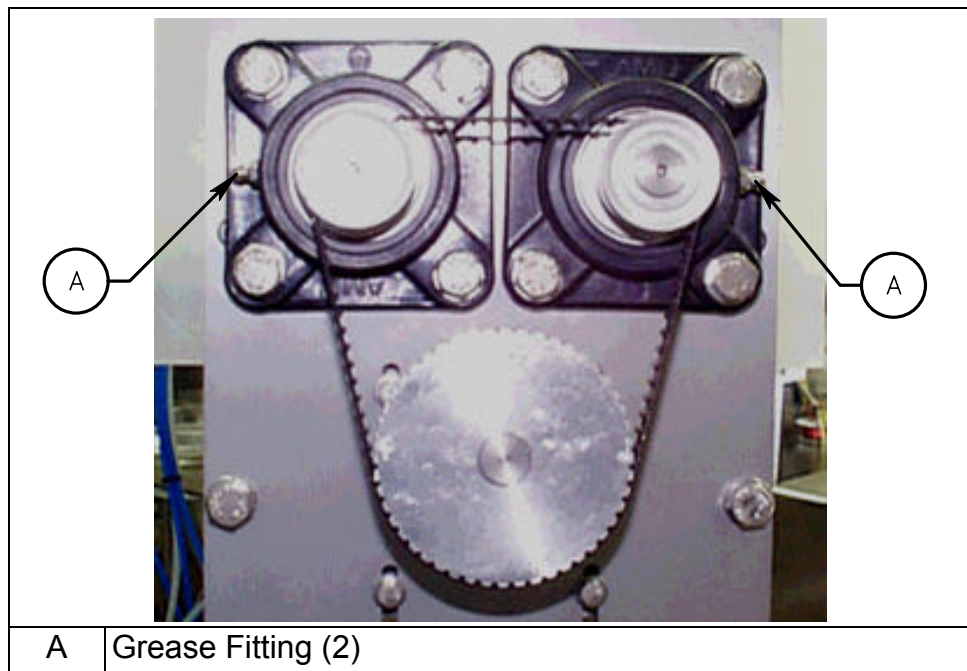


Figure 13-2: Lubricate Spinning Roll Bearings

LUBRICATION

Notes

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	POSSIBLE REMEDY
Machine stops operating.	Guards/doors open or not secure.	Close guard/doors.
	The MACHINE POWER is "off".	Turn the MACHINE POWER "on" to restart the machine.
Machine power failure.	Incoming power line is too small to handle the current load.	Replace the incoming power line to handle at least 30 amps current load.
	Blown fuse.	Replace fuse.
	Defective main power relay.	Replace relay.
Containers becoming damaged.	Container handling parts are improperly adjusted.	Adjust as needed.
	Weak containers.	Consult supplier or try different container.
Containers are not reaching the pockets.	Container handling parts are improperly adjusted.	Adjust as needed.
	Cup dropper timing is not set correctly.	Re-time the cup dropper assembly.
	Mis-sized containers.	Consult supplier or try different container.
Inaccurate fill weight.	Flow controls on the filler air cylinder may be set incorrectly.	Check and adjust flow controls on filler air cylinder.
	The machine speed may be too fast.	Reduce the speed of the machine.
	Ball and seals may be worn or damaged.	Replace worn or damaged ball and seals.
Product splashing from the container.	Product may be too thin.	Ensure the limit switches are being met.
	The forward stroke speed may be too fast.	Turn the adjustment screw clockwise to reduce the speed.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	POSSIBLE REMEDY
Product peaking in container.	The forward stroke speed may be too slow.	Turn the adjustment screw counterclockwise to increase the speed.
Product dripping from spout.	The filler bushings may be worn.	Inspect and replace.
Product does not break between container and filling spout.	The filler speed may be incorrect.	Adjust the filler speed.
The filler is not working.	Air hook-up on filler is hooked up incorrectly.	Check and adjust air hook-up on filler as necessary.
	Proximity sensor connection is bad	Check proximity sensor connection and adjust as needed.
	Ball valve is assembled improperly.	Assemble ball valve properly.
The seals are not being pulled from the seal magazine.	The seal fingers that hold the seals in place are not properly adjusted.	Adjust the seal fingers in or out to release the seal easily.
	There is no vacuum to pull the seal from the seal magazine.	Check the vacuum generator. Adjust, repair, or replace as needed.
	The suction cup is not reaching the bottom of the seal.	Adjust the height of the suction cup.
The seals are not properly aligned on the container.	The guide rods are not properly aligned.	Adjust the guide rods to align the seals properly on the container.
	The foil placement unit is not properly adjusted.	Adjust the foil placement unit to properly align the container with the pick and place assembly.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	POSSIBLE REMEDY
The seal is not properly sealing onto the container.	The heat seal temperature is too low.	Increase the heat seal temperature.
	The heat seal head air pressure is too low.	Increase the heat seal air pressure.
	The heat seal dwell time is too low.	Increase the heat seal dwell time.
	The heater is bad.	Replace the heater.
	There is a deviation in the container sealing surface.	Consult supplier / manufacturer.
The seals jam at the heat seal station.	The temperature is set too high.	Decrease the heat seal temperature.
	The heat seal dwell time is excessive.	Decrease the heat seal dwell time.
The container is lifting with the heat seal adapter.	The container is too light or is empty.	Check to make certain containers are filled correctly.
	The heat seal head is dirty.	Wipe the head to remove buildup. DO NOT WASH.
	The temperature is set too high.	Reduce the heat seal temperature.
	The heat seal dwell time is too long.	Decrease the heat seal dwell time.
The heat seal head adapter is not hot.	The heater is defective.	Replace the heater.
	The thermocouple wire is defective.	Replace the thermocouple wire.
	The solid state relay is bad.	Replace the relay.
	The temperature setting on the temperature controller is wrong or is "OFF".	Reset the temperature and make certain the controller is "ON".
	The temperature controller is defective.	Replace the temperature controller.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	POSSIBLE REMEDY
The heat seal head will not activate.	No air pressure or the heat seal head is turned down.	Adjust the air pressure.
	There is no input signal indicating the presence of containers.	Check the sealing sensors.
	The sealing temperature has not been reached.	Allow the heat seal adapter to reach operating temperature.
The heat seal head adapter is too hot.	The solid state relay is stuck or closed.	Replace the relay.
	The temperature controller is defective.	Replace the temperature controller.
	The thermocouple wire is broken or loose.	Check the wire and / or replace the thermocouple wire.
Heat sealer will not cycle.	The air cylinder is defective.	Repair or replace the air cylinder.
	Solenoid valve spool is sticking or is defective.	Repair solenoid.
Turntable motor will not operate.	Fuse is blown.	Replace fuse.
	Defective relay, drive board, or speed potentiometer.	Replace component.
	Defective motor.	Repair or replace the motor.
The lidder is not working.	Air hook-ups to lidder are hooked up incorrectly.	Check all air hook-ups to lidder and adjust as necessary.
	LID not selected on touch screen controls.	Press LID key on touch screen.
Lids are not being picked up by the cups.	Height of cup to lidder is set incorrectly.	Check height of cup to lidder. Raise or lower lidder or ramp for cup as needed.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	POSSIBLE REMEDY
Occasionally no lid.	Speed of lid hold cylinder is too fast or too slow.	Check speed of lid hold cylinder. Adjust flow control to speed up or slow down as needed.
	Lidder is out of adjustment.	Adjust lidder.

TROUBLESHOOTING

Notes

ORDERING PARTS

Ordering parts requires the following information:

1. Purchase order number.
2. Complete shipping instructions, including shipping address which indicates actual location of your facility; not a post office box.
3. Part number(s), description(s), and quantity of each part ordered.

Our Parts Department is staffed from 7:30 a.m. to 4:30 p.m. (Central Time Zone - United States), Monday through Friday. Reduced staff periods are between 12:30 p.m. to 1:00 p.m. (Central Time) and between 4:00 p.m. and 4:30 p.m. (Central Time). Please keep this in mind if calling during these time periods.

Orders received before 4:30 p.m. (Central Time) will normally be shipped the following business day. Emergency and overnight shipment orders MUST be placed no later than 2:00 p.m. (Central Time).

Orders may be telephoned, submitted by FAX, or mailed to the following:

TELEPHONE NUMBERS (563) 391-1100 1-800-257-5622 (USA)	FAX MACHINE NUMBER (563) 391-4951
SHIPPING ADDRESS 807 West Kimberly Road Davenport, IA 52806 USA	MAILING ADDRESS P.O. Box 3848 Davenport, IA 52808 USA

ORDERING PARTS

Notes

TECHNICAL SERVICE

Technical Service Representatives are available to provide maintenance and repair service in your plant on ***Pt Holmatic***, ***Pt KartridgPak***, and ***Pt KPAerofill*** built machines. These representatives are qualified to provide service to and operational maintenance instruction for, the above machines. They are not qualified to give service or advice relating to machinery or equipment sold or manufactured by others, or to advise regarding manufacturing processes or product formulations.

For additional information, or to schedule repair service, periodic inspection, or in-plant training, contact the Technical Service Department at (563) 391-1100, or toll free in the United States and Canada 1-800-257-5622.

TECHNICAL SERVICE

Notes

MACHINE DISPOSAL

Once the service life of the machine is done, proper disposal of the machine and its components will be necessary. The following guideline will enable you to safely dispose of the machine.

1. Disconnect all electrical, air, and product lines from the machine. Disconnect the machine from any conveyor system.
2. Remove all product from the machine, including bowl, heads, supply lines, and pans. Dispose of product in a manner consistent with local ordinance.
3. Drain any fluids and lubricants from the drive unit. Such fluids must be handled and disposed of in a manner consistent with local ordinance.
4. Remove any transformers from the electrical enclosures. Dispose of transformers in a manner consistent with local ordinance.
5. If desired, salvage any usable components from the machine for use elsewhere.
6. Remove the machine mounting hardware.
7. Deliver the machine to a salvage company or yard, for recycling of materials.

MACHINE DISPOSAL

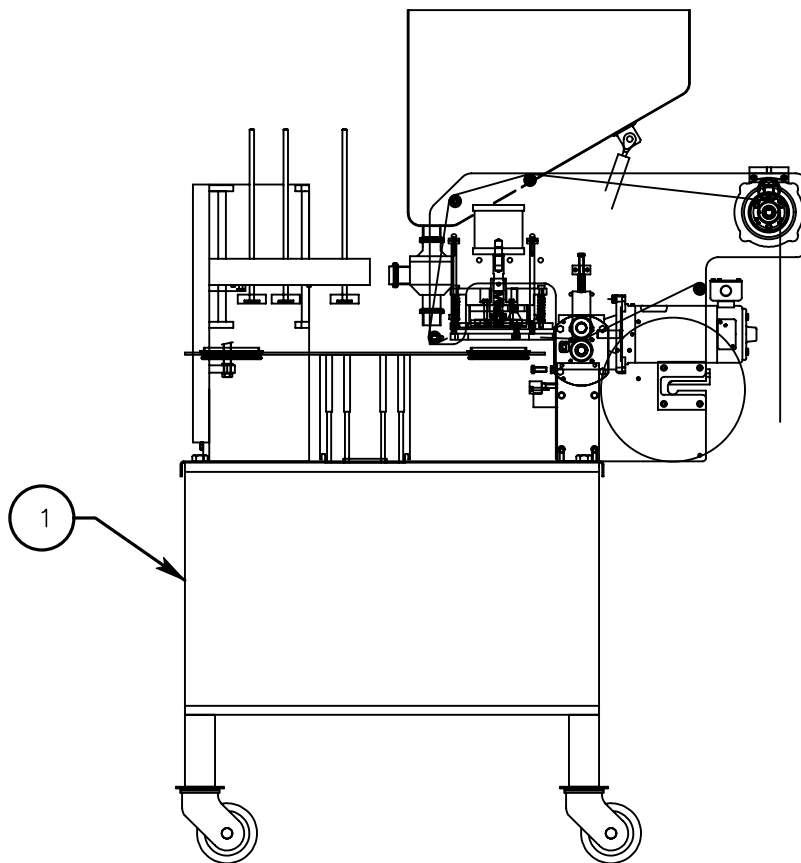
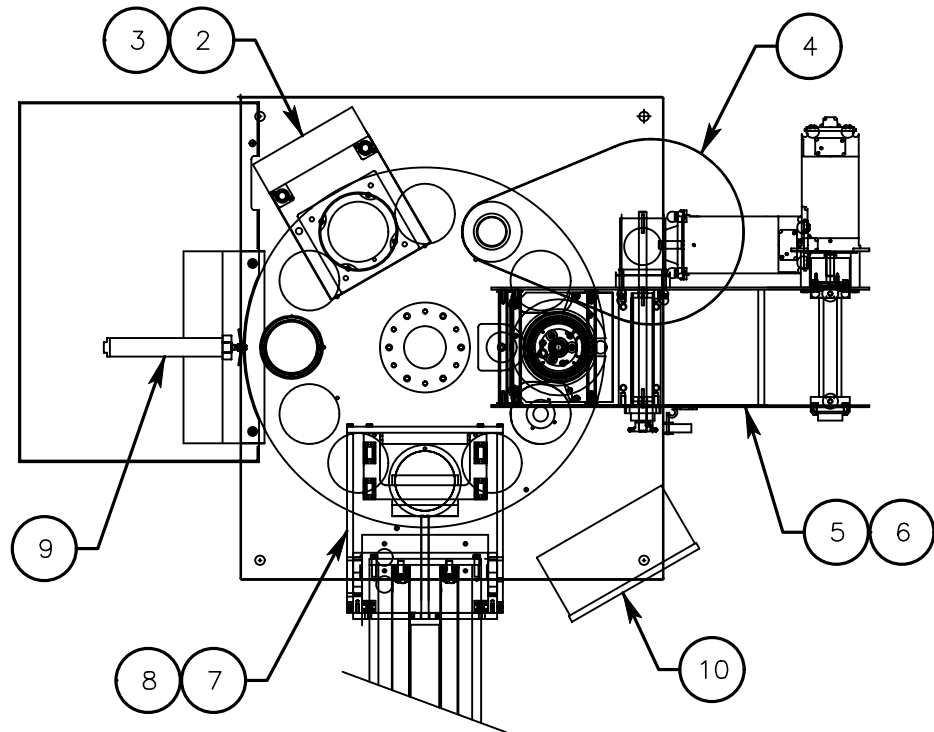
Notes

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ITEM	PART NUMBER	QTY	DESCRIPTION
1	QC32-10001	1	Frame Assembly
2	QC32-20001	1	Cup Dropper Assembly
OR	QC32-20101	1	Cup Dropper Assembly
3	QC32-20031	1	Cup Dropper Drive Assembly
4	QC32-30001	1	Filler Assembly (32 oz.)
OR	QC32-30010	1	Filler Assembly (8 oz.)
5	QC32-40080	1	Film Mounting Shaft Assembly
6	QC32-40079	1	Film Heat Seal Assembly
7	QC32-70001	1	Lidder Assembly
8	QC32-70002	1	Lid Spinner Assembly
9	QC32-80001	1	Cup Removal Assembly
10	QC32-90012	1	Electrical Controls
11*	QC32-90013	1	Pneumatic Controls

*Item not shown on illustration.

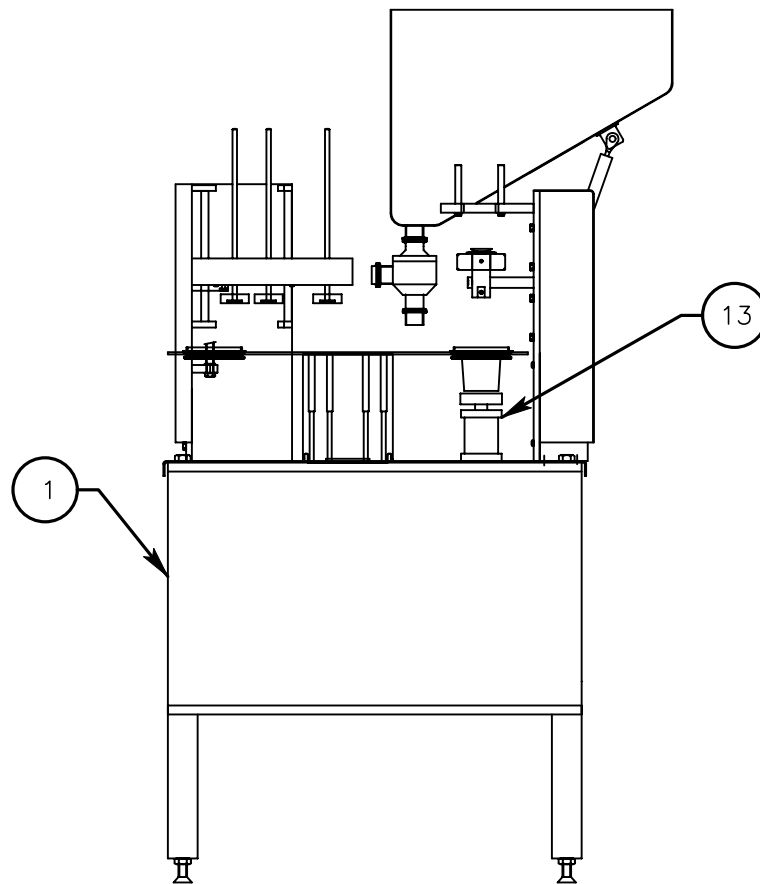
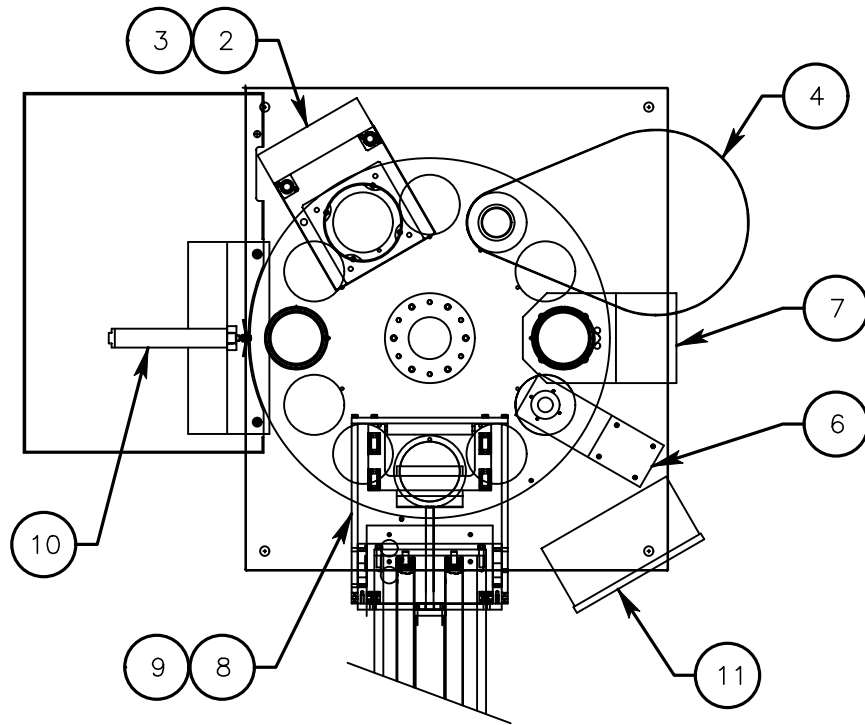


Shown with optional locking castors.

QC-32 CUP FILLER ASSEMBLY - WITH FILM HEAT SEAL

ITEM	PART NUMBER	QTY	DESCRIPTION
1	QC32-10001	1	Frame Assembly
2	QC32-20001	1	Cup Dropper Assembly
3	QC32-20031	1	Cup Dropper Drive Assembly
4	QC32-30001	1	Filler Assembly (32 oz.)
OR	QC32-30010	1	Filler Assembly (8 oz.)
6	QC32-41001	1	Foil Sealer Assembly
7	QC32-50001	1	Pick 'n' Place Assembly
8	QC32-70005	1	Lidder Assembly
9	QC32-70002	1	Lid Spinner Assembly
10	QC32-80001	1	Cup Removal Assembly
11	QC32-90012	1	Electrical Controls
OR	QC32-90020	1	Electrical Controls
12*	QC32-90013	1	Pneumatic Controls
OR	QC32-90021	1	Pneumatic Controls
13	QC32-10050	1	Cup Lift Support
	QC044-32132	1	Air Cylinder
	QC044-32133	1	Vacuum Cup
	95-220-2760-50	4	#10-24 x 1-1/4" Socket Head Cap Screw

*Item not shown on illustration.

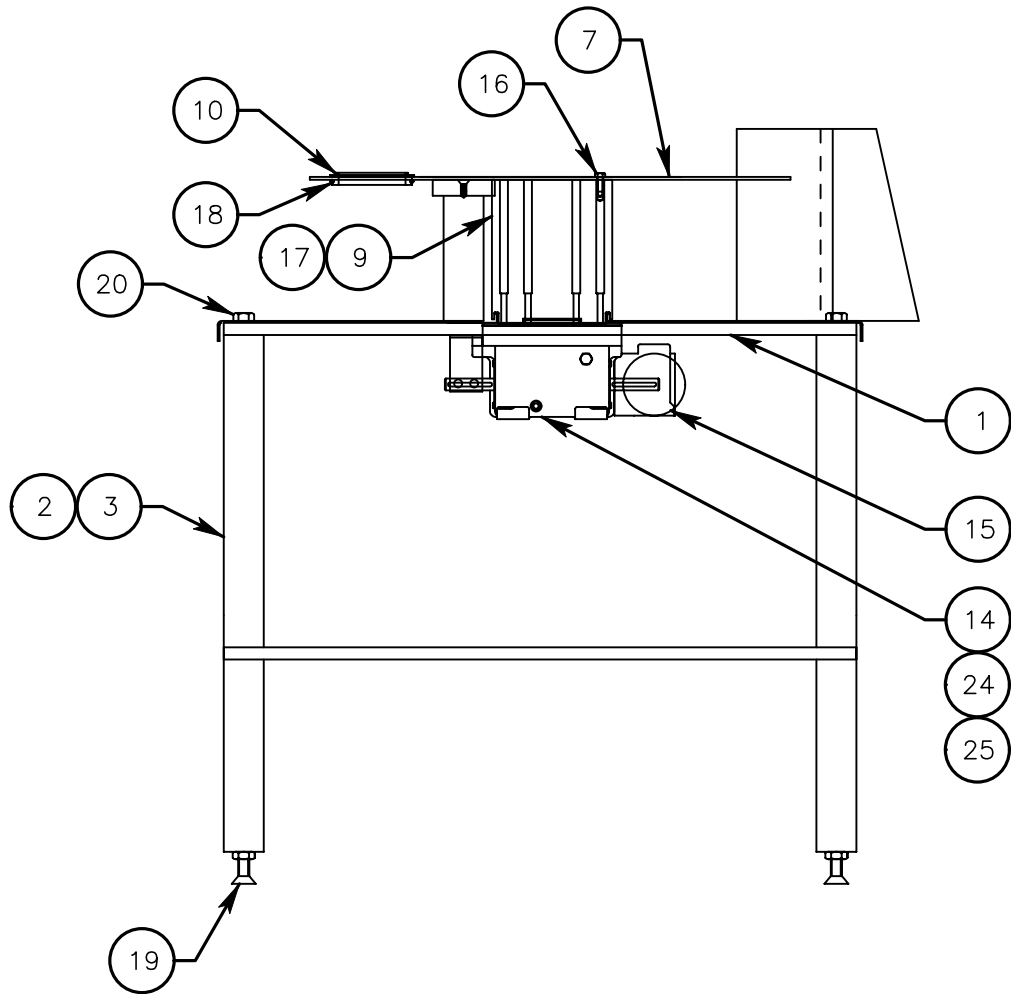
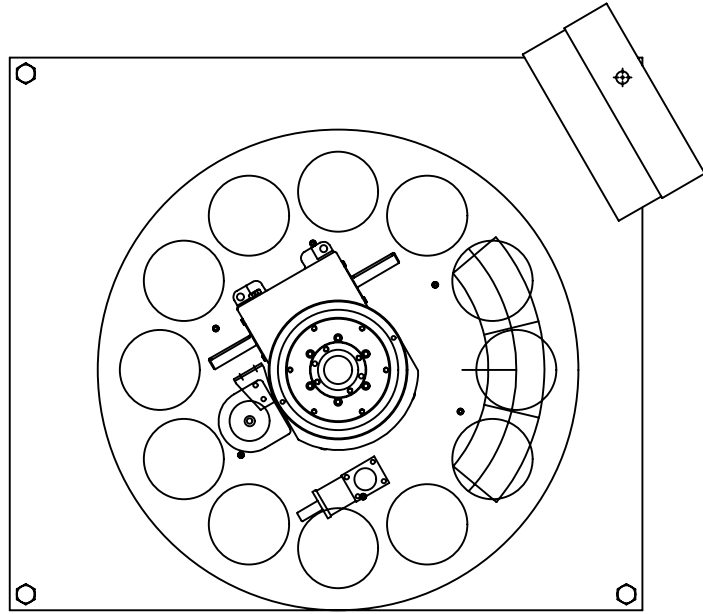


QC-32 CUP FILLER ASSEMBLY - WITH FOIL SEAL

ITEM	PART NUMBER	QTY	DESCRIPTION
1	QC32-10002	1	Top Plate
2	QC32-10012	4	Riser Frame
3	QC32-10013	4	Leg Mounting Stud
7	QC32-10033	1	Rotary Table Weldment
	QC32-10004	1	Rotary Table
	95-285-1410-50	12	1/4" Diameter x 3/8" Dowel Pin
9	QC32-10007	1	Turntable Hub
10	Customer Specific	12	Table Insert
14	QC044-32001	1	Indexer
15	QC044-32002	1	Motor
16	95-219-4350-50	6	3/8-16 x 1" Hex Head Cap Screw
17	95-219-4065-50	6	5-/16-18 x 5" Socket Head Cap Screw
18	QC044-32003	12	O'Ring
19	QC61045K73	4	Leveling Foot**
	95-255-2650-50	4	3/4-10 Hex Nut
20	95-219-6400-50	4	3/4-10 x 2-1/4" Hex Head Cap Screw
22*	QC32-10015	2	Frame Side Shield
23*	QC32-10016	2	Frame End Shield
24	QC32-10008	5	Spacer
25	95-219-3590-50	5	1/4-20 x 2" Hex Head Cap Screw
26*	QC044-32004	4	Bulkhead Union
27*	QC044-32005	6	Bulkhead Union
28*	QC044-32006	2	Cord Grip Fitting
29*	QC044-32007	4	Knob

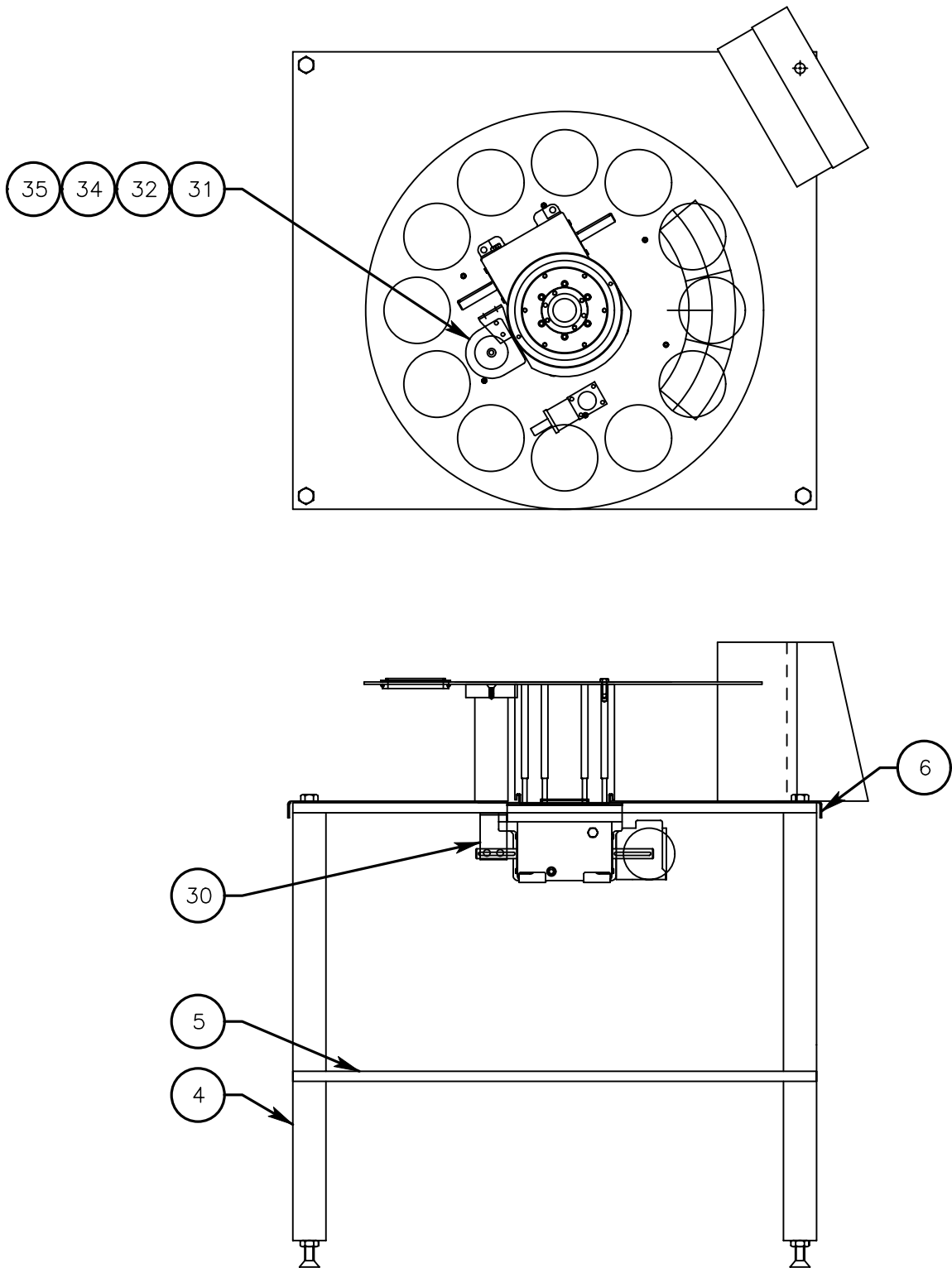
*Items not shown on illustration.

**Leveling foot is optional. Some machines may be equipped with locking castors.



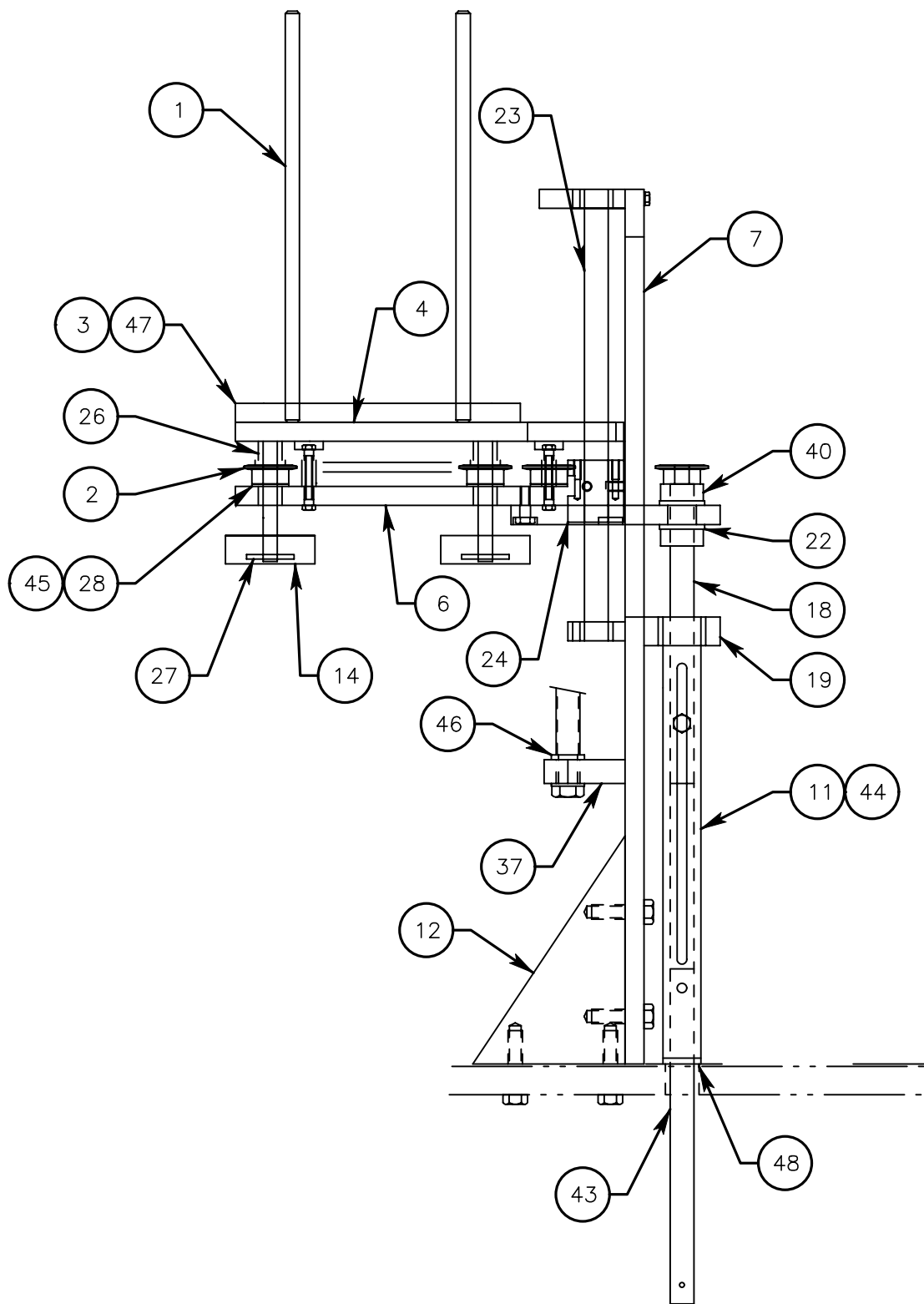
QC32-10001 FRAME ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION
4	QC32-10006	4	Leg
5	QC32-10003	1	Bottom Plate
6	QC32-10014	1	Top Shield / Enclosure Weldment
30	QC32-10036	1	Proximity Mounting Bracket
31	QC32-10042	4	Table Support
32	QC32-10043	1	Wear Pad
34	QC32-10013	1	3/4-10 x 3-1/4" Thread Rod
35	95-219-3970-50	1	5/16-18 x 1-1/2" Flat Head Socket Screw



QC32-10001 FRAME ASSEMBLY

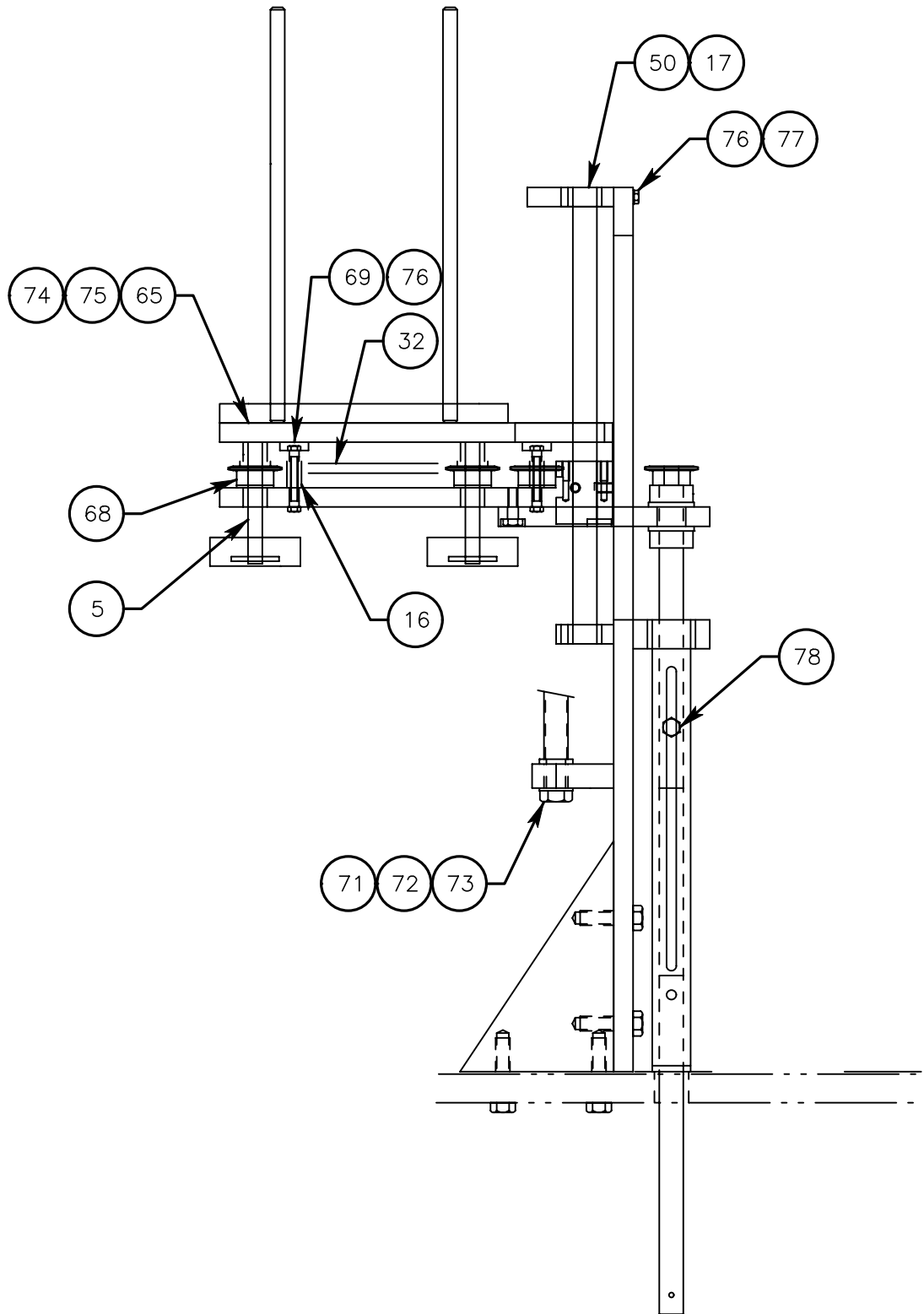
ITEM	PART NUMBER	QTY	DESCRIPTION
1	QC32-20002	4	Guide Rod
2	QC32-20003	5	#25 Sprocket (16T)
3	Customer Specific	1	Bottom Guide Plate
4	QC32-20005	1	Top Dropper Plate
6	QC32-20007	1	Bottom Dropper Plate
7	QC32-20008	1	Dropper Stank
11	QC32-20012	1	Lower Drive Shaft Sleeve
12	QC32-20013	1	Base Weldment Support
14	Customer Specific	4	Cup Separator Screw
18	QC32-20019	1	Upper Drive Shaft
19	QC32-20020	1	Support Block
22	QC044-32008	4	Thrust Washer
23	QC32-20022	2	Slide Shaft
24	QC32-20023	2	Slide Block
26	QC044-32009	8	Bushing
27	95-289-2290-50	4	3/16" diameter x 3/4" Roll Pin
28	QC044-32010	4	Retaining Ring
37	QC32-20026	1	Screw Base
40	QC044-32011	2	Set Screw Collar
43	QC32-20029	1	Lower Drive Shaft
44	95-289-3230-50	2	1/4" diameter x 1" Roll Pin
45	QC044-32012	4	Thrust Washer
46	QC044-32013	1	Flange Bushing
47	95-219-3540-50	2	1/4-20 x 3/4" Hex Head Cap Screw
48	QC044-32014	1	Flange Bushing
51	95-236-1500-50	2	Set Screw



QC32-20001 CUP DROPPER ASSEMBLY

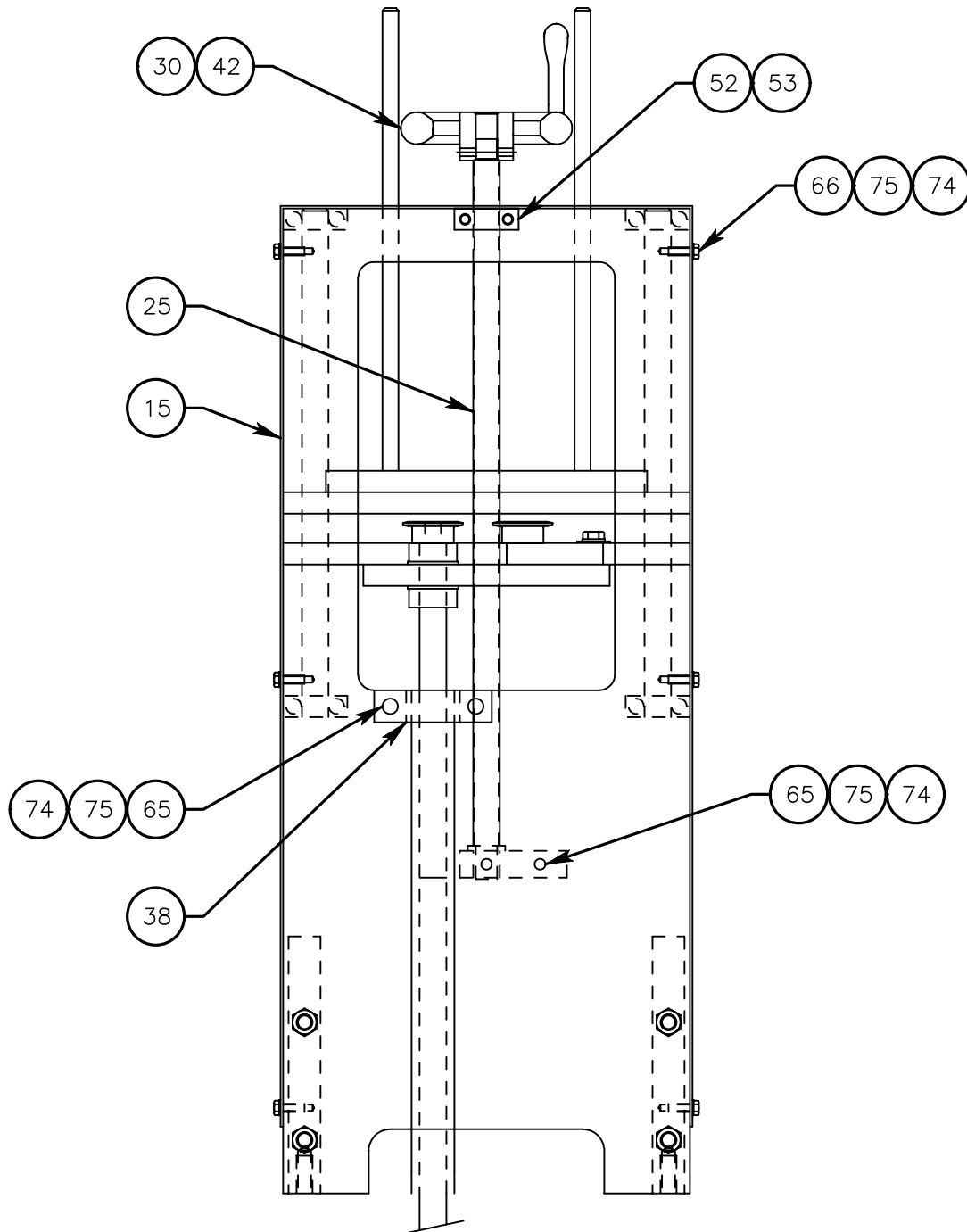
ITEM	PART NUMBER	QTY	DESCRIPTION
5	QC32-20006	4	Dropper Shaft
16	QC32-20017	4	Spacer
17	QC32-20018	4	Slide Shaft Support
29*	QC044-32015	2	Thrust Washer
50	95-236-1720-50	2	Set Screw
64*	QC044-32016	A/R	Rasterners
65	95-219-3550-50	15	1/4-20 x 1" Hex Head Cap Screw
68	95-236-1500-50	10	#8-32 x 1/4" Set Screw
69	95-220-2720-50	8	#10-24 x 1/2" Socket Head Cap Screw
71	95-219-3950-50	1	5/16-18 x 1" Hex Head Cap Screw
72	95-265-1170-50	1	5/16" Flat Washer
73	95-265-1670-50	1	5/16" Lock Washer
74	95-265-1660-50	26	1/4" Lock Washer
75	95-265-1160-50	10	1/4" Flat Washer
76	95-265-1640-50	10	#10 Lock Washer
77	95-219-2750-50	8	#10-24 x 1" Hex Head Cap Screw
78	95-236-2340-50	1	1/4-20 x 1/2" Set Screw

*Items not shown on illustration.



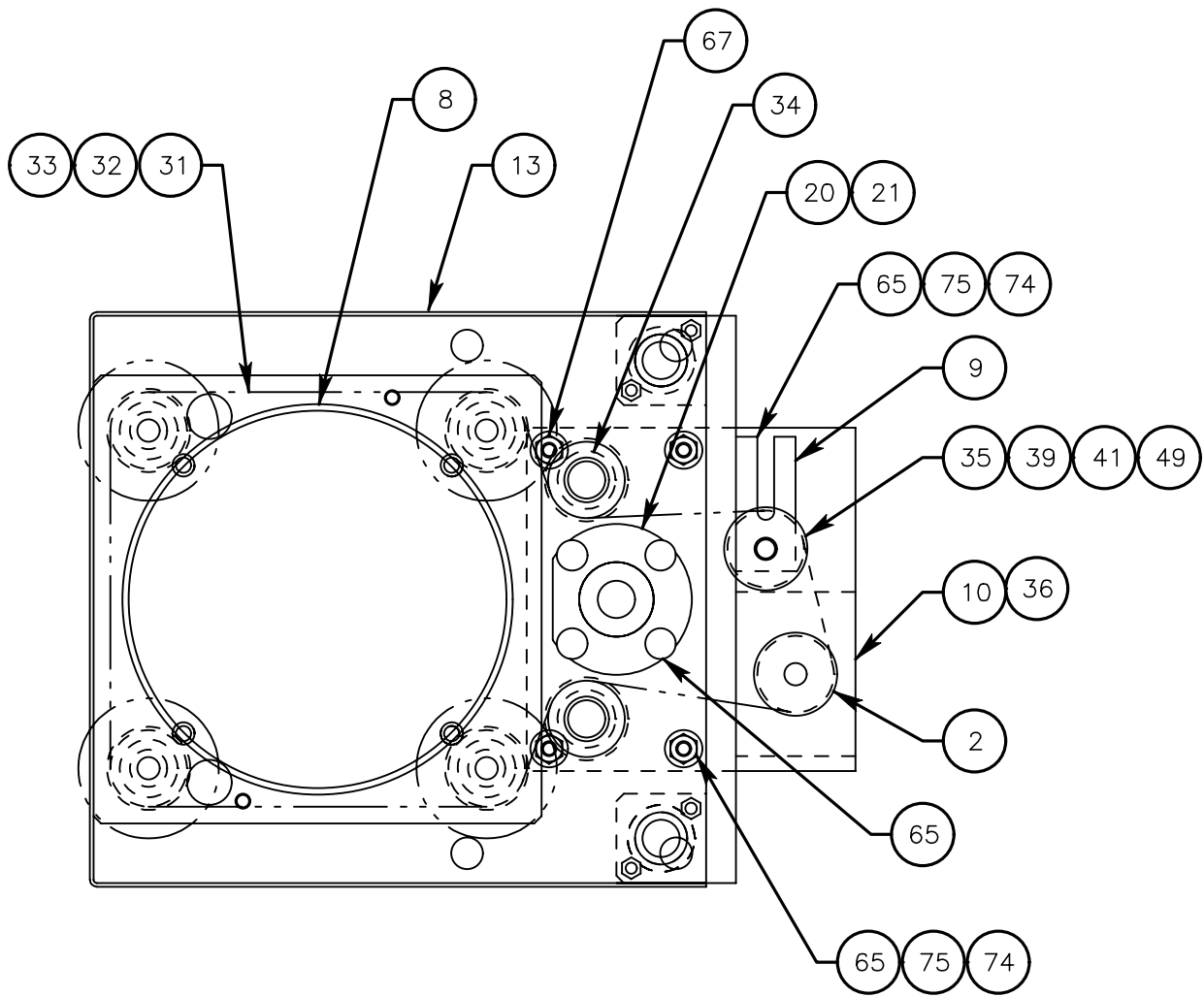
QC32-20001 CUP DROPPER ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION
15	QC32-20016	1	Dropper Stand Cover
25	QC32-20024	1	Dropper Elevating Screw
30	QC044-32017	1	Crank Knob
38	QC044-32018	1	Flange Bushing
42	95-289-2040-50	1	1/8" diameter x 1-1/4" Roll Pin
52	QC044-32019	1	Sleeve Bushing
53	QC32-20034	1	Dropper Screw Support
65	95-219-3550-50	15	1/4-20 x 1" Hex Head Cap Screw
66	95-219-3510-50	9	1/4-20 x 3/8" Hex Head Cap Screw
74	95-265-1660-50	26	1/4" Lock Washer
75	95-265-1160-50	10	1/4" Flat Washer



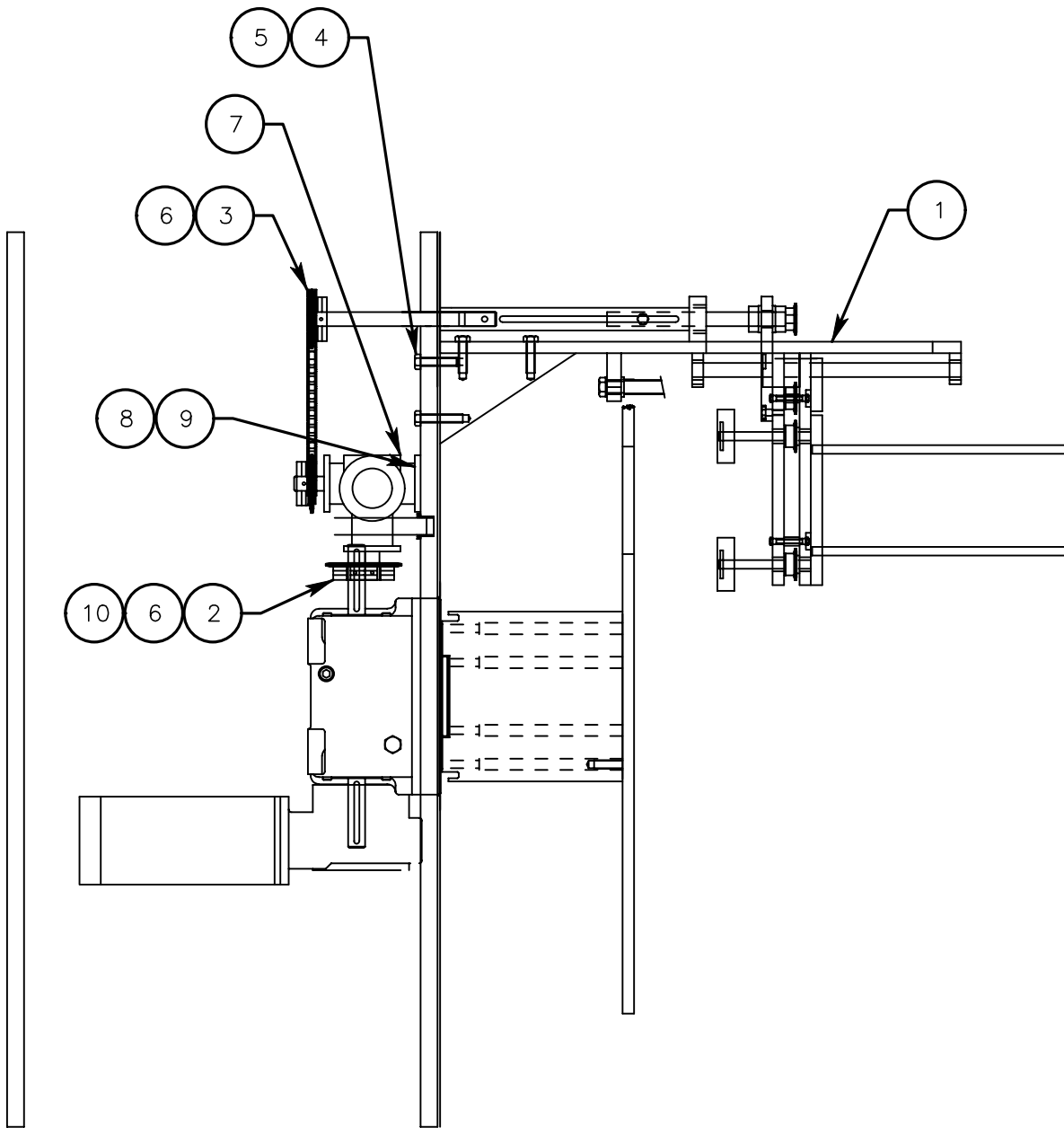
QC32-20001 CUP DROPPER ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION
2	QC32-20003	5	#25 Sprocket (16T)
8	Customer Specific	1	Dropper Insert
9	QC32-20010	1	Idler Block
10	QC32-20011	1	Support Plate
13	QC32-20014	1	Chain Cover
20	QC044-32020	1	5/8-8 Acme Thread Hex Nut, Bronze
21	QC32-20021	1	Nut
31	044-570-00500	A/R	#25 Roller Chain
32	044-570-00500	A/R	#25 Roller Chain
33	044-570-00510	1	#25 Chain Link
34	QC044-32021	2	Bushing
35	QC044-32022	1	Bushing
36	QC044-32023	1	Bushing
39	QC044-32024	1	Thrust Washer
41	QC32-20027	3	#25 Sprocket (16T)
49	95-500-1850-50	1	3/8" diameter x 3/4" Shoulder Bolt
65	95-219-3550-50	15	1/4-20 x 1" Hex Head Cap Screw
67	95-220-3550-50	2	1/4-20 x 1" Socket Head Cap Screw
74	95-265-1660-50	26	1/4" Lock Washer
75	95-265-1160-50	10	1/4" Flat Washer



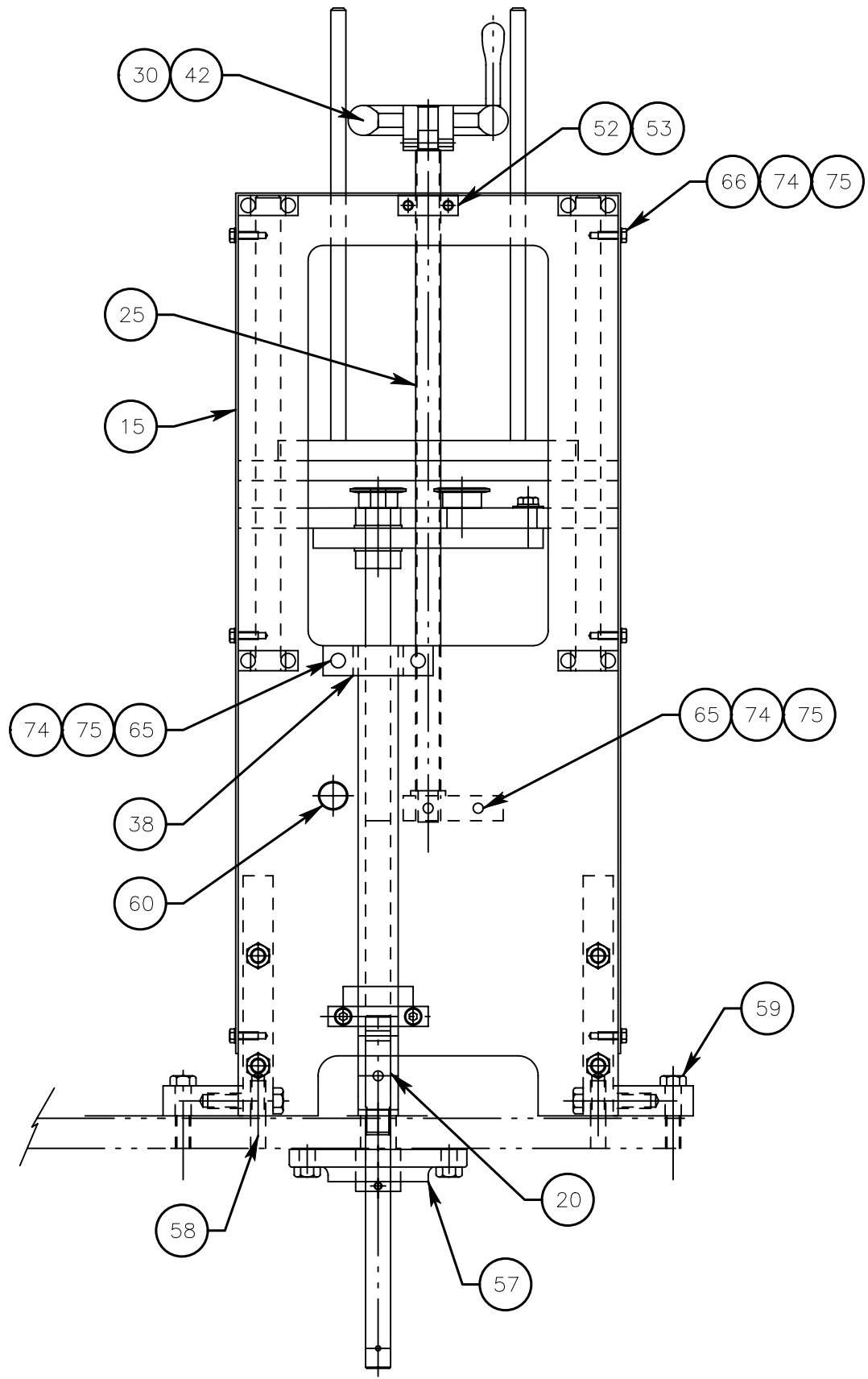
QC32-20001 CUP DROPPER ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION
1	QC32-20001	REF	Cup Dropper Assembly
2	QC32-20032	1	#35 Sprocket (20T)
3	QC32-20033	3	#35 Sprocket (20T)
4	95-219-4380-50	4	3/8-16 x 1-3/4" Hex Head Cap Screw
5	95-265-1680-50	4	3/8" Lock Washer
6	044-570-02000	A/R	#35 Chain
7	QC044-32025	1	Beveled Gear Drive
8	95-236-2390-50	4	1/4-20 x 1-1/4" Set Screw
9	95-255-1950-50	4	1/4-20 Hex Nut
10	95-236-2740-50	4	5/16-18 x 1/2" Set Screw



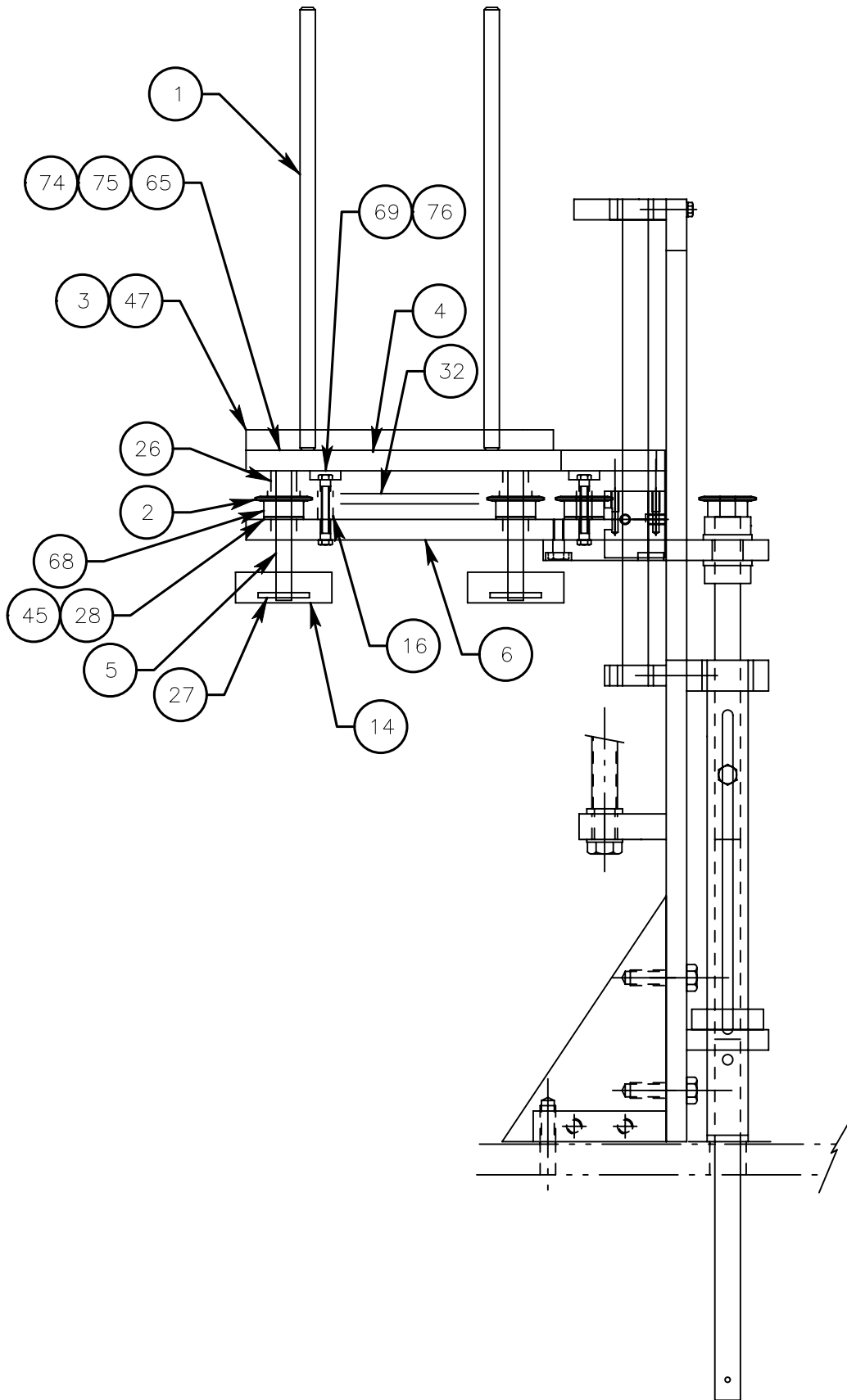
QC32-20031 CUP DROPPER DRIVE ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION
15	QC32-20016	1	Dropper Stand Cover
20	QC32-20072	1	Lower Drive Shaft
25	QC32-20024	1	Dropper Elevating Screw
30	QC044-99167	1	Crank Knob
38	QC044-32018	1	Flange Bushing
42	95-289-2040-50	1	1/8" diameter x 1-1/4" Roll Pin
52	QC044-32019	1	Sleeve Bushing
53	QC32-20034	1	Dropper Screw Support
57	QC044-99303	1	Flange Bearing
58	QC044-99304	2	3/8-16 x 1-1/2" Stud
59	95-219-4370-50	6	3/8-16 x 1-1/2" Hex Head Cap Screw
60	QC044-99005	1	Photo Sensor
65	95-219-3550-50	15	1/4-20 x 1" Hex Head Bolt
66	95-219-3710-50	9	1/4-20 x 3/8" Hex Head Bolt
74	95-265-1660-50	26	1/4" Lock Washer
75	95-265-1160-50	10	1/4" Flat Washer



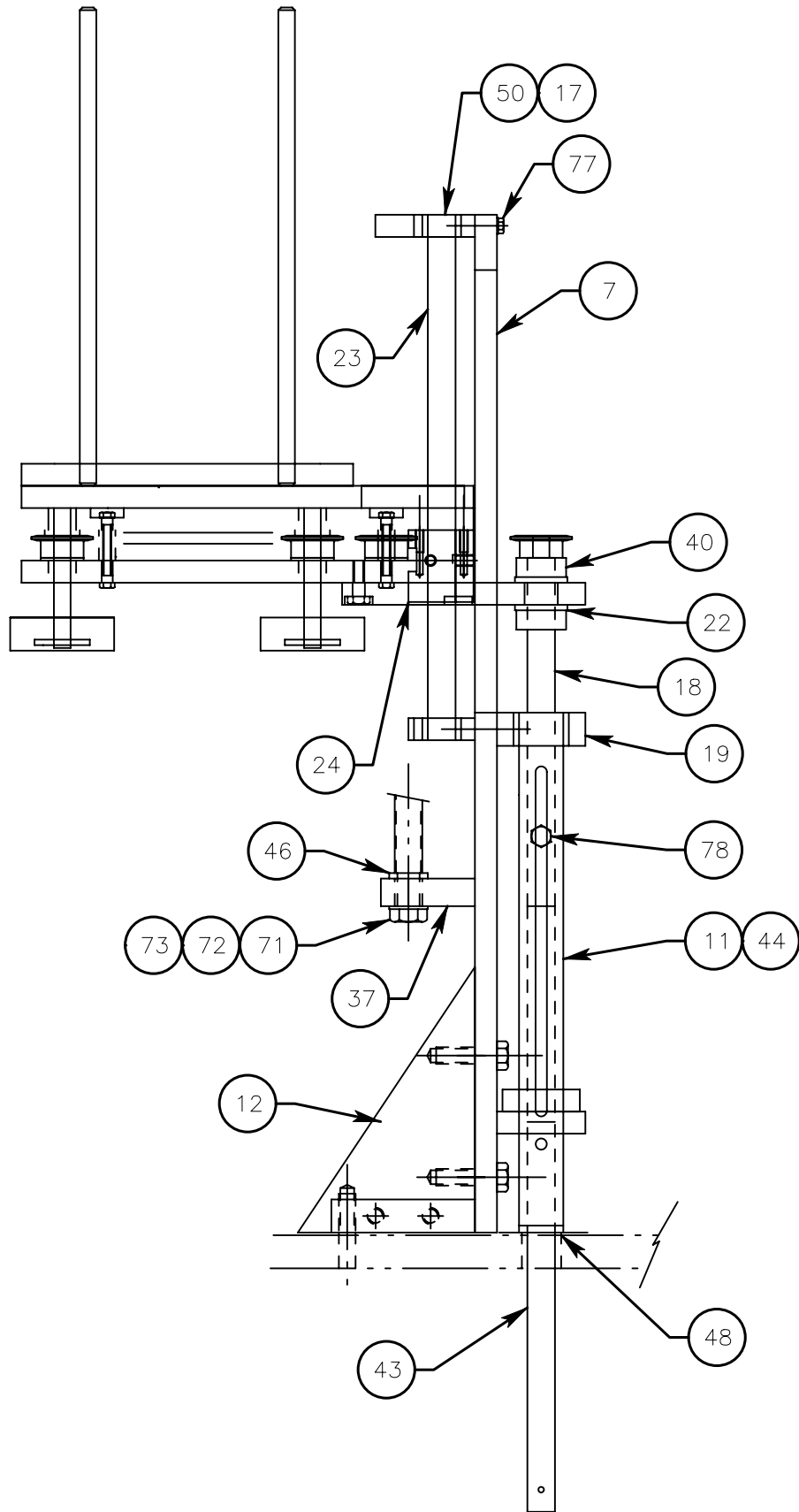
QC32-20101 CUP DROPPER ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION
1	QC32-20002	4	Guide Rod
2	QC32-20003	5	Sprocket
3	QC32-20099	1	Bottom Guide Plate
4	QC32-20097	1	Top Dropper Plate
5	QC32-20006	4	Dropper Shaft
6	QC32-20098	1	Bottom Dropper Plate
14	QC32-20047	4	Cup Separator Screw
16	QC32-20017	4	Spacer
26	QC044-32009	8	Bushing
27	95-289-2290-50	4	3/16" diameter x 3/4" Roll Pin
28	QC044-32010	4	Retaining Ring
32	QC044-80011	A/R	#25 Roller Chain
45	QC044-32012	4	Thrust Washer
47	95-219-3540-50	2	1/4-20 x 3/4" Hex Head Bolt
65	95-219-3550-50	15	1/4-20 x 1" Hex Head Bolt
68	95-236-1500-50	10	#8-32 x 1/4" Set Screw
69	95-220-2720-50	8	#10-24 x 1/2" Socket Head Cap Screw
74	95-265-1660-50	26	1/4" Lock Washer
75	95-265-1160-50	10	1/4" Flat Washer
76	95-265-1670-50	10	#10 Lock Washer



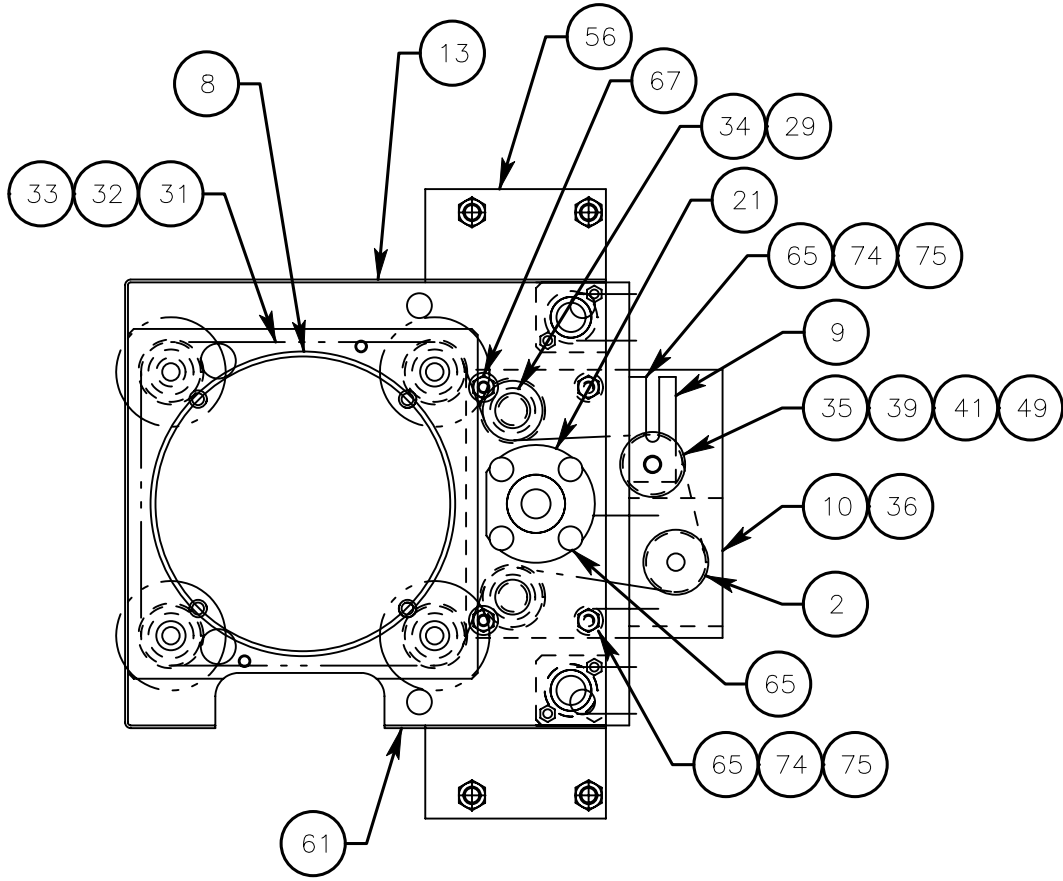
QC32-20101 CUP DROPPER ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION
7	QC32-20100	1	Dropper Stand
11	QC32-20012	1	Lower Drive Shaft Sleeve
12	QC32-20013	2	Base Support
17	QC32-20018	4	Slide Shaft Support
18	QC32-20019	1	Upper Drive Shaft
19	QC32-20020	1	Support Block
22	QC044-32008	4	Thrust Washer
23	QC32-20022	2	Slide Shaft
23.1	QC044-99302	2	Precision Ground Rod
24	QC32-20023	2	Slide Block
37	QC32-20026	1	Screw Base
40	QC044-32011	2	Set Screw Collar
43	QC32-20074	1	Bottom Drive Shaft
44	95-289-3230-50	2	1/4" diameter x 1" Roll Pin
46	QC044-32013	1	Flange Bushing
48	QC044-32014	1	Bushing Flange
50	95-236-1720-50	6	#10-24 x 3/8" Set Screw
71	95-219-3950-50	1	5/16-18 x 1" Hex Head Bolt
72	95-265-1170-50	1	5/16" Flat Washer
73	95-265-1670-50	1	5/16" Lock Washer
77	95-219-2750-50	8	#10-24 x 1" Hex Head Bolt
78	95-236-2340-50	1	1/4-20 x 1/2" Set Screw



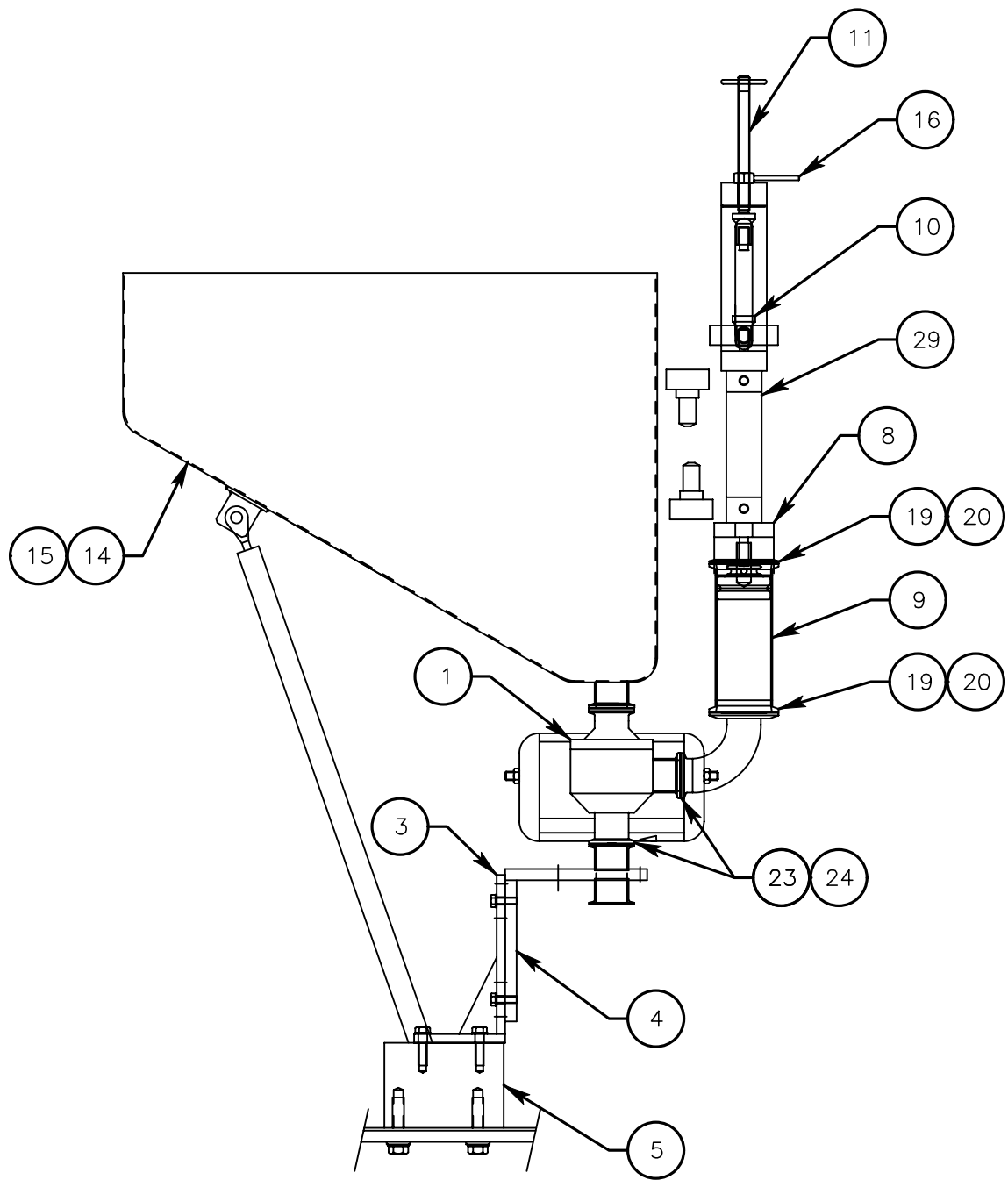
QC32-20001 CUP DROPPER ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION
2	QC32-20003	5	Sprocket
8	QC32-20009	1	Dropper Insert
9	QC32-20010	1	Idler Block
10	QC32-20011	1	Support Plate
13	QC32-20102	1	Chain Cover
21	QC32-20021	1	Plate Nut
29	QC044-32015	2	Thrust Washer
31	QC044-80016	1	#25 Roller Chain Half Link
32	QC044-80011	A/R	#25 Roller Chain
33	QC044-80018	1	# 25 Roller Chain Master Link
34	QC044-32089	2	Bushing
35	QC044-32022	1	Bushing
36	QC044-32023	1	Bushing
39	QC044-32024	1	Thrust Washer
41	QC32-20027	3	Idler Sprocket
49	95-500-1850-50	1	3/8-16 x 3/4" Shoulder Bolt
56	QC32-20072	2	Support Block
61	QC32-20103	1	Chain Cover
65	95-219-3550-50	15	1/4-20 x 1" Hex Head Bolt
67	95-220-3550-50	2	1/4-20 x 1" Socket Head Cap Screw
74	95-265-1660-50	26	1/4" Lock Washer
75	95-265-1160-50	10	1/4" Flat Washer



QC32-20101 CUP DROPPER ASSEMBLY

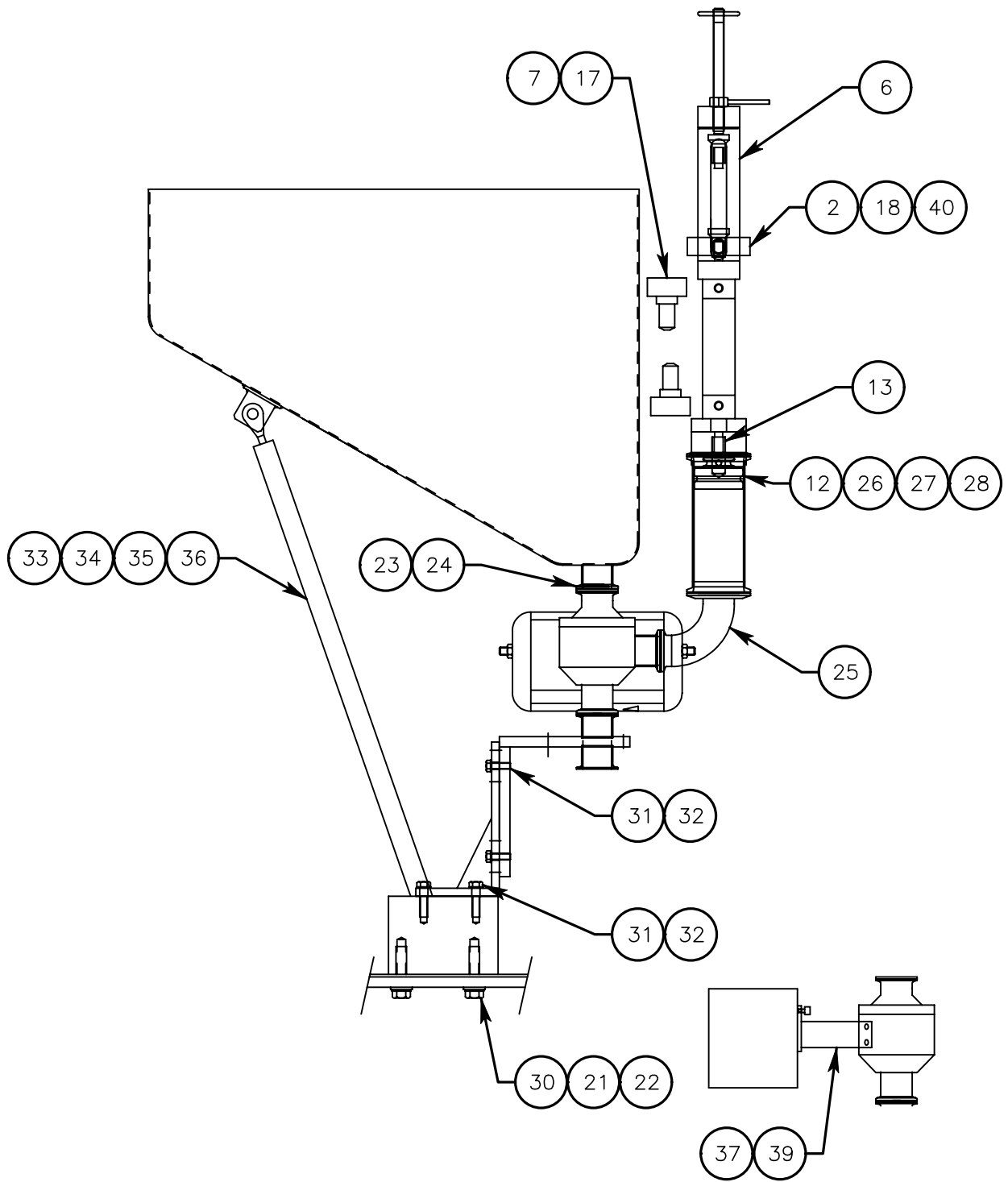
ITEM	PART NUMBER	QTY	DESCRIPTION
1	QC044-32026	1	Ball Valve with Actuator
3	QC08-30003	1	Filler Mounting Bracket
4	QC32-30003	1	Valve Mounting Bracket
	QC044-32027	1	Ferrule
5	QC32-30002	1	Filler Adapter Block
8	QC32-30006	1	Air Cylinder Adapter
9	QC08-30006	1	Product Barrel
10	QC32-30014	1	Cylinder End Stop Cap
11	QC32-30015	1	Cylinder Stop Rod
14	Customer Specific	1	Product Hopper
	QC044-32028	1	Ferrule
15	QC32-30007	1	Hopper Cover
16	QC32-30018	1	Lock Nut Adjuster
19	QC044-32029	2	Clamp
20	QC044-32030	2	Gasket
23	QC044-32031	3	Clamp
24	QC044-32032	3	Gasket
29	QC044-32033	1	Air Cylinder



QC32-30010 FILLER ASSEMBLY (8OZ)

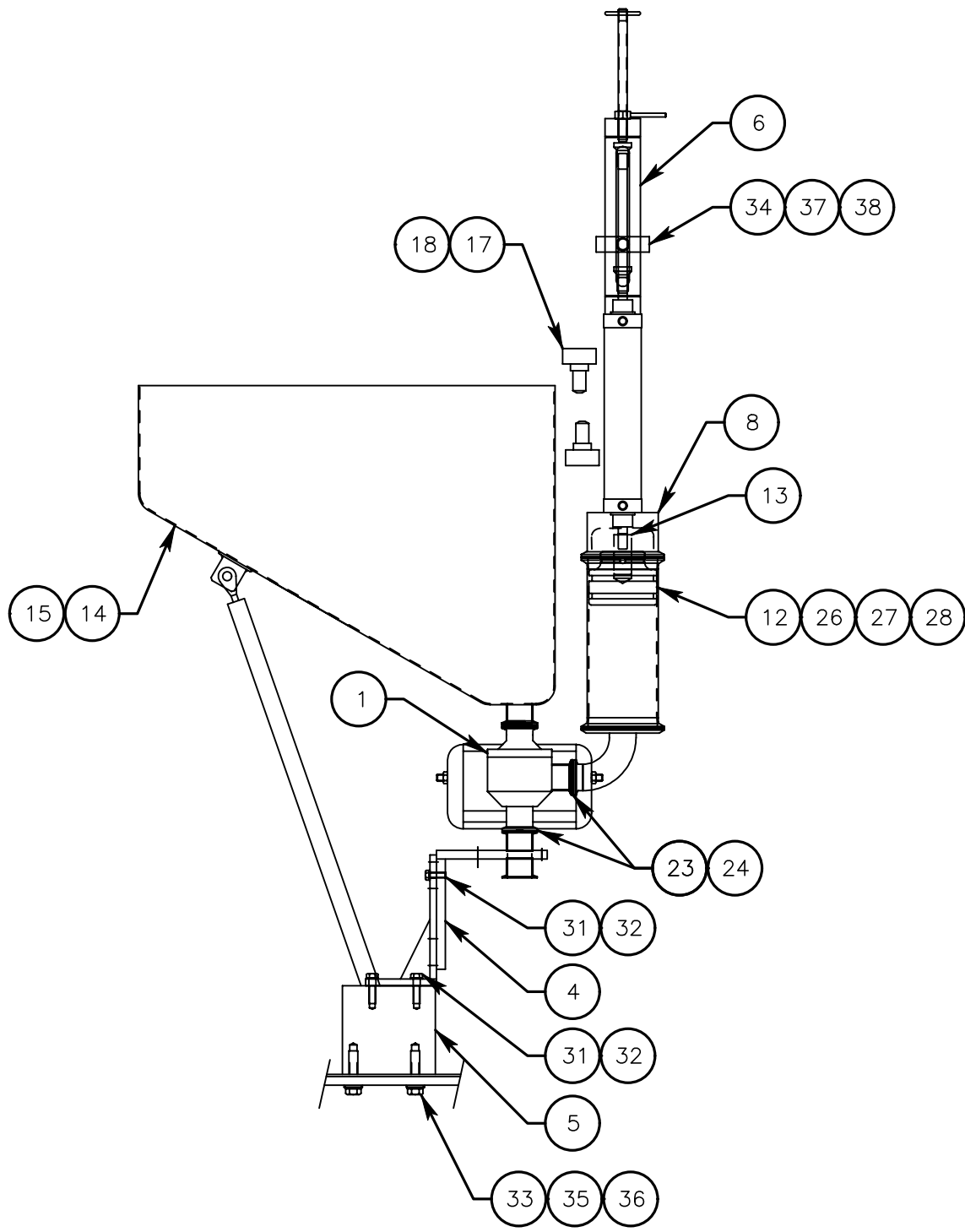
ITEM	PART NUMBER	QTY	DESCRIPTION
2	QC32-30017	1	Proximity Bracket Ring
6	QC32-30009	1	Adjusting Barrel Weldment
	QC32-30011	1	Adjusting Barrel Head Cap
	QC32-30012	1	Adjusting Barrel
	QC32-30013	1	Adjusting Barrel Tail Cap
7	QC044-32034	4	Pipe Nipple
12	QC08-30005	1	Product Piston
13	QC32-30016	1	Piston Adapter
17	QC044-32035	1	Flow Control
18	QC044-32036	1	Proximity Switch
21	95-265-1200-50	4	1/2" Flat Washer
22	95-265-1700-50	4	1/2" Lock Washer
23	QC044-32037	3	Clamp
24	QC044-32038	3	Gasket
25	QC044-32039	1	90 Degree Elbow
26	QC044-32040	1	Retainer O'Ring
27	QC044-32041	1	Piston O'Ring
28	95-285-1460-50	1	1/4" diameter x 1" Dowel Pin
30	95-219-5190-50	4	1/2-13 x 2" Hex Head Cap Screw
31	95-219-4360-50	8	3/8-16 x 1-1/4" Hex Head Cap Screw
32	QC044-32042	8	3/8" Lock Washer
33	QC32-30102	1	Hopper Support
34	QC044-32043	2	Safety Pin with Lanyard
35	QC044-32044	1	5/6-18 x 4" Turnbuckle
36	QC044-32045	1	3/8-16 x 3" Rod End
37	QC32-30005	1	Bracket
38*	QC32-30034	1	Filler Support Brace
39	QC044-32046	4	5/16-18 High Head Thumb Screw
40	QC044-32047	1	Disconnect Cable

*Item not shown on illustration.



QC32-30010 FILLER ASSEMBLY (8OZ)

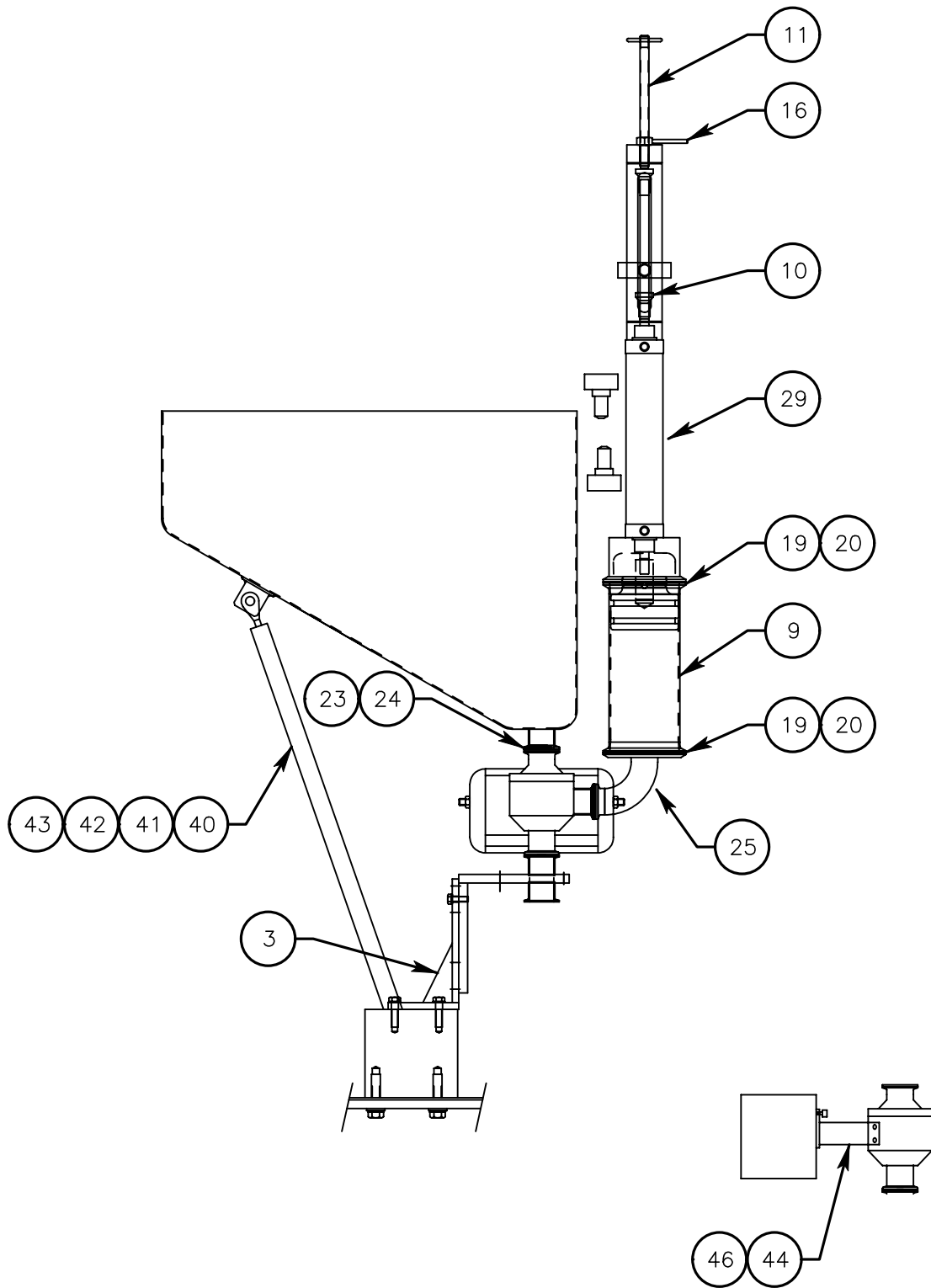
ITEM	PART NUMBER	QTY	DESCRIPTION
1	QC044-32048	1	Ball Valve with Actuator
4	QC32-30003	1	Valve Mounting Bracket
5	QC32-30002	1	Filler Adapter Block
	QC044-32049	1	Ferrule
6	QC32-30029	1	Adjusting Barrel Weldment
	QC32-30030	1	Adjusting Barrel Head Cap
	QC32-30031	1	Adjusting Barrel
	QC32-30013	1	Adjusting Barrel Tail Cap
8	QC32-30028	1	Air Cylinder Adapter
12	QC08-30023	1	Product Piston
13	QC32-30024	1	Piston Adapter
14	Customer Specific	1	Product Hopper
	QC044-32050	1	Ferrule
15	QC32-30007	1	Hopper Cover
17	QC044-32051	4	Pipe Nipple
18	QC044-32052	2	Flow Control
23	QC044-32053	3	Clamp
24	QC044-32054	3	Gasket
26	QC044-32055	1	Retainer O'Ring
27	QC044-32056	1	Piston O'Ring
28	95-285-1700-50	1	5/16 x 2" Dowel Pin
31	95-219-4360-50	8	3/8-16 x 1-1/4" Hex Head Cap Screw
32	95-265-1680-50	8	3/8" Lock Washer
33	95-219-5190-50	4	1/2-13 x 2" Hex Head Cap Screw
34	QC32-30017	1	Proximity Bracket Ring
35	95-265-1200-50	4	1/2" Flat Washer
36	95-265-1700-50	4	1/2" Lock Washer
37	QC044-32057	1	Proximity Switch
38	QC044-32058	1	Disconnect Cable



QC32-30001 FILLER ASSEMBLY (32OZ)

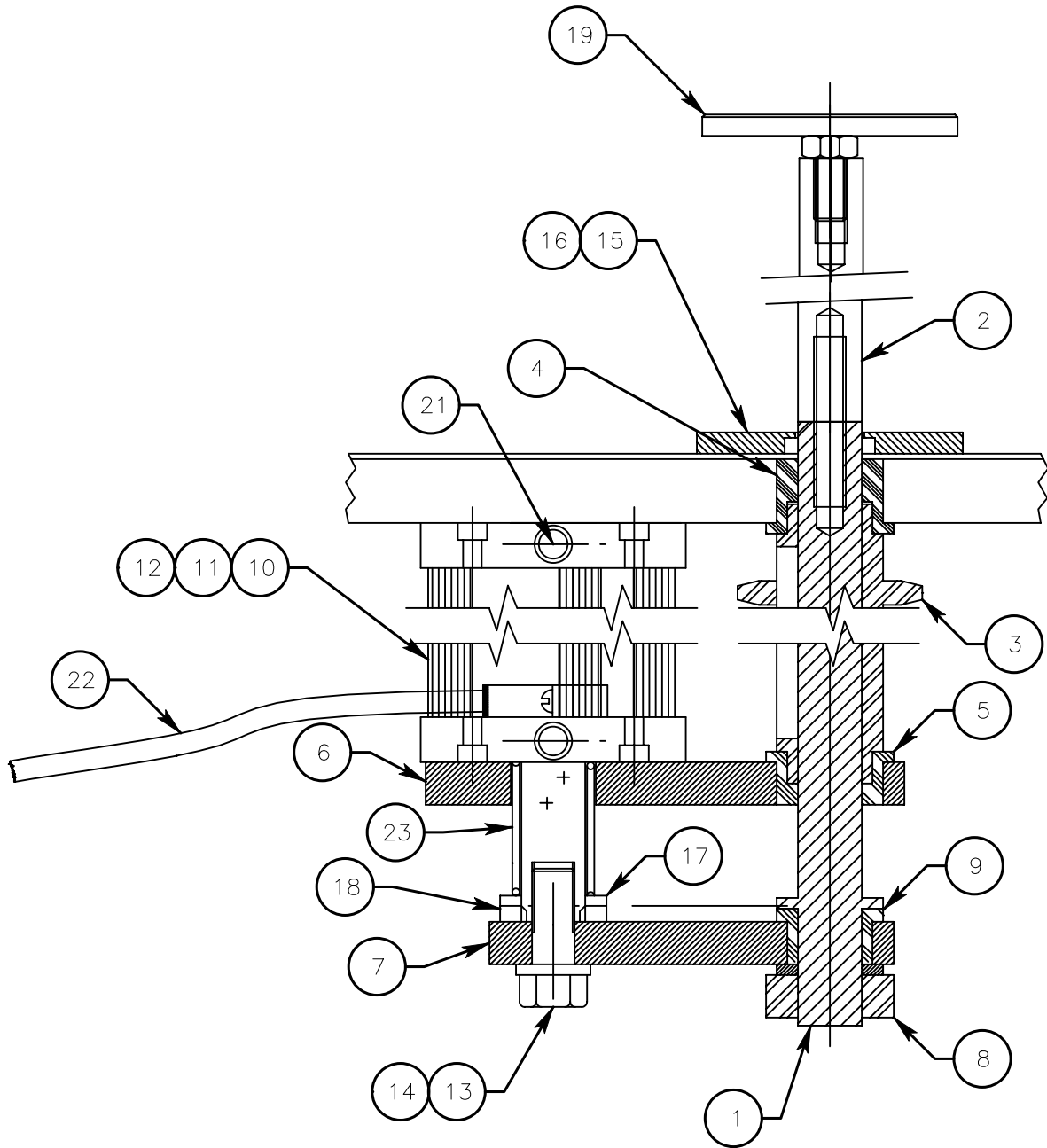
ITEM	PART NUMBER	QTY	DESCRIPTION
3	QC08-30003	1	Filler Mounting Bracket (Mounts to backside of item 4)
9	QC08-30006	1	Product Barrel
10	QC32-30025	1	Cylinder End Stop Cap
11	QC32-30026	1	Cylinder Stop Rod
16	QC32-30018	1	Adjuster Lock Nut
19	QC044-32059	2	Clamp
20	QC044-32060	2	Gasket
21*	QC32-30019	1	Rod End Spacer
23	QC044-32061	3	Clamp
24	QC044-32062	3	Gasket
25	QC32-30027	1	90° Elbow
	QC044-32063	1	90° Elbow
	QC044-32064	1	End Cap
29	QC044-32065	1	Air Cylinder
40	QC32-30102	1	Hopper Support
41	QC044-32066	2	Safety Pin with Lanyard
42	QC044-32067	1	3/16-18 x 4" Turnbuckle
43	QC044-32068	1	3/8-16 x 3" Rod End
44	QC044-32069	1	Actuator Mounting Bracket
45*	QC32-30034	1	Filler Support Brace
46	QC044-32070	4	5/16-18 High Head Thumb Screw

*Items not shown on illustration.



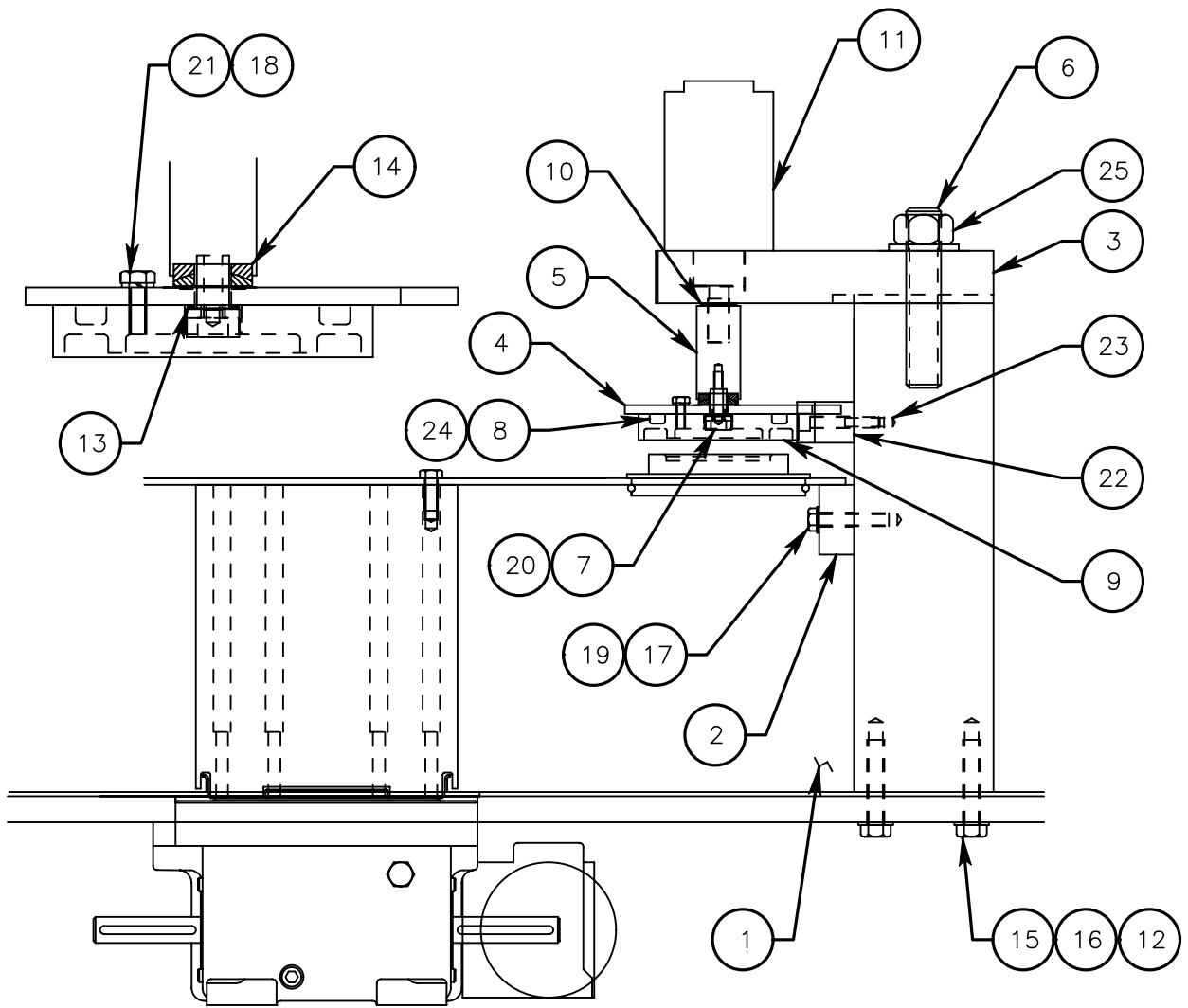
QC32-30001 FILLER ASSEMBLY (32OZ)

ITEM	PART NUMBER	QTY	DESCRIPTION
1	QC32-11005	1	Vertical Lift Shaft Weldment
	QC32-11006	1	Vertical Guide Shaft
	QC32-11007	1	Stop Disc
2	QC32-11017	1	Bottom-Up Fill Extension Shaft
3	QC32-11008	1	Vertical Guide Sleeve Weldment
	QC32-11009	1	Vertical Guide Sleeve Weldment
	QC32-11010	1	Rotary Drive Sprocket
4	QC32-11011	1	Top Outer Bushing
5	QC32-11012	1	Bottom Outer Bushing
6	QC32-11013	1	Center Bearing Plate
7	QC32-11014	1	Lower Bearing Plate
8	QC044-80009	1	Set Screw Collar
9	QC044-32014	2	Flange Bushing
10	QC044-32210	1	Air Cylinder
11	95-220-2750-50	8	#10-24 x 1" Socket Head Cap Screw
12	95-265-1640-50	8	#10 Lock Washer
13		1	1/2-20 x 1-1/4" Hex Head Cap Screw
14	95-265-1700-50	1	1/2" Lock Washer
15	QC32-11015	1	Wiper Holder
16	QC044-32121	1	Wiper Ring Seal
17	QC044-32211	1	Thrust Washer
18	QC044-32214	1	Washer
19	QC32-11016	1	Bottom-Up Fill Pad
21	QC044-32308	2	Flow Control
22	QC044-32212	1	Switch
23	QC044-32213	1	Compression Spring



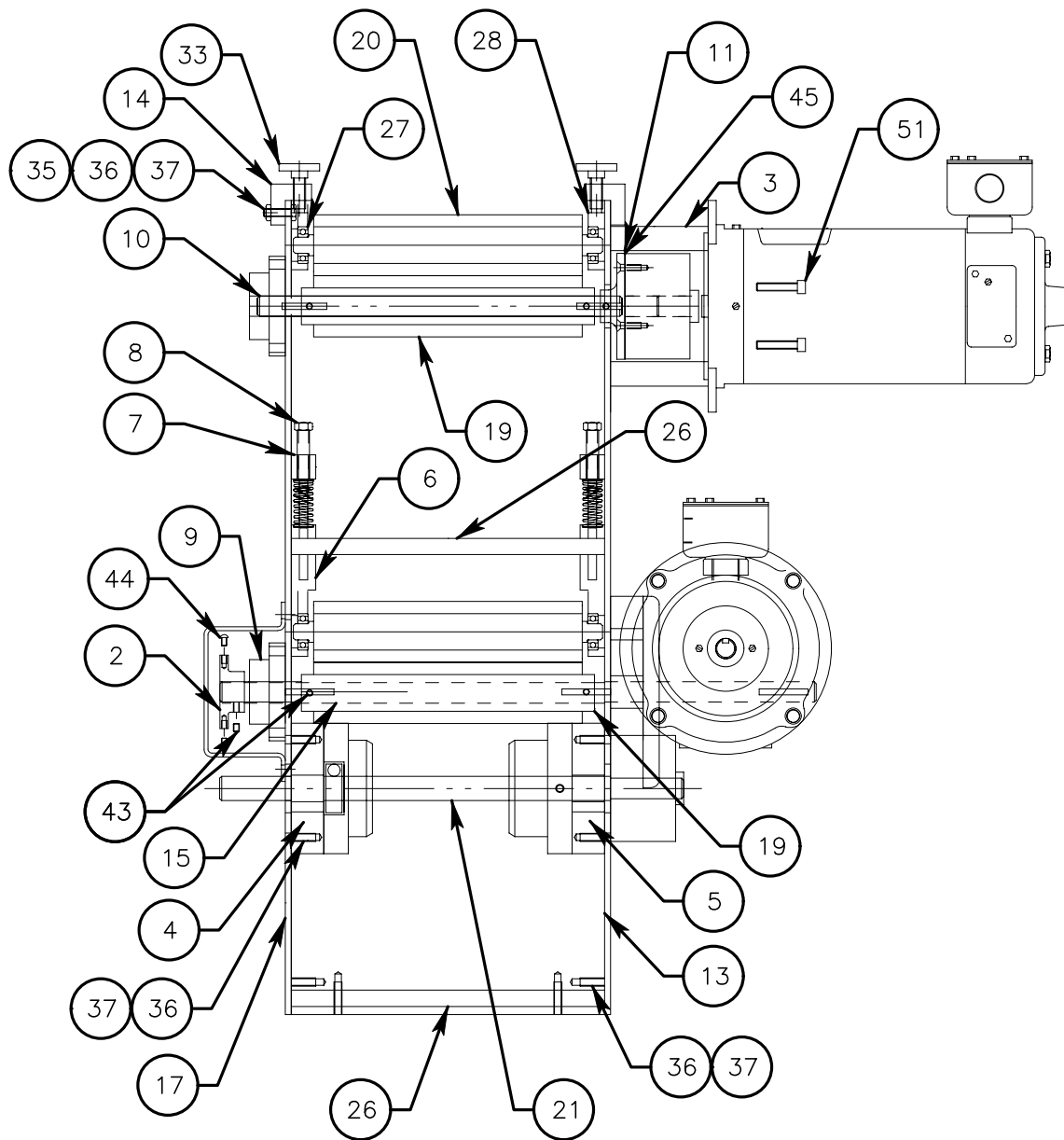
32-11004 BOTTOM UP SPIN FILLER ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION
1	QC32-41002	1	Heater Housing Base
2	QC32-41005	1	Wear Plate
3	QC32-41004	1	Cylinder Mounting Plate
4	Customer Specific	1	Clamp Plate
5	QC32-41006	1	Seal Plate Shaft
6	QC32-41011	1	Threaded Rod
7	QC32-41012	1	Seal Plate Mounting Adapter
8	QC32-41013	1	Heating Element
9	Customer Specific	1	Seal Plate
10	QC044-32071	1	Cushion
11	QC044-32072	1	Air Cylinder
12	95-265-1200-50	2	1/2" Flat Washer
13	QC044-32073	6	Spring Washer
14	QC044-32074	1	Spherical Washer Set
15	95-219-5180-50	4	1/2-13 x 1-3/4" Hex Head Cap Screw
16	95-265-1700-50	4	1/2" Lock Washer
17	95-265-1180-50	4	3/8" Flat Washer
18	95-265-1660-50	4	1/4" Lock Washer
19	95-219-4380-50	2	3/8-16 x 1-3/4" Hex Head Cap Screw
20	95-219-3560-50	1	1/4-20 x 1-1/4" Socket Head Cap Screw
21	95-219-3540-50	4	1/4-20 x 3/4" Hex Head Cap Screw
22	Customer Specific	1	Guide Block
23	95-220-4010-50	2	5/16-18 x 2-1/2" Socket Head Cap Screw
24	QC044-32075	1	Thermocouple
25	95-255-3000-50	1	1-1/4-12 Hex Nut



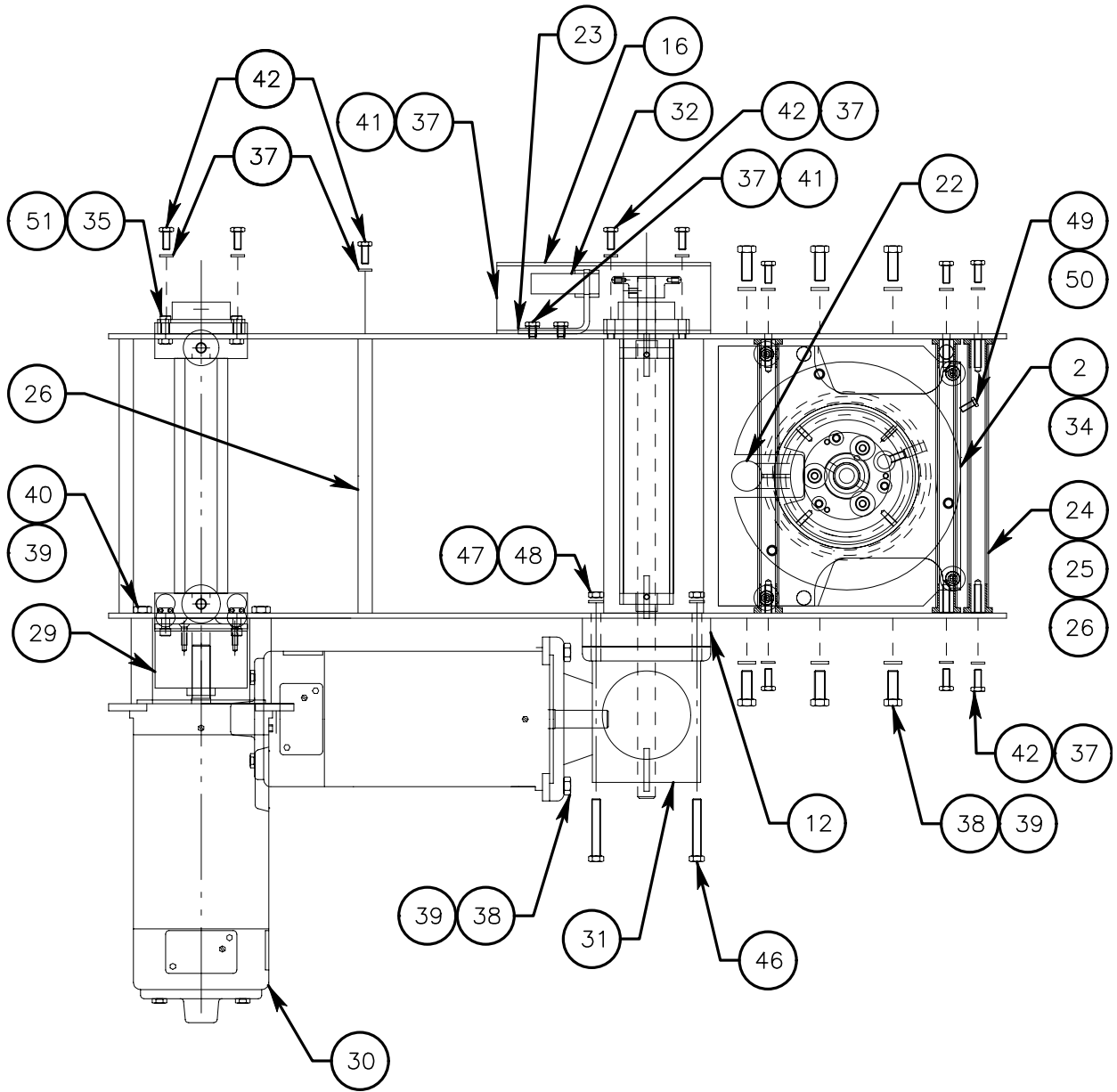
QC32-41001 FOIL SEAL ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION
2	QC32-40002	1	Disc Pulse Generator
3	QC32-40068	4	Take-Up Motor Spacer
4	QC32-40005	1	Stock Film Roll Holder (Left Side)
5	QC32-40006	1	Stock Film Roll Holder (Right Side)
6	QC32-40007	2	Pinch Roller Spring Bearing Blocks
7	QC32-40008	2	Screw Pinch Spring Blocks
8	QC32-40009	2	Pinch Screws
9	QC32-40010	1	Pincher Roll Shaft Hub
10	QC32-40067	1	Take-Up Shaft
11	QC32-40063	1	Clutch Adapter
13	QC32-40015	1	Main Mounting Block
14	QC32-40069	2	Tightening Bracket
15	QC32-40017	1	Film Drive Shaft
17	QC32-40071	1	Film Side Plate Weldment (Left Side)
	QC32-40065	1	Film Heat Seal Side Plate (Left Side)
	95-285-1420-50	12	1/4" diameter x 1/2" Dowel Pin
19	QC32-40024	2	Film Drive Shaft Pinch Roller
20	QC32-40025	2	Tension Pinch Roller
21	QC32-40080	1	Film Mounting Shaft Assembly
26	QC32-40038	6	Idler Shaft
27	QC044-32076	4	Ball Bearing
28	QC32-40066	2	Bearing Carrier
33	QC044-32077	2	Thumbscrew
35	95-255-1950-50	4	1/4-20 Hex Nut
36	95-219-3550-50	20	1/4-20 x 1" Hex Head Cap Screw
37	95-265-1660-50	40	1/4" Lock Washer
43	95-236-1700-50	5	#10-24 x 1/4" Set Screw
44	95-205-3000-50	10	#8-32 x 1/4" Bind Head Cap Screw
45	95-222-2740-50	3	#10-32 x 3/4" Flat Head Cap Screw
51	95-220-3560-50	8	1/4-20 x 1-1/4" Socket Head Cap Screw



QC32-40076 FILM HEAT SEAL FRAME ASSEMBLY

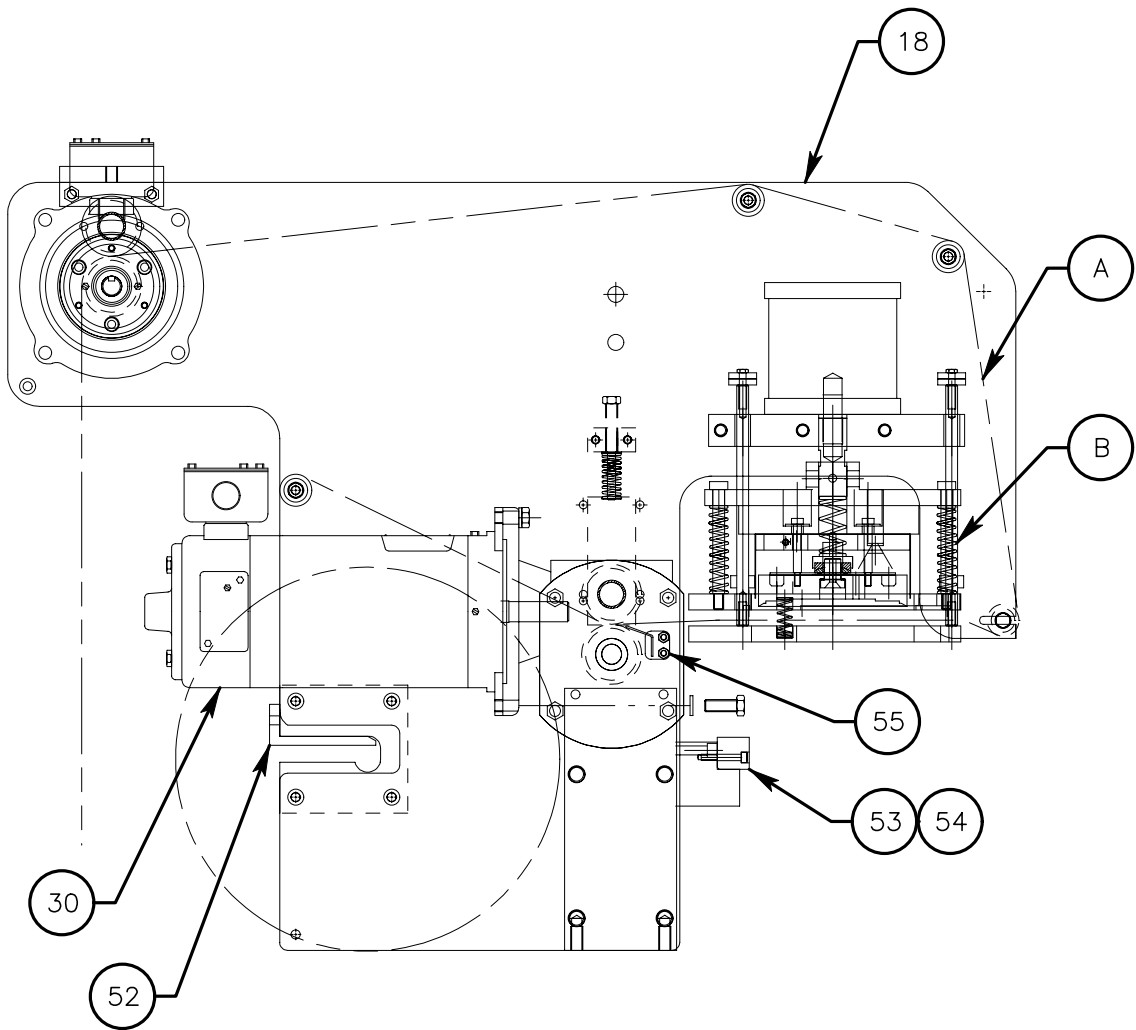
ITEM	PART NUMBER	QTY	DESCRIPTION
2	QC32-40002	1	Disc Pulse Generator
12	QC32-40013	1	Gear Box Adapter Plate
16	QC32-40084	1	Cover
22	QC32-40032	1	Heating Element
23	QC32-40033	1	Mounting Bracket
24	QC32-40034	6	Idler Bushing
25	QC32-40037	3	Idler Roller
26	QC32-40038	6	Idler Shaft
29	QC044-32078	1	Electric Tension Clutch
30	QC044-32079	2	1/4 Hp DC Motor
31	QC044-32080	1	Gear Reducer
32	QC044-32081	1	Proximity Sensor
34	QC044-32082	1	Thermocouple
35	95-255-1950-50	4	1/4-20 Hex Nut
37	95-265-1660-50	40	1/4" Lock Washer
38	95-219-4350-50	10	3/8-16 x 1" Hex Head Cap Screw
39	95-265-1680-50	14	3/8" Lock Washer
40	95-219-4450-50	4	3/8-16 x 4" Hex Head Cap Screw
41	95-219-3710-50	6	1/4-20 x 3/8" Hex Head Cap Screw
42	95-219-3730-50	18	1/4-20 x 5/8" Hex Head Cap Screw
46	95-219-3990-50	4	5/16-18 x 2" Hex Head Cap Screw
47	95-255-2050-50	4	5/16-18 Hex Nut
48	95-265-1670-50	4	5/16" Lock Washer
49	95-219-2720-50	2	#10-24 x 1/2" Hex Head Cap Screw
50	95-265-1640-50	14	#10 Lock Washer
51	95-220-3560-50	8	1/4-20 x 1-1/4" Socket Head Cap Screw



QC32-40076 FILM HEAT SEAL FRAME ASSEMBLY

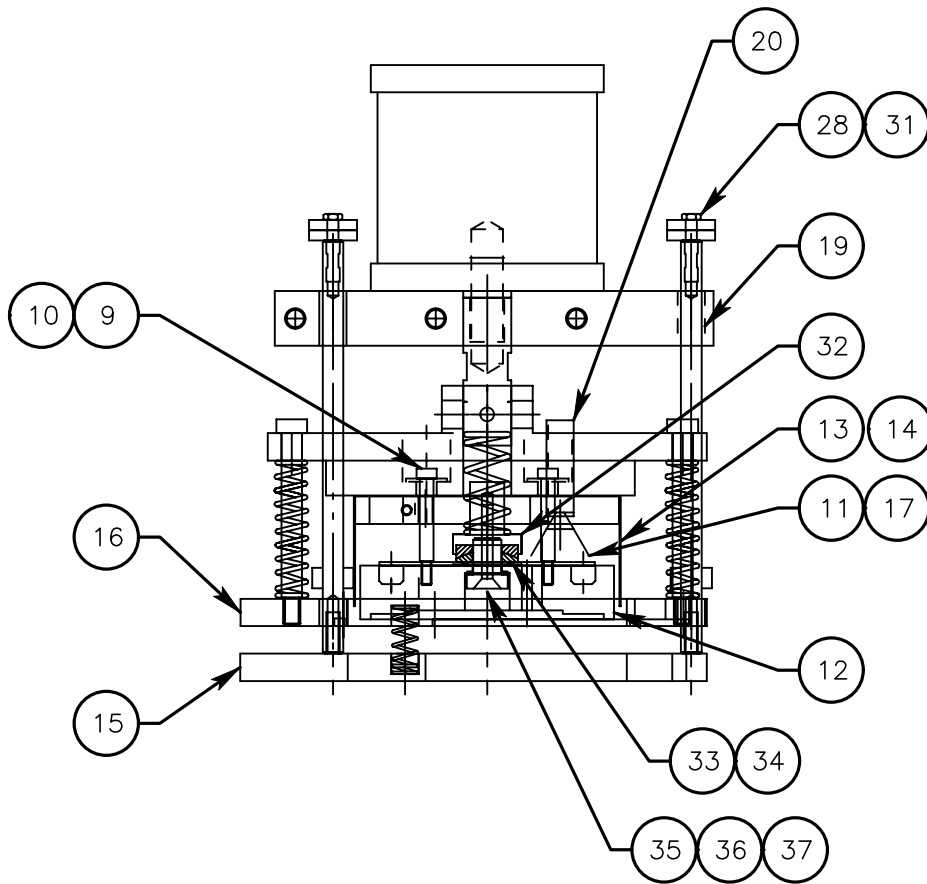
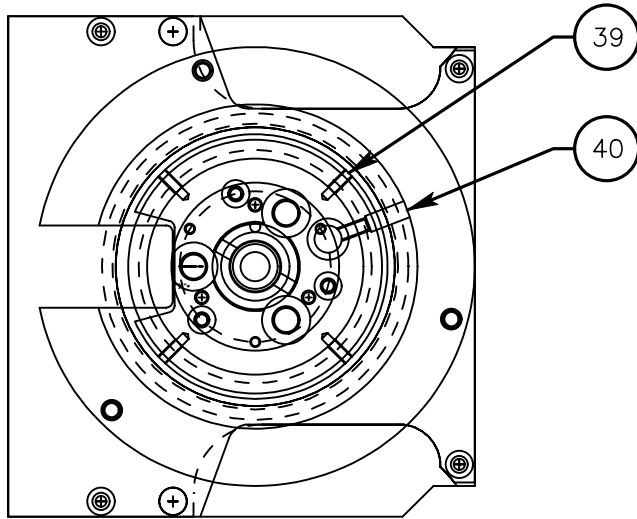
ITEM	PART NUMBER	QTY	DESCRIPTION
18	QC32-40070	1	Film Side Plate Weldment (Right Side)
	QC32-40064	1	Film Heat Seal Side Plate (Right Side)
30	QC044-32083	2	1/4 Hp DC Motor
52	QC32-40052	2	Film Roll Keeper
53	QC32-40053	1	Table Support Block Assembly
	QC32-40054	1	Table Support Block
	QC32-40055	1	Wear Plate
	95-220-2750-50	2	#10-24 x 1" Socket Head Cap Screw
54	95-220-3570-50	2	1/4-20 x 1-1/2" Socket Head Cap Screw
55	QC32-40056	1	Film Catch Plate Weldment

A	Film
B	Film Heat Seal Assembly



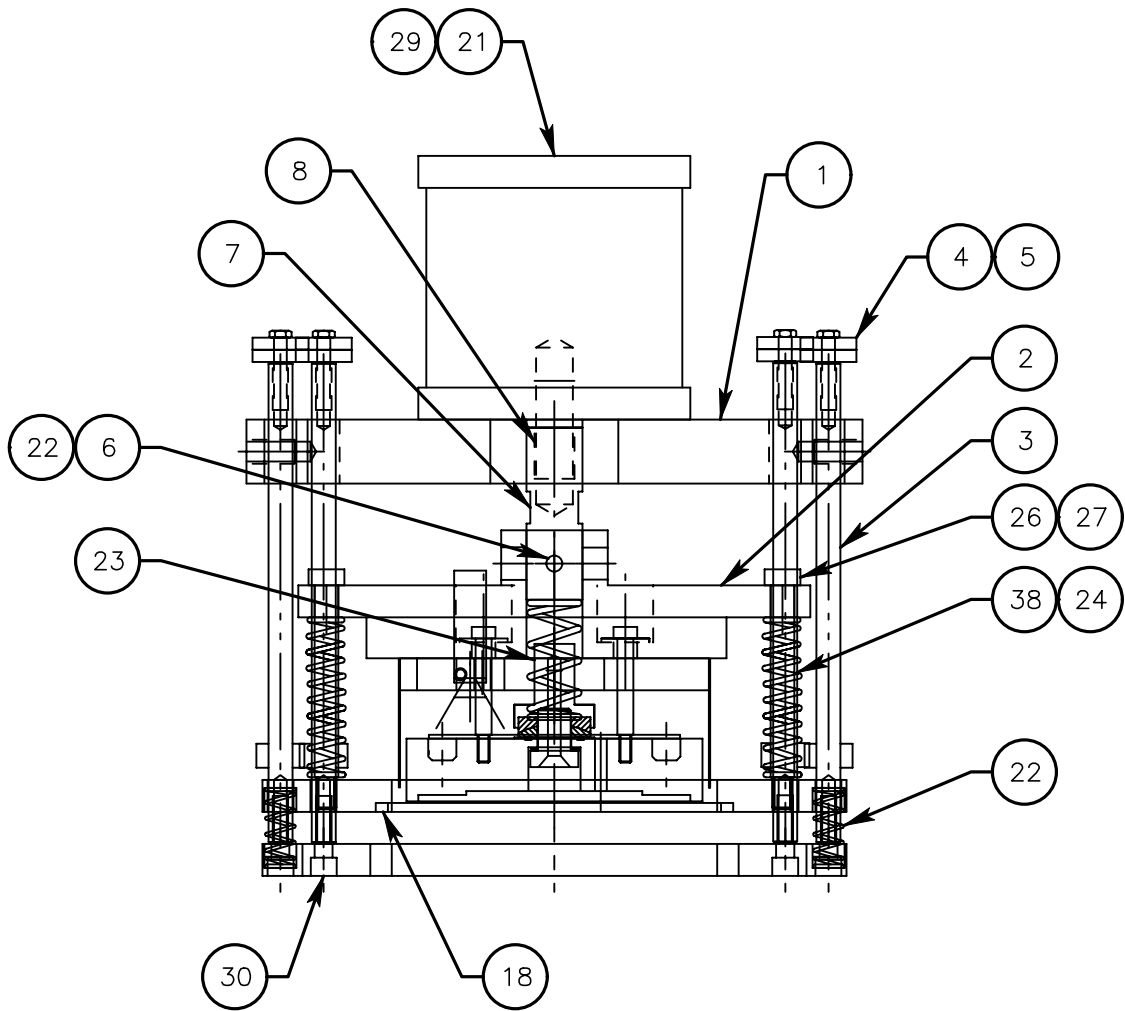
QC32-40076 FILM HEAT SEAL FRAME ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION
9	95-500-1490-50	3	5/16" diameter x 1-1/2" Shoulder Bolt
10	95-265-1170-50	3	5/16" Flat Washer
11	Customer Specific	1	Heater Element Hold Plate
12	Customer Specific	1	Seal Plate
13	Customer Specific	1	Knife Bracket
14	Customer Specific	1	Knife
15	Customer Specific	1	Lower Film Plate
16	Customer Specific	1	Upper Film Plate
17	95-209-3640-50	3	#10-24 x 3/8" Pan Head Screw
19	QC044-32084	4	Bushing
20	QC044-32085	1	Thermister Probe
28	95-265-1640-50	4	#10 Lock Washer
31	95-219-2740-50	4	#10-24 x 3/4" Hex Head Cap Screw
32	QC32-40047	1	Swivel Shaft
33	QC044-32086	1	Spherical Washer Kit
34	QC044-32087	2	Wave Spring
35	QC044-32088	5	Wave Spring
36	QC32-40057	1	Seal Plate Mounting Adapter
37	95-222-3570-50	1	1/4-20 x 1-1/2" Flat Head Cap Screw
39	95-219-2720-50	4	#10-24 x 1/2" Hex Head Cap Screw
40	95-236-2320-50	1	1/4-20 x 3/8" Set Screw



QC32-40079 FILM HEAT SEAL ASSEMBLY

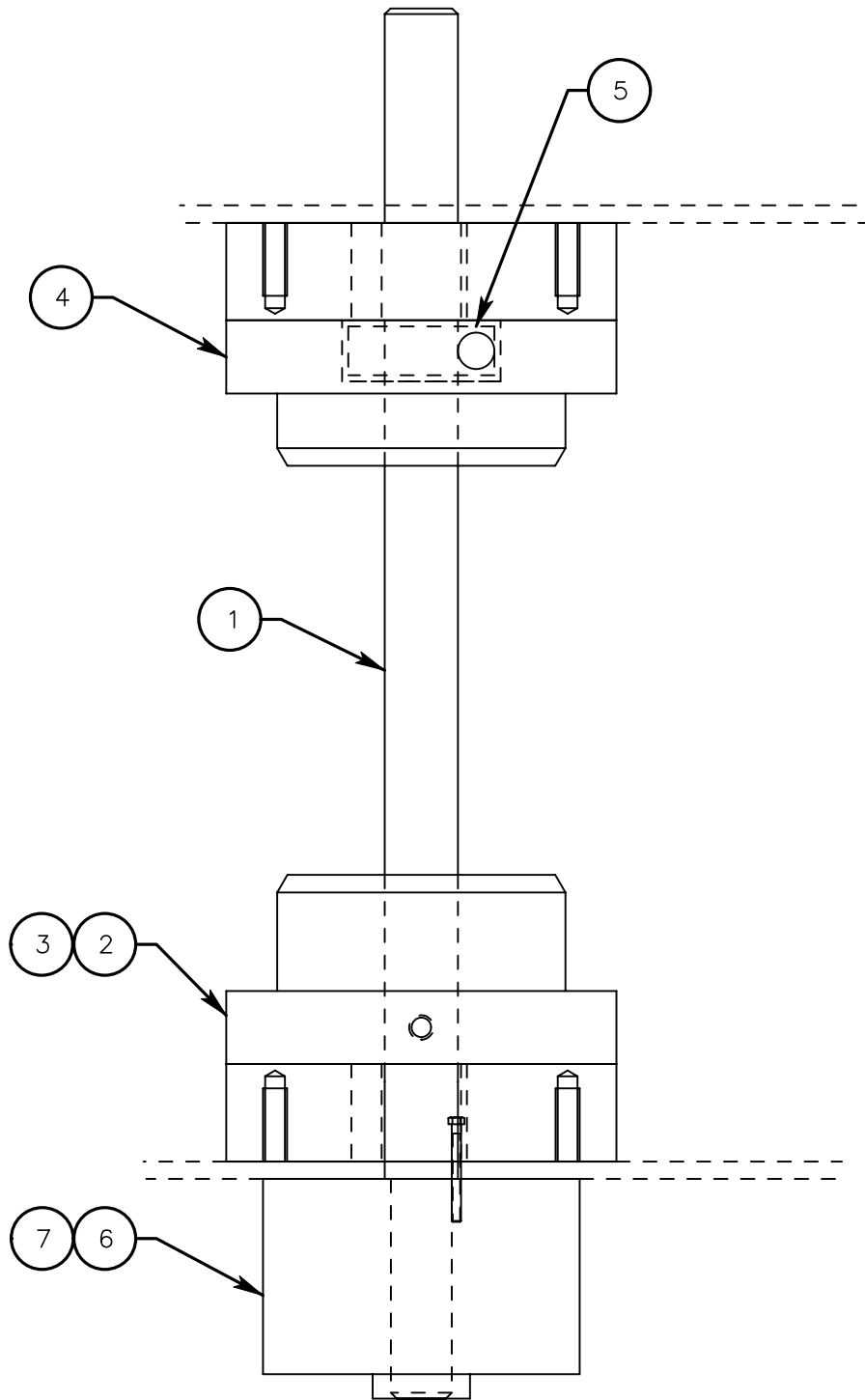
ITEM	PART NUMBER	QTY	DESCRIPTION
1	Customer Specific	1	Cylinder Mounting Plate
2	Customer Specific	1	Hold Down Mounting Plate
3	QC32-40019	4	Film Plate Stop Post
4	QC32-40035	4	Rod End
5	QC32-40036	4	Cushion
6	QC044-32089	1	Bushing
7	QC32-40039	1	Cylinder Rod Extension
8	QC32-40040	1	Screw
18	QC044-32090	1	O'Ring
21	QC044-32091	1	Cylinder
22	QC044-32092	2	Spring
23	QC044-32093	1	Spring
24	QC044-32094	4	Spring
26	95-500-1950-50	3	3/8" diameter x 3" Shoulder Bolt
27	QC044-32095	3	Bushing
29	95-220-3560-50	8	1/4-20 x 1-1/4" Socket Head Cap Screw
30	95-220-2720-50	4	#10-24 x 1/2" Socket Head Cap Screw
38	95-265-1180-50	3	3/8" Washer



QC32-40079 FILM HEAT SEAL ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION
1	QC32-40081	1	Shaft
2	Customer Specific	1	Fixed Film Holder
3	95-236-2360-50	1	1/4-20 x 3/4" Set Screw
4	Customer Specific	1	Moveable Film Holder
5	QC044-32096	1	Clamp Collar
6	QC044-32097	1	Torque Converter
7	95-219-2950-50	1	#10-32 x 1" Hex Head Cap Screw
8*	QC044-32098	3	1/4-20 x 1/2" Cone Point Set Screw

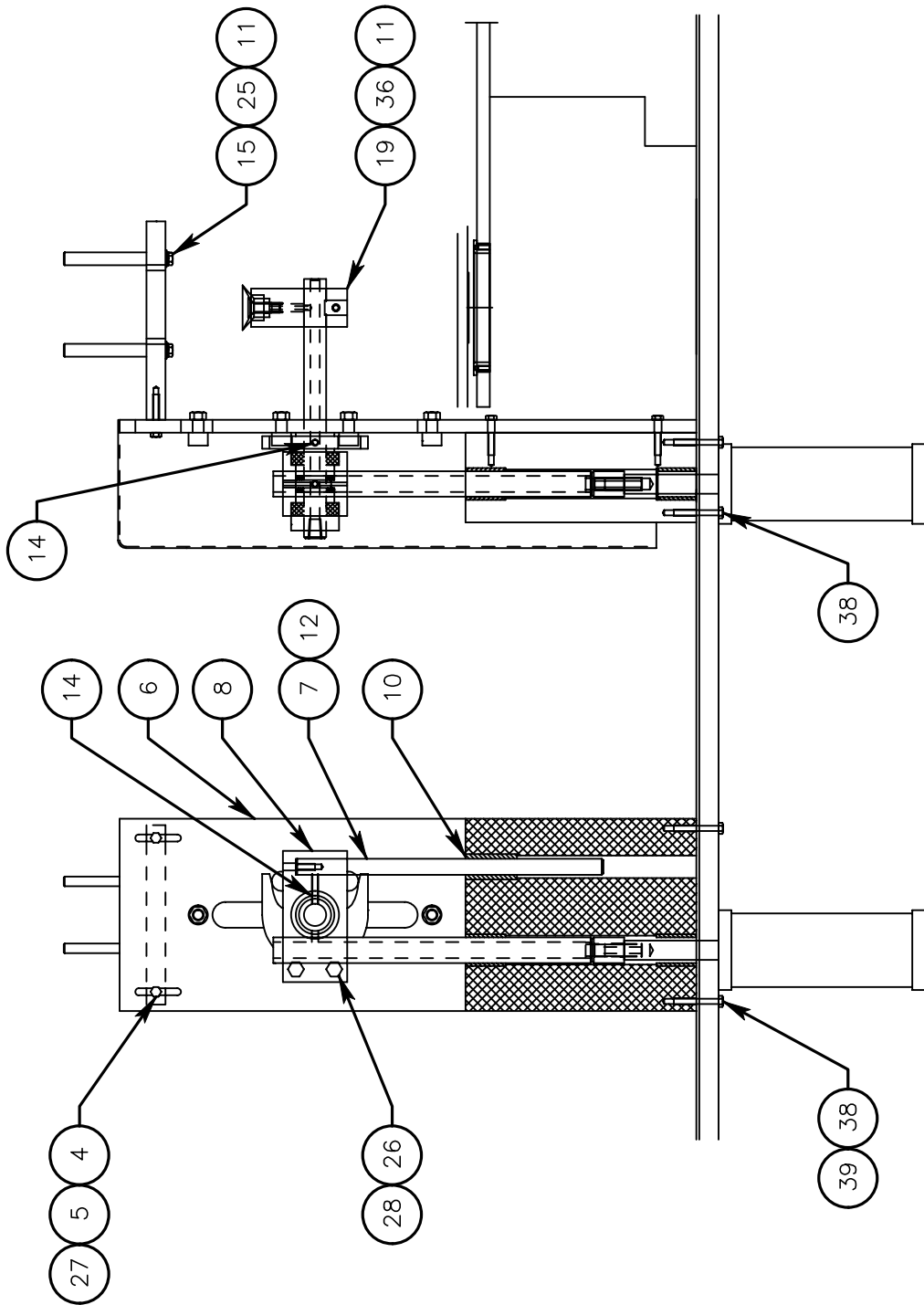
*Item not shown on illustration.



QC32-40080 FILM MOUNTING SHAFT

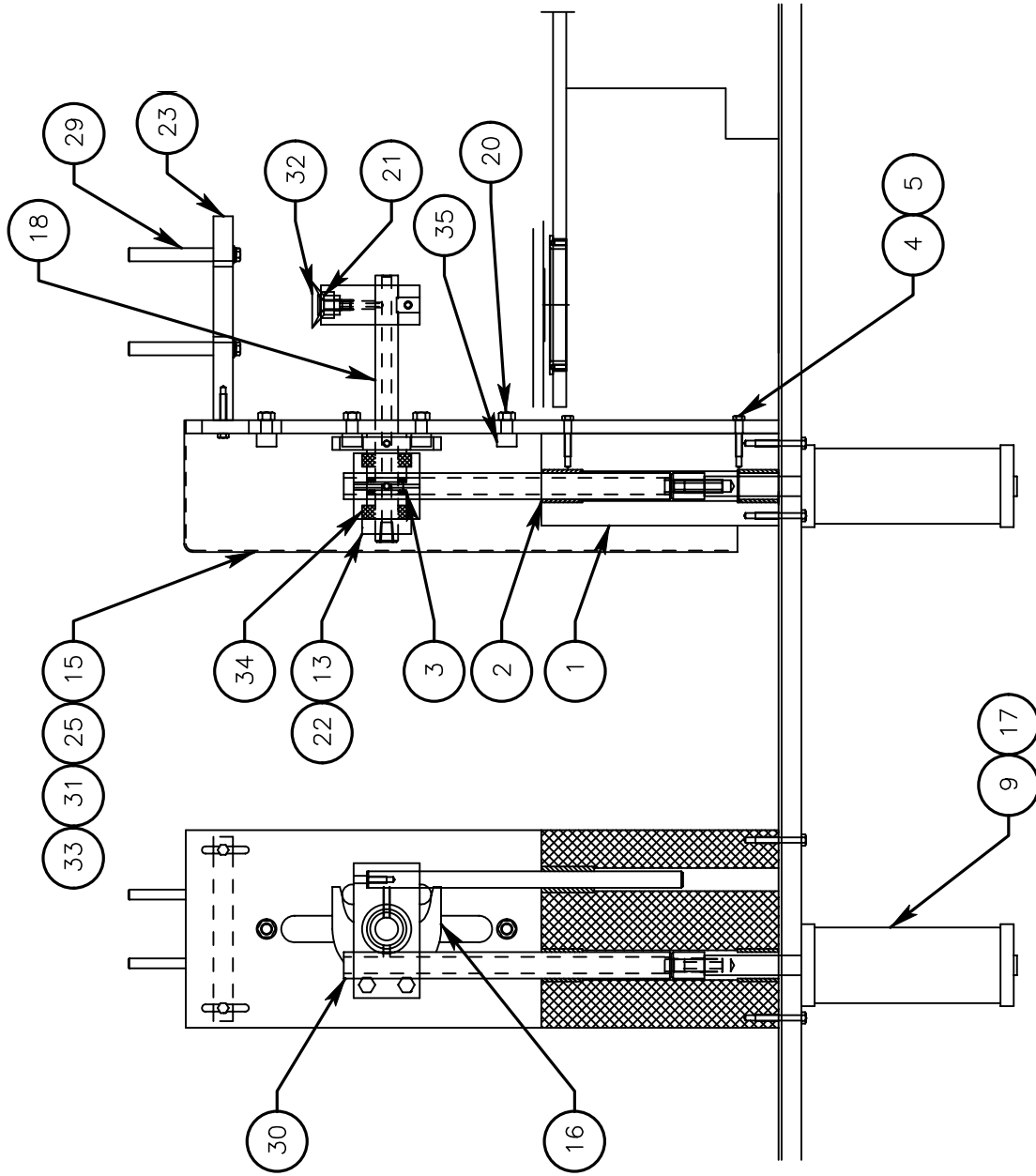
ITEM	PART NUMBER	QTY	DESCRIPTION
4	95-265-1670-50	5	5/16" Lock Washer
5	95-219-3980-50	6	5/16-18 x 1-3/4" Hex Head Cap Screw
6	QC32-50003	1	Lidder Stand
7	QC32-50005	1	Lift Guide Rod
8	QC32-50004	1	Lift Block
10	QC044-32099	2	Bushing
11	95-219-2760-50	10	#10-24 x 1-1/4" Hex Head Cap Screw
12	95-219-3550-50	1	1/4-20 x 1" Hex Head Cap Screw
14	95-236-2360-50	1	1/4-20 x 3/4" Socket Set Screw
15	95-265-1140-50	10	#10 Flat Washer
19	QC32-50012	1	Vacuum Lid Placement Block
25	95-265-1640-50	10	#10 Lock Washer
26	95-219-4410-50	2	3/8-16 x 2-1/2" Hex Head Cap Screw
27	95-265-1160-50	1	1/4" Flat Washer
28	95-265-1680-50	2	3/8" Lock Washer
36	95-219-3570-50	1	1/4-20 x 1-1/2" Hex Head Cap Screw
37*	95-219-2750-50	4	#10-24 x 1" Hex Head Cap Screw
38	95-219-5180-50	4	1/2-13 x 1-3/4" Hex Head Cap Screw
39	95-265-1700-50	4	1/2" Lock Washer

*Item not shown on illustration.



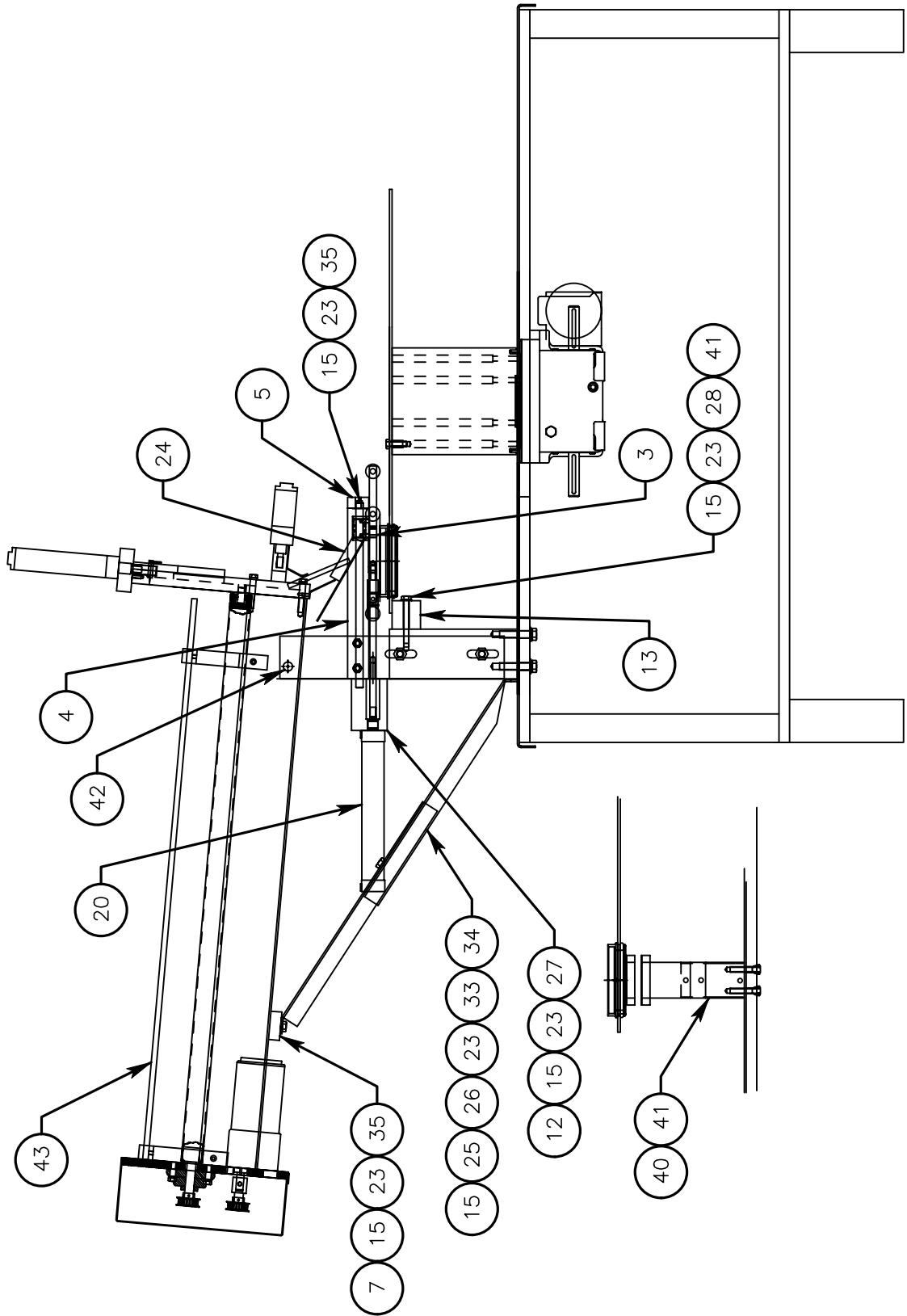
QC32-50001 LID PICK & PLACE ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION
1	QC32-50002	1	Main Base Block
2	QC044-32100	2	Bushing
3	QC044-32101	2	Oil Seal
4	95-265-1670-50	5	5/16" Lock Washer
5	95-219-3980-50	6	5/16-18 x 1-3/4" Hex Head Cap Screw
9	QC044-32102	1	Air Cylinder
13	QC044-32103	1	Clamp Collar
15	95-265-1640-50	4	#10 Flat Washer
16	QC32-50006	1	Rotary Cam
17	QC32-50007	2	Cylinder Shaft Stud
18	QC32-50008	1	Vacuum Rod
20	95-254-2250-50	4	7/16-20 Acorn Lock Nut
22	QC044-32104	1	Pipe Plug
23	QC32-50010	1	Lid Dropper Block (Large Foil / 4" - 6" diameter)
OR	QC32-50011	1	Lid Dropper Block (Small Foil / 1" - 4" diameter)
OR	Customer Specific	1	Lid Dropper Block
25	95-265-1640-50	4	#10 Lock Washer
29	QC32-50013	10	Lid Guide Rod
30	QC32-50014	1	Push Rod
31	QC32-50015	1	Cover Shield
32	QC044-32105	1	Suction Cup
33	95-219-3520-50	3	1/4-20 x 1/2" Hex Head Cap Screw
34	QC044-32106	2	Bearing
35	QC044-32107	4	Bearing



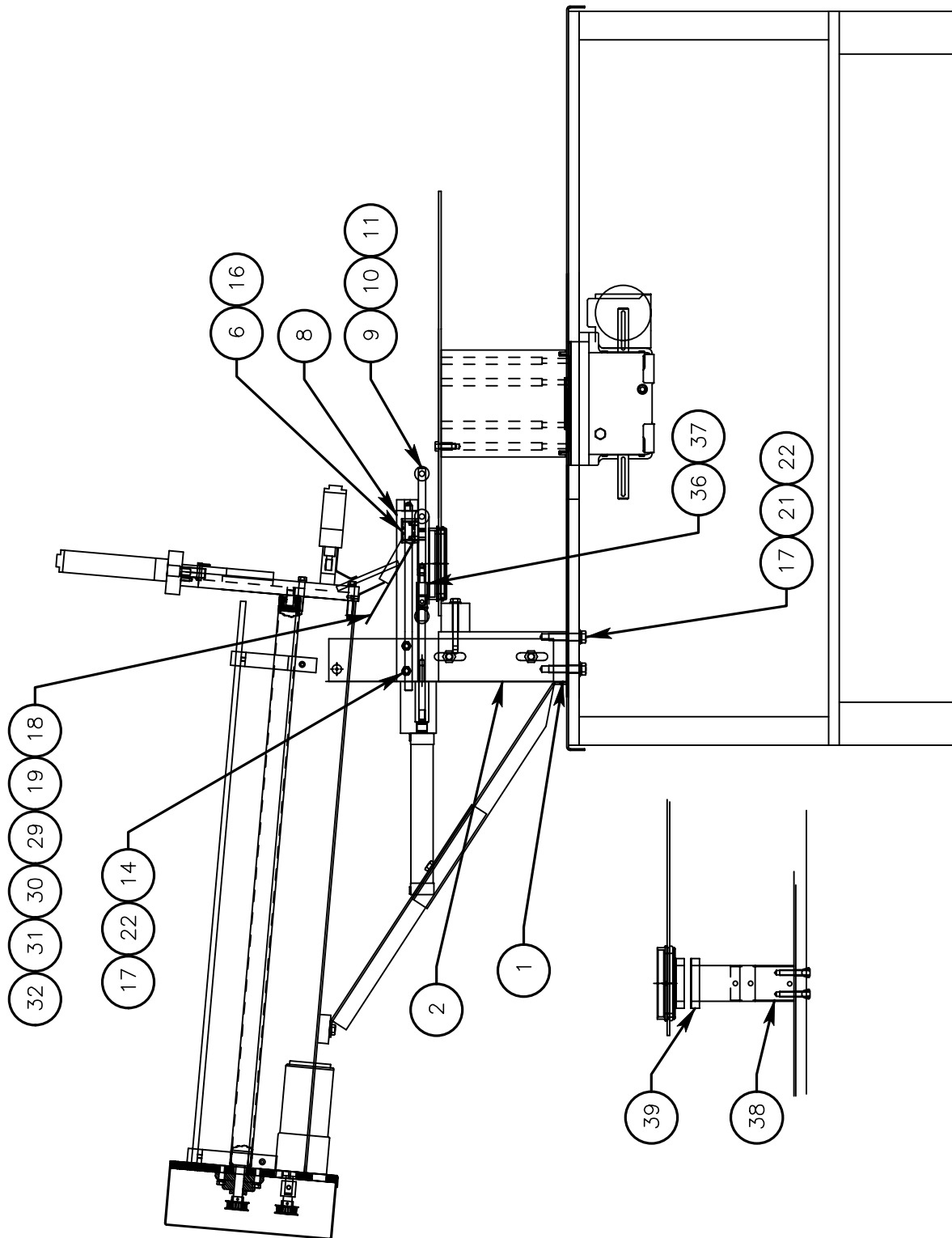
QC32-50001 LID PICK & PLACE ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION
3	QC32-70025	1	Slide Plate
4	QC32-70027	2	Slide Shaft
5	QC32-70028	1	Slide Shaft End Plate
7	QC32-70042	1	Lidder Brace Support
12	QC32-70034	1	Cylinder Pivot Bar
13	QC32-70041	1	Rotary Table Support
15	95-265-1180-50	16	3/8" Flat Washer
20	QC044-32108	1	Air Cylinder
23	95-265-1680-50	8	3/8" Lock Washer
24	QC32-70022	1	Catcher Plate
25	QC32-70039	1	Upper Support
26	QC32-70040	1	Lower Support
27	95-219-4460-50	2	3/8-16 x 4-1/2" Hex Head Cap Screw
28	95-219-4430-50	2	3/8-16 x 3" Hex Head Cap Screw
33	95-255-2150-50	1	3/8-16 Hex Nut
34	95-219-4340-50	3	3/8-16 x 3/4" Hex Head Cap Screw
35	95-219-4370-50	2	3/8-16 x 1-1/2" Hex Head Cap Screw
40	QC32-70050	1	Spacer (15 oz. Container)
41	QC32-70051	1	Spacer (8 oz. Container)
42	QC6435K35	4	Set Screw Collar
43	QC32-70002	1	Lid Spinner Assembly



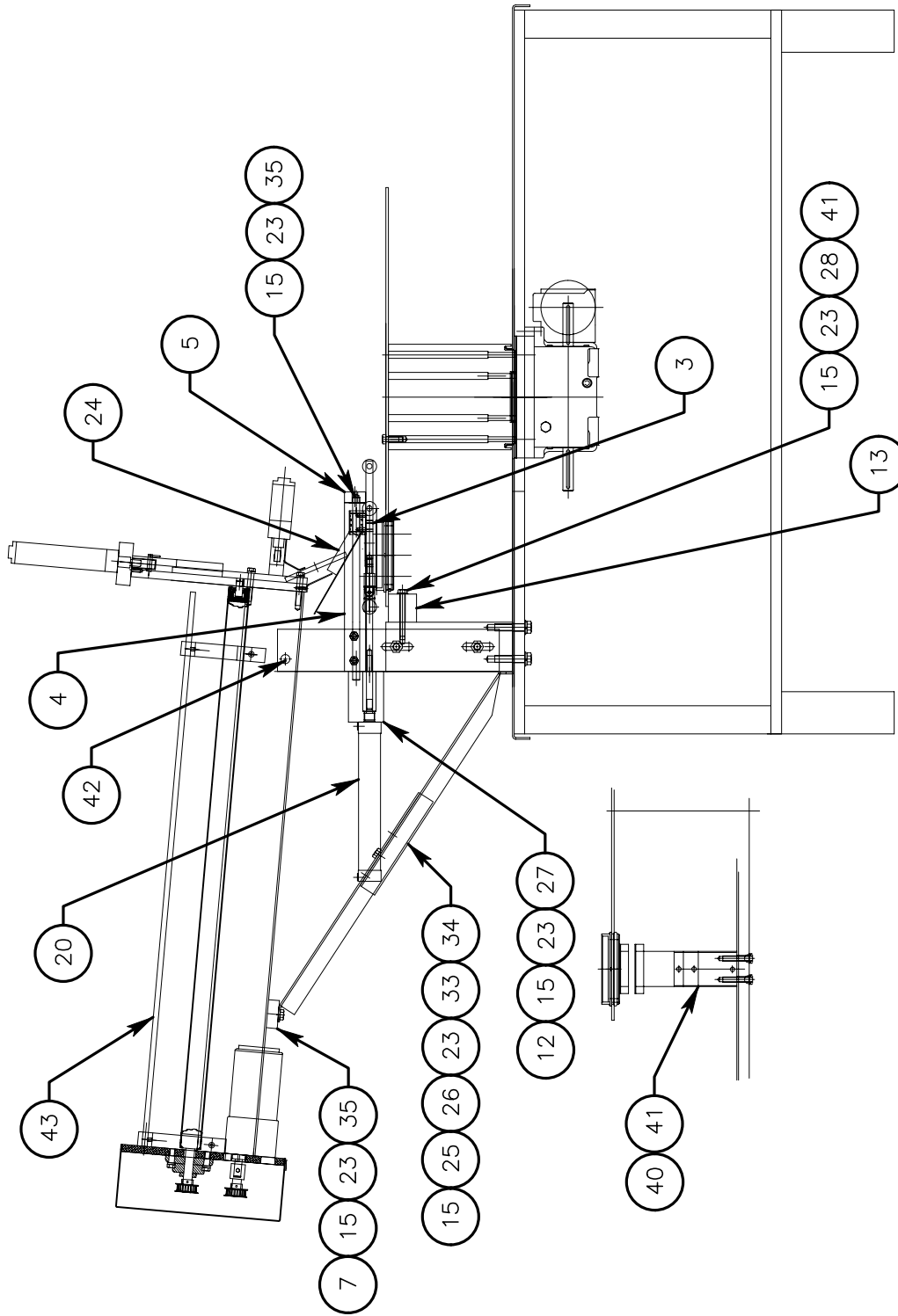
QC32-70001 LIDDER ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION
1	QC32-70023	1	Shuttle Base Block
2	QC32-70024	2	Upright Mounting Plate
6	QC32-70029	4	Slide Bearing
	QC32-70036	2	Bearing Housing
	QCFLA-08	2	Bearing
	QC044-32109	4	Retaining Ring
8	QC32-70030	2	Shaft Support Bar
9	QC32-70031	2	Tube Roller Shaft
10	QC32-70032	2	Roller Tubing
11	QC32-70033	4	Tube Bushing
14	95-219-5170-50	2	1/2-13 x 1-1/2" Hex Head Cap Screw
16	95-219-3560-50	4	1/4-20 x 1-1/4" Flat Head Machine Screw
17	95-265-1700-50	14	1/2" Lock Washer
18	QC32-70037	1	Lid Angle Shoot
19	QC32-70038	2	Lid Stop Stud
21	95-219-5200-50	4	1/2-13 x 2-1/4" Hex Head Cap Screw
22	95-265-1200-50	20	1/2" Flat Washer
29	95-219-2720-50	4	#10-24 x 1/2" Hex Head Cap Screw
30	95-255-1750-50	2	#10-24 Hex Nut
31	95-265-1640-50	4	#10 Lock Washer
32	95-265-7140-50	4	#10 Flat Washer
36	QC044-32110	1	Threaded Rod
37	QC32-70026	1	Universal Joint
38	QC32-70048	1	Container Support
39	QC32-70049	1	Lifting Weldment



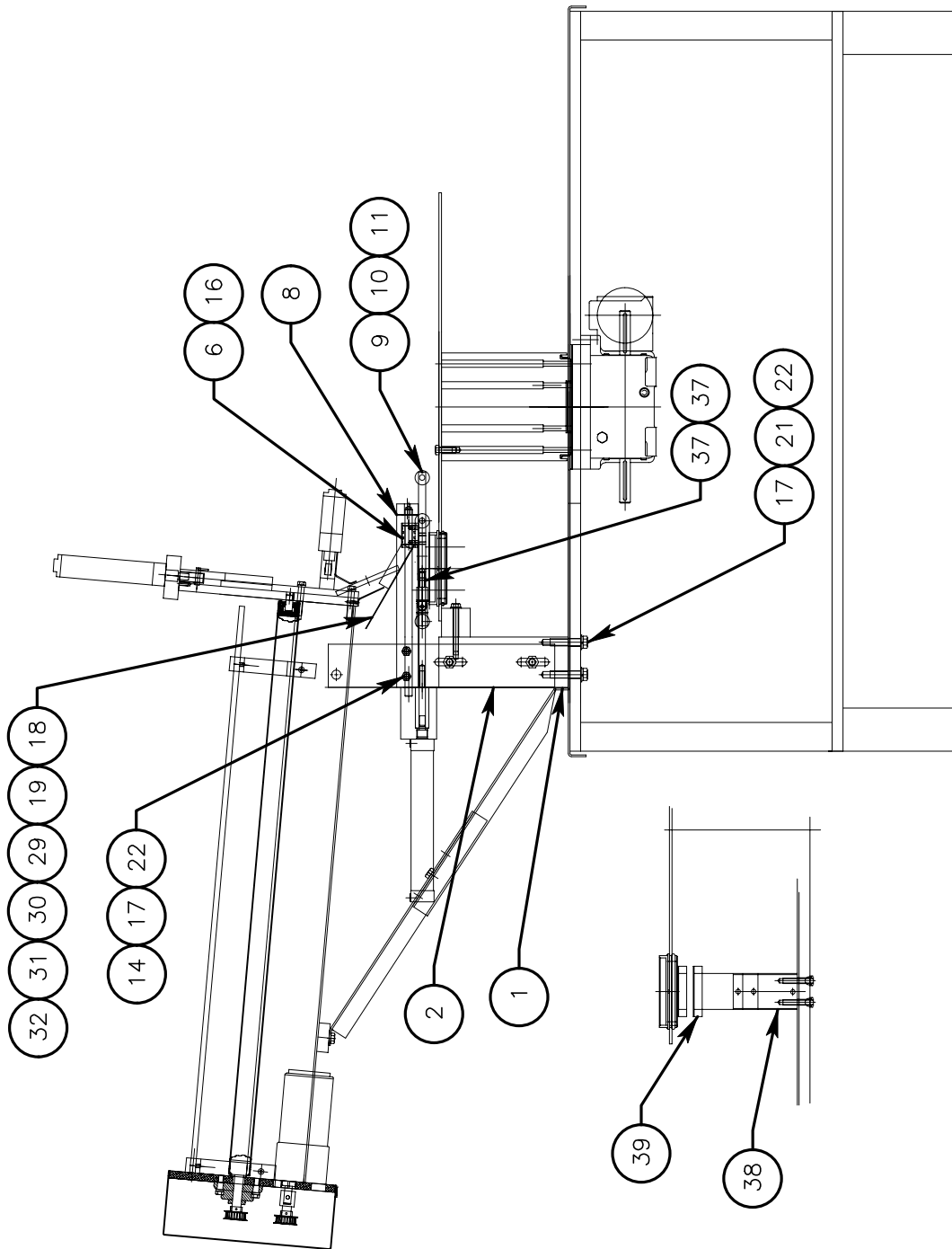
QC32-70001 LIDDER ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION
3	QC32-70035	1	Slide Plate
4	QC32-70027	2	Slide Shaft
5	QC32-70028	1	Slide Shaft End Plate
7	QC32-70042	1	Lidder Brace Support
12	QC32-70034	1	Cylinder Pivot Bar
13	QC32-70041	1	Rotary Table Support
15	95-265-1180-50	16	3/8" Flat Washer
20	QC044-32108	1	Air Cylinder
23	95-265-1680-50	8	3/8" Lock Washer
24	QC32-70022	1	Catcher Plate
25	QC32-70039	1	Upper Support
26	QC32-70040	1	Lower Support
27	95-219-4460-50	2	3/8-16 x 4-1/2" Hex Head Cap Screw
28	95-219-4430-50	2	3/8-16 x 3" Hex Head Cap Screw
33	95-255-2150-50	1	3/8-16 Hex Nut
34	95-219-4340-50	3	3/8-16 x 3/4" Hex Head Cap Screw
35	95-219-4370-50	2	3/8-16 x 1-1/2" Hex Head Cap Screw
40	QC32-70050	1	Spacer (15 oz. Container)
41	QC32-70051	1	Spacer (8 oz. Container)
42	QC6435K35	4	Set Screw Collar
43	QC32-70002	1	Lid Spinner Assembly



QC32-70005 LIDDER ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION
1	QC32-70023	1	Shuttle Base Block
2	QC32-70024	2	Upright Mounting Plate
6	QC32-70029	4	Slide Bearing
	QC32-70036	2	Bearing Housing
	QCFLA-08	2	Bearing
	QC044-32109	4	Retaining Ring
8	QC32-70030	2	Shaft Support Bar
9	QC32-70031	2	Tube Roller Shaft
10	QC32-70032	2	Roller Tubing
11	QC32-70033	4	Tube Bushing
14	95-219-5170-50	2	1/2-13 x 1-1/2" Hex Head Cap Screw
16	95-219-3560-50	4	1/4-20 x 1-1/4" Flat Head Machine Screw
17	95-265-1700-50	14	1/2" Lock Washer
18	QC32-70037	1	Lid Angle Shoot
19	QC32-70038	2	Lid Stop Stud
21	95-219-5200-50	4	1/2-13 x 2-1/4" Hex Head Cap Screw
22	95-265-1200-50	20	1/2" Flat Washer
29	95-219-2720-50	4	#10-24 x 1/2" Hex Head Cap Screw
30	95-255-1750-50	2	#10-24 Hex Nut
31	95-265-1640-50	4	#10 Lock Washer
32	95-265-7140-50	4	#10 Flat Washer
36	QC044-32110	1	Threaded Rod
37	QC32-70026	1	Universal Joint
38	QC32-70048	1	Container Support
39	QC32-70049	1	Lifting Weldment

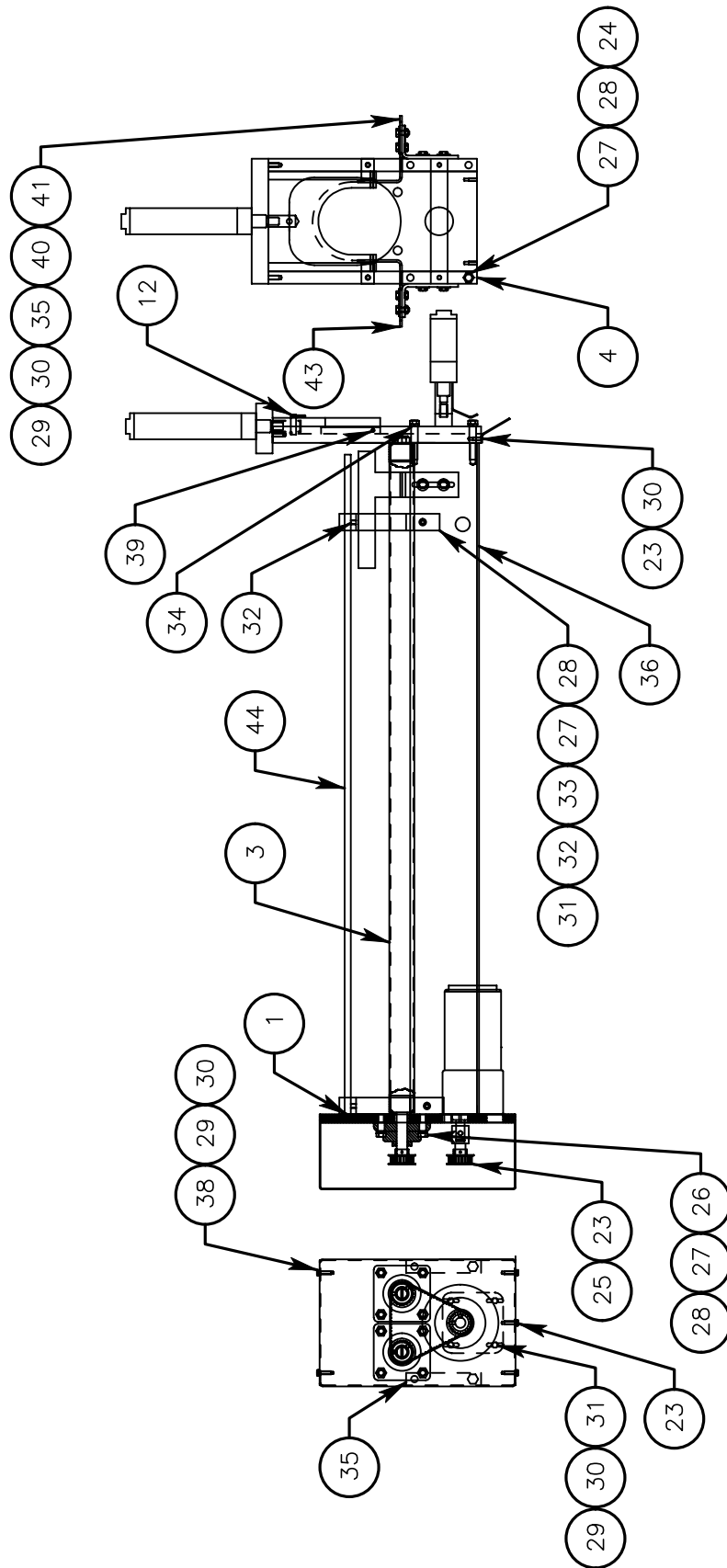


QC32-70005 LIDDER ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION
1	QC32-70003	1	Motor End Plate
3	QC32-70006	2	Spinning Shaft
4	QC32-70009	1	Left Side Support
12	QC044-32111	1	5/16 x 8/10" Pin
23	95-219-2730-50	14	#10-24 x 5/8" Hex Head Cap Screw
24	95-219-4380-50	4	3/8-16 x 1-3/4" Hex Head Cap Screw
25	95-289-1990-50	3	1/8" diameter x 3/4" Roll Pin
26	95-219-4360-50	10	3/8-16 x 1-1/8" Hex Head Cap Screw**
27	95-265-1680-50	14	3/8" Lock Washer
28	95-265-1180-50	12	3/8" Flat Washer
29	95-265-1640-50	14	#10 Lock Washer
30	95-265-1140-50	14	#10 Flat Washer
31	QC32-70020	4	Bracket
OR	QC32-70056	4	Bracket
32	95-236-2320-50	2	1/4-20 x 3/8" Set Screw
33	95-219-4380-50	2	3/8-16 x 1-3/4" Hex Head Cap Screw
34	QC044-32112	2	Bearing
35	95-219-3560-50	8	1/4-20 x 1-1/8" Hex Head Cap Screw**
36	QC32-70021	1	Lid Catcher Plate
38	95-219-3510-50	4	1/4-20 x 3/8" Hex Head Cap Screw
39	95-236-1720-50	2	#10-24 x 3/8" Set Screw
40	QC32-70043	2	Lid Guide Support Bracket
41	QC32-70044	1	Lid Guide Right Bracket
43*	QC32-70046	1	Lid Guide Left Bracket
44	QC32-70047	1	Lid Support Shaft

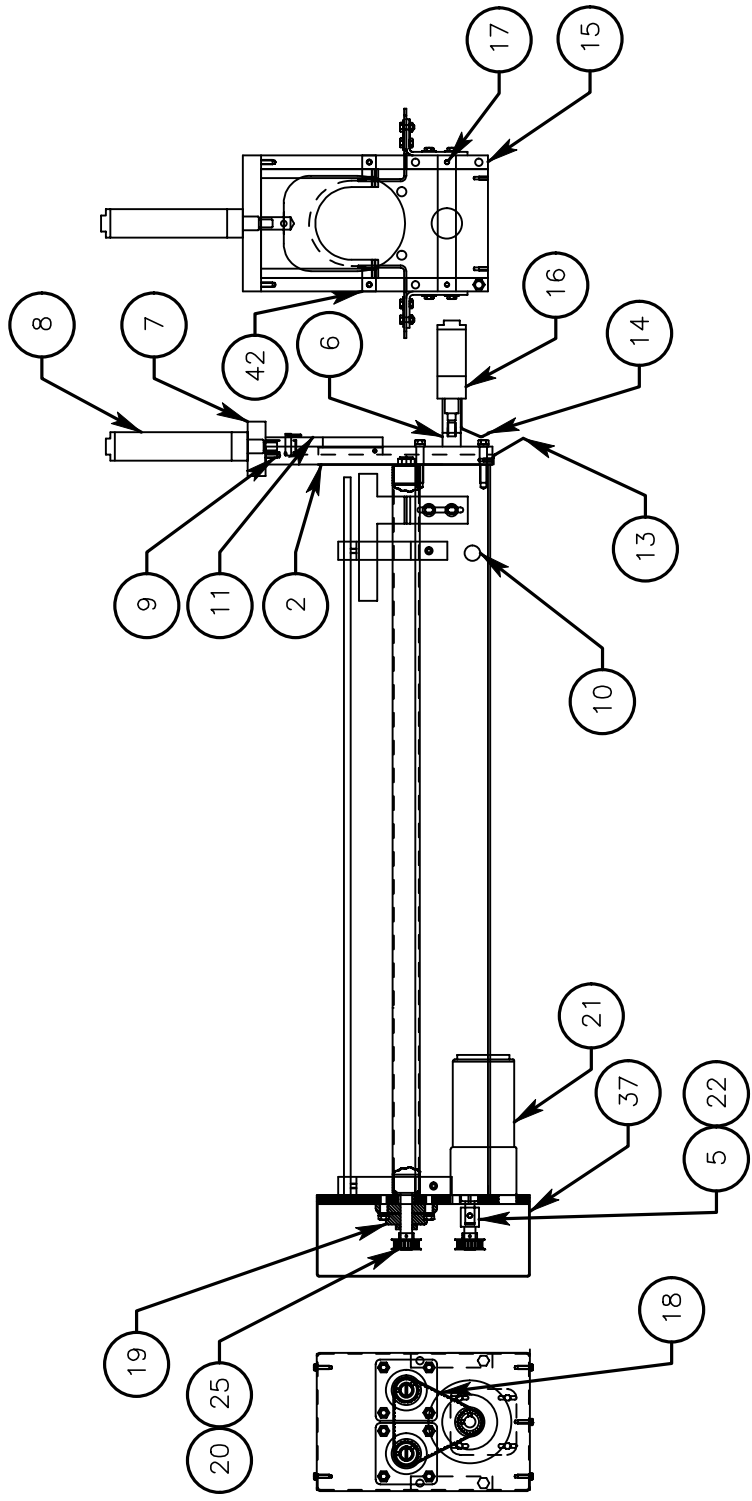
*Item not shown on illustration.

**Part number is for a 1-1/4" long screw.



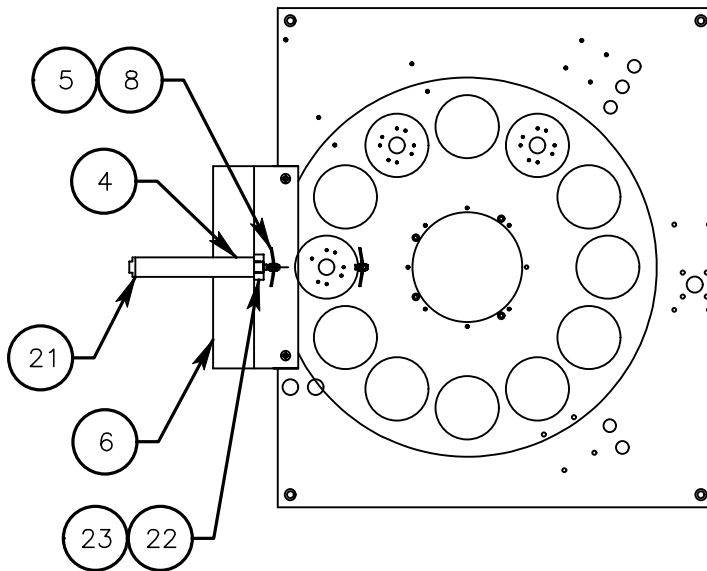
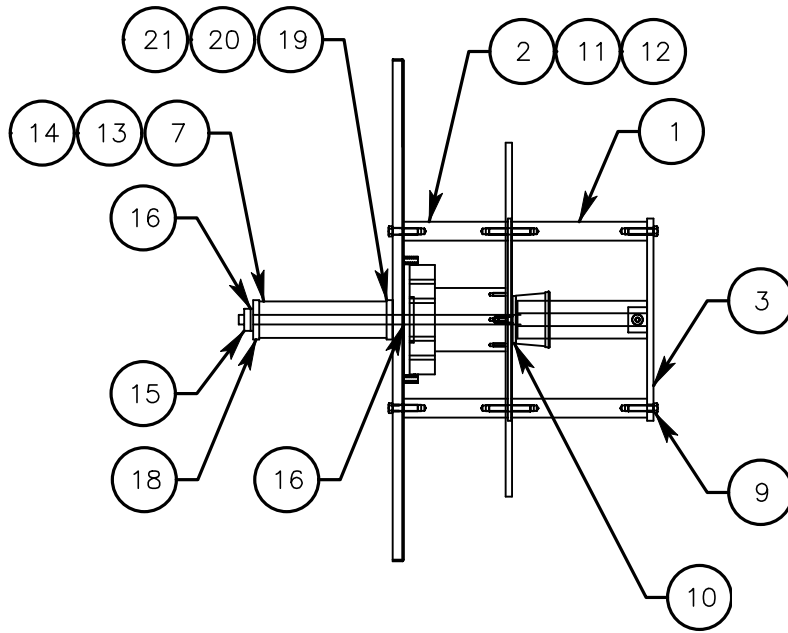
QC32-70002 LID SPINNER ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION
2	QC32-70008	1	Shuttle Support Plate
5	QC32-70011	1	Extension Motor Shaft
6	QC32-70012	1	Lower Cylinder Mounting Plate
7	QC32-70013	1	Top Cylinder Mounting Plate
8	QC044-32113	1	Air Cylinder
9	QC32-70014	1	Cylinder Rod Extension
10	QC32-70015	1	Lidder Support Shaft
11	Customer Specific	1	Lid Shuttle
13	QC32-70016	1	Lid Deflector
14	QC32-70017	1	Lid Stop
15	QC32-70010	1	Right Side Support
16	QC044-32114	1	Air Cylinder
17	95-219-3640-50	2	1/4-20 x 3-1/2" Hex Head Cap Screw
18	QC044-32115	1	Timing Belt
19	QC044-32116	2	Bearing
20	QC32-70018	2	Gearbelt Pulley
21	QC044-32117	1	Motor
22	QC32-70019	1	Gearbelt Pulley
25	95-289-1990-50	3	1/8" diameter x 3/4" Roll Pin
37	QC32-70004	1	Belt Shield
42	QC32-70045	2	Retaining Block



QC32-70002 LID SPINNER ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION
1	QC32-80002	2	Upper Support Rod
2	QC32-80003	2	Lower Support Rod
3	QC32-80004	1	Cylinder Bracket
4	QC044-32118	1	Air Cylinder
5	QC32-80005	1	Sweep Off Arm
6	QC32-80006	1	Off End Plate
7	QC044-32119	1	Air Cylinder
8	95-255-2300-50	2	7/16-20 Hex Nut
9	95-219-5190-50	2	1/2-13 x 2" Hex Head Cap Screw
10	Customer Specific	1	Push-Up Pad
11	95-219-5200-50	2	1/2-13 x 2-1/4" Hex Head Cap Screw
12	QC044-32120	2	Threaded Rod
13	QC32-80007	1	Seal Retainer
14	QC044-32121	1	Wiper Seal Ring
15	QC044-32122	1	Clamp Collar
16	QC044-32123	2	Cushion
18	QC044-32124	1	Swivel
19	QC044-32125	1	Elbow
20	QC044-32126	1	Adapter
21	QC044-32127	3	Flow Control Valve
22	QC32-80010	1	Cylinder Block
23	95-222-3950-50	2	5/16-18 x 1" Flat Head Cap Screw



QC32-80001 CUP REMOVAL ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION
1	QC1762-L40BWA	1	PLC
2	QC1962-1F20F2	1	Analog Module
3	QC800T-FXNP16RA7	1	Push/Pull Button
4	QCEZ-S6M-R	1	Automation Direct Touch Screen
5	QCEZ-MLOGIX-CBL	1	Automation Direct Cable
6	QCDN-M10	28	Automation Direct Terminal Block
7	QCDN-ECM10	5	Automation Direct End Cover
8	QC1415089	2	Fuse Terminal Block
9	QCO921053	2	Fuse Holder
10	QCSI-6EP13321SH41	1	Power Supply
11	QCHA-176B4000	1	DC Drive
12	QCHA-176B1111	1	120 Volt DC Drive
13	QCHA-176B1116	1	Current Sensor Resistor
14	QCSY2S-05	1	Relay Socket
15	QCSH2B-05	1	Relay Socket
16	QCRH2B-U	2	Relay 24VDC
17	QCRY2S-U	2	Relay 24VDC
18	QC70355K53	1	Power Cord
*19	QCMVS-030ABPNP	1	Vacuum Sensor
OR	QC044-32134	1	Transformer
20	QCV1-8A-E2-5M-PVC	1	8 Position Buss Block
21	QCNS-15	1	Din Rail
22	QCC103PM	1	Din Rail
23	QCVAS22-A653-5M	9	Cord Set
24	QC#32-90011	1	Enclosure
25	QCC-P2016	1	Enclosure Panel
26	QC0BT500-18GM70-E5-V1	1	Photo Eye
27	QC3SB3602-2PA11	1	On/Off Switch
28	QC7550K4	1	On/Off Label
29	QC5262	3	Sealing Washer

ITEM	PART NUMBER	QTY	DESCRIPTION
30	QCV1-G-YE2M-PVC-V1-G	8	Extension Cable
31	QCV1-G-S-YE2M-PVC	1	Micro Cord Set
32	QCV1-G-S	1	Field Attachable Connector
33	QCV1-G-S	1	Field Attachable Connector
34	QCNBB2-12GM50-E2-V1	2	Proximity Sensor
35	QC7140K23	2	Water Tight Plug
36	QC7140K24	2	Water Tight Connector
37	QCMTW18	25	18 Gauge Wire (Red)
38	QCMTW 18	25	18 Gauge Wire (White)
39	QCMTW 18	25	18 Gauge Wire (Blue)
40	QC9539	A/R	Cable
41	QC69915K47	10	Cord Grip
42	QCSJ0W 16/3	A/R	Cable
43	QC7566K42	5	Cable Tie Holder
44	QC7130K52	40	Cable Tie
45	QCPM11-NA	1	Pressure Switch
46	QC69915K53	4	Cord Grip
47	QC69915K55	1	Cord Grip
48	QC7529K42	1	90 degree Cord Grip
49	QCMRS-087-B-70	1	Switch
50	QCHCQC	2	Switch
51	QC32-90010	1	Console Style Enclosure
52	QC9626	A/R	Cable
53	QCOS39-MVF-6	1	Infrared Thermocouple

Schematics are located in a pocket on the control cabinet.

QC32-90012/90020 ELECTRICAL CONTROLS

NOTE: Item 19 component changes to a transformer for QC32-90020.

ITEM	PART NUMBER	QTY	DESCRIPTION
1	QCR75-04C	1	Regulator
2	QCF75-04BJR	1	Filter
3	QCF71-04BJR	1	Coalescing Filter
4	QC56C-13-111CA	1	Dump Valve
5	QCP-069294	9	Valve
6	QCP-067703	7	Valve Segment
7	QCP-067701	2	Valve End Segment
8	QCP68493	2	Manifold Kit
9	QC3033-08-00	1	Distribution Block
10	QC40565K13	1	0-160 psi Air Gauge
11	QC4830K176	1	Nipple
12	QC6520-08-08	2	Swivel Elbow
13	QC2500-08-08	2	Nipple
14	QC2020-08-00	1	Elbow
15	QC2003-02-00	1	Tee
16	QC6520-06-06	2	Swivel Elbow
17	QC6520-02-04	1	Swivel Elbow
18	QC6520-06-02	1	Swivel Elbow
19	QC6510-02-02	2	Connector
20	QC2020-02-00	2	Elbow
21	QC2543-02-02	1	Coupling
22	QC6590-04-00	8	Bulkhead Union
23	QC6590-06-00	4	Bulkhead Union
24	QCFQP2	2	Flow Control Tube
25	QC4427K54	4	Muffler
26	QC4427K55	1	Muffler
27	QC51055K97	8	Reducer Coupling
28	QC1J-074-10	A/R	3/8" Natural Tubing
29	QC1J-074-07	A/R	3/8" Blue Tubing
30	QC1J-048-110	A/R	1/4" Natural Tubing
31	QC1J-048-07	A/R	1/4" Blue Tubing
32	QC4076K25	3	Tube Flow Control
33	QCP3010.AA.04.A	1	Vacuum Generator
34	QCPP-1	2	End of Stroke Sensor

Schematics are located in a pocket on the control cabinet.

QC32-90013 PNEUMATIC CONTROLS

ITEM	PART NUMBER	QTY	DESCRIPTION
1	QC044-32135	1	Panel
2	QC044-32136	1	Adapter
3	QC044-32137	1	T-Fitting
4	QC044-32138	1	Pressure Switch
5	QC044-32139	20	Straight Connector
6	QC044-32140	6	Straight Connector
7	QC044-32141	1	Male Fitting
8	QC044-32142	2	Straight Connector
9	QC044-32143	1	Regulator
10	QC044-32144	1	Blank Plate
11	QC044-32145	1	End Station
12	QC044-32146	1	End Plate
13	QC044-32147	10	Middle Station
14	QC044-32148	1	Cable
15	QC044-32149	1	Mounting Plate
16	QC044-32150	1	Filter/Regulator
17	QC044-32151	1	Vacuum Sensor
18	QC044-32152	1	Vacuum Generator
19	QC044-32153	1	Dump Valve

Schematics are located in a pocket on the control cabinet.

QC32-90021 PNEUMATIC CONTROLS

SPARES LIST

Mechanical Spare Parts Kit

ITEM	PART NUMBER	QTY	DESCRIPTION
1	QC044-32003	6	O'Ring
2	QC044-32009	4	Bushing
3	QC044-32013	2	Flange Bushing
4	QC044-32014	2	Flange Bushing
5	QC044-32019	2	Sleeve Bushing
6	QC044-32018	2	Flange Bushing
7	QC044-32021	4	Bushing
8	QC044-32022	2	Bushing
9	QC044-32023	2	Bushing
10	QC044-32030	4	Gasket
11	QC044-32032	6	Gasket
12	QC044-32040	3	Retainer O'Ring
13	QC044-32041	3	Piston O'Ring
14	QC044-32054	6	Gasket
15	QC044-32060	4	Gasket
16	QC044-32062	6	Gasket
17	QC044-32076	2	Ball Bearing
18	QC32-40034	3	Idler Bushing
19	Customer Specific	3	Knife
20	QC044-32084	2	Bushing
21	QC044-32089	2	Bushing
22	QC044-32090	4	O'Ring
23	QC044-32095	2	Bushing
24	QC044-32099	2	Bushing
25	QC044-32100	2	Bushing
26	QC044-32101	2	Oil Seal
27	QC044-32106	2	Bearing
35	QC044-32107	2	Bearing
36	QC32-70029	2	Slide Bearing
37	QCFLA-08	2	Bearing
38	QC044-32112	2	Bearing
39	QC044-32115	1	Timing Belt
40	QC044-32116	2	Bearing

This kit may be ordered in partial or in its entirety.

This listing of parts is OPTIONAL and available at EXTRA COST.

SPARES LIST

Electrical Spare Parts Kit

ITEM	PART NUMBER	QTY	DESCRIPTION
1	QC044-32057	2	Proximity Switch
2	QC32-41013	3	Heating Element
3	QC044-32075	3	Thermocouple
4	QC32-40032	3	Heating Element
5	QC044-32081	2	Proximity Sensor
6	QC044-32082	3	Thermocouple
7	QC044-32085	2	Thermister Probe
8	QCHA-176B1116	1	Current Sensor Resistor
9	QCRH2B-U	1	Relay 24VDC
10	QCRY2S-U	1	Relay 24VDC
11	QC0BT500-18GM70-E5-V1	1	Photo Eye

This kit may be ordered in partial or in its entirety.

This listing of parts is OPTIONAL and available at EXTRA COST.

SPARES LIST

Pneumatic Spare Parts Kit

ITEM	PART NUMBER	QTY	DESCRIPTION
1	QC044-32033	1	Air Cylinder
2	QC044-32072	1	Air Cylinder
3	QC044-32091	1	Air Cylinder
4	QC044-32102	1	Air Cylinder
5	QC044-32105	6	Suction Cup
6	QC044-32108	1	Air Cylinder
7	QC044-32113	1	Air Cylinder
8	QC044-32114	1	Air Cylinder
9	QC044-32118	1	Air Cylinder
10	QC044-32119	1	Air Cylinder
11	QC044-32127	1	Flow Control Valve
12	QCP-069294	2	Valve
13	QC4427K54	2	Muffler
14	QC4427K55	1	Muffler

This kit may be ordered in partial or in its entirety.

This listing of parts is OPTIONAL and available at EXTRA COST.

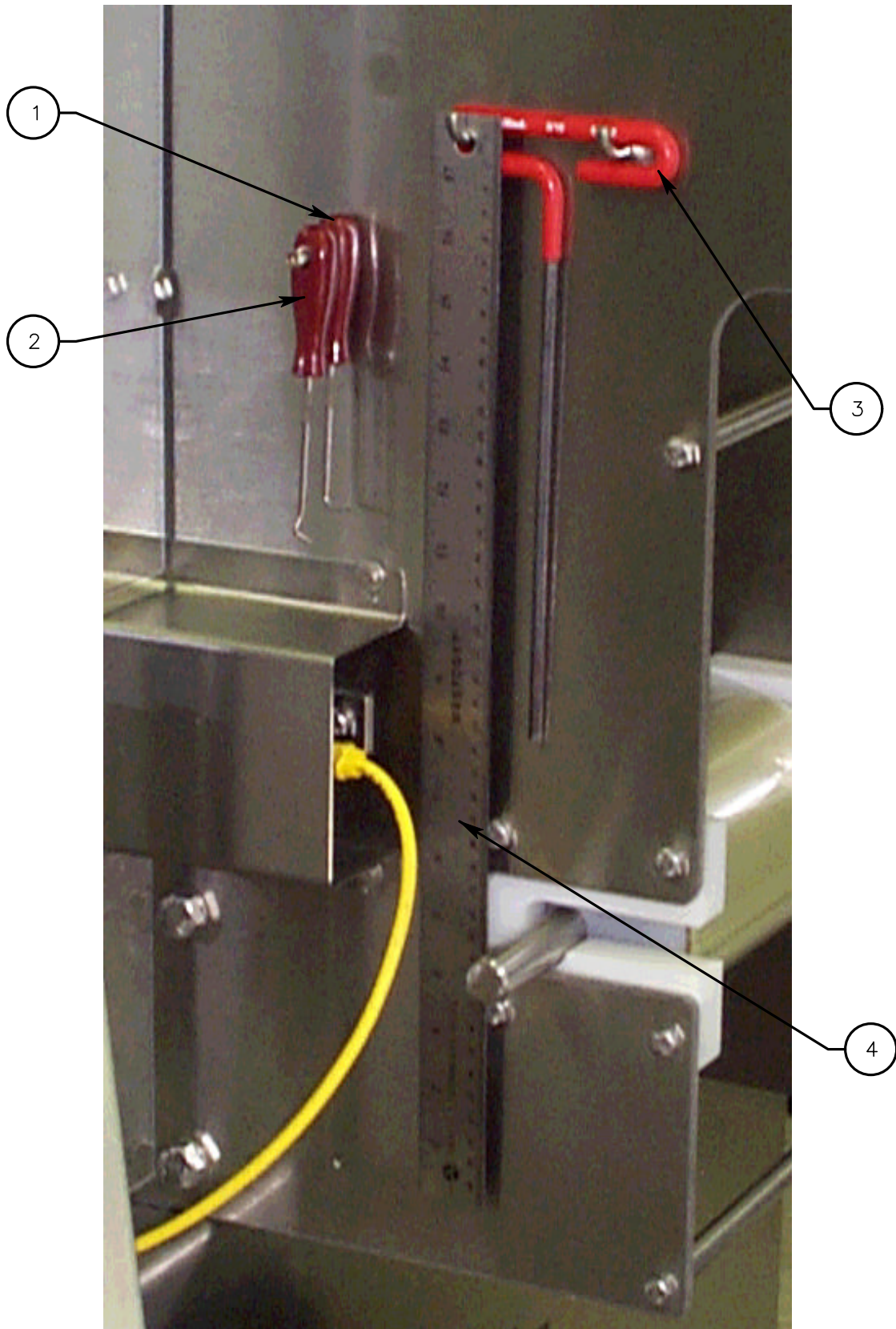
SPECIAL TOOLS

Notes

SPECIAL TOOLS

ITEM	PART NUMBER	QTY	DESCRIPTION
1	QC044-32128	1	90° Angle O'Ring Pick
2	QC044-32129	1	Wide Angle O'Ring Pick
3	QC044-32130	1	3/16" Allen T-Handle (Long)
4	QC044-32131	1	18" Stainless Rule

SPECIAL TOOLS



SPECIAL TOOLS

CUSTOMER SPECIFIC PARTS LIST

Your QC-32 (EON-15309) was purchased with the following options:

With/Without Open or Second Filler

With/Without Bottom Up Filler

With/Without Roll Stock Film Sealer

With/Without Foil Placement Sealer

With/Without No Foil / Cycle Stop Option

With **QC32-70001/QC32-70005** Lidder

With/Without Extended Cup Magazine

With/Without Cup Lift

With **QC32-90012/QC32-90020** Electrics

With **QC32-90013/QC32-90021** Pneumatics

ITEM	PAGE #	PART NUMBER	DESCRIPTION
2	18-2	QC32-20101	Cup Dropper Assembly
4	18-2	QC32-30001	Filler Assembly (32 oz.)
10	18-6	QC32-10049	Table Insert
3	18-22	QC32-20099	Bottom Guide Plate
14	18-22	QC32-20047	Cup Separator Screw
8	18-26	QC32-20009	Dropper Insert
14	18-28	N/A	Product Hopper (8oz. Filler Assembly)
14	18-32	QC32-30035	Product Hopper (32oz. Filler Assembly)
4	18-38	QC32-41016	Clamp Plate
9	18-38	QC32-41017	Seal Plate
22	18-38	QC32-41018	Guide Block
11	18-46	Not Applicable	Heater Element Hold Plate
12	18-46	QC32-40136	Seal Plate
13	18-46	QC32-40221	Knife Bracket
14*	18-46	Not Applicable	Knife
15	18-46	QC32-40143	Lower Film Plate
16	18-46	QC32-40144	Upper Film Plate
1	18-48	QC80-40068	Cylinder Mounting Plate
2	18-48	Not Applicable	Hold Down Mounting Plate

CUSTOMER SPECIFIC PARTS LIST

ITEM	PAGE #	PART NUMBER	DESCRIPTION
2	18-50	Not Applicable	Fixed Film Holder
4	18-50	Not Applicable	Moveable Film Holder
23	18-54	Not Applicable	Lid Dropper Block
31 OR	18-64	QC32-70020 QC32-70056	Bracket
11	18-66	QC32-70005	Lid Shuttle
10	18-68	QC32-80008	Push-Up Pad
19	18-70	QC044-32134	Transformer

A part number listed as N/A indicates that item is not used on, or was not originally ordered on, this machine.

*Also listed as Item 19 on page 19-1.

