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GC96

Safety & Operating Manual



A Tomkins Company

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P.O. Box 5887
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The World's Most Trusted Name in Belts, Hose and Hydraulics.



GC96 Operators Manual

Crimper Specifications

Prod. No.: 7480-9001

Power source: Any world-wide 210-257 VAC, 20 Amps, 45 to 65 Hz electrical source

Dimensions: 37" H x 23" W x 19 ½" D

Approx. Weight: 804 lbs.

Maximum Rated Working Pressure: 4350 PSI (300 bar)

Carefully read and understand the following warnings before operating this crimper.

WARNING!

An incorrect hose assembly can rupture or blow apart in use, resulting in serious injury, death, or property damage. **REMEMBER:** Others depend on you to make correct assemblies.

FOR SAFETY'S SAKE

USE THIS MACHINE ONLY IF YOU:

1. Receive hands-on **TRAINING** with this Gates crimper and assemblies.
2. Follow current **GATES OPERATING MANUAL** and **CRIMP DATA** for the GC96 crimper.
3. Wear **SAFETY GLASSES**.
4. Keep hands clear of moving parts.

NOTE ON OPERATING TEMPERATURE:

The GC96 crimper has been designed to operate in a 32°F to 122°F (0C to 50C) ambient temperature range and stored in a -4°F to 122°F (-20C to 50C) ambient temperature range. It is also important that the crimper should be acclimated after delivery in its work facility for 24 hours prior to use. If the crimper isn't acclimated or the crimper is stored or operated outside the indicated temperature range it is possible that there may be oil leakage at the kickers. Additionally, if the correct breather assembly isn't installed, oil droplets may form at the oil level sight glass, around the shipping cap/breather assembly and at the reservoir deck plate. If either of these conditions occurs, the operator should wipe off these surfaces and replace the shipping cap with the breather assembly, if necessary. The crimper will then operate normally.

NOTE ON POWER SOURCE:

The GC96 has been designed to accept power from **20amp 220-250VAC outlets**. Power regulated and not exceeding these specifications will allow your GC96 crimper to operate without any electrical fault.

Supply Voltages exceeding this specification ***will*** cause damage to your crimper. Poorly regulated power in some areas can easily fluctuate outside of the crimper inverter range.

To insure long lasting use of the GC96 crimper it is **important that a certified electrician qualify that the supply voltage** is within the specified voltage range **and will not** be exceeded in that region. If the certified electrician determines that the electricity is poorly regulated in your area, steps must be taken to alleviate the problem prior to operation of the GC96 crimper.

Serial number: _____

Purchase date: _____

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Setup

1. Unpack carton.

Remove crimper from shipping container by removing bolts connected through the pallet. Using the included nylon slings and an engine hoist, or similar piece of equipment, suspend crimper and pull crimper from crate.

▲ **WARNING:**

Crimper is very top heavy (approximately 804 lbs.).

- Follow correct set-up procedure as shown in supplied CD.
- Failure to follow proper procedures can create risk of severe injury and/or damage to crimper.
- DO NOT lift crimper by head. Use lifting anchors on crimper base. (See photos below.)

Locate serial number assigned to crimper on rear reservoir base and record on Page 1 for future reference.

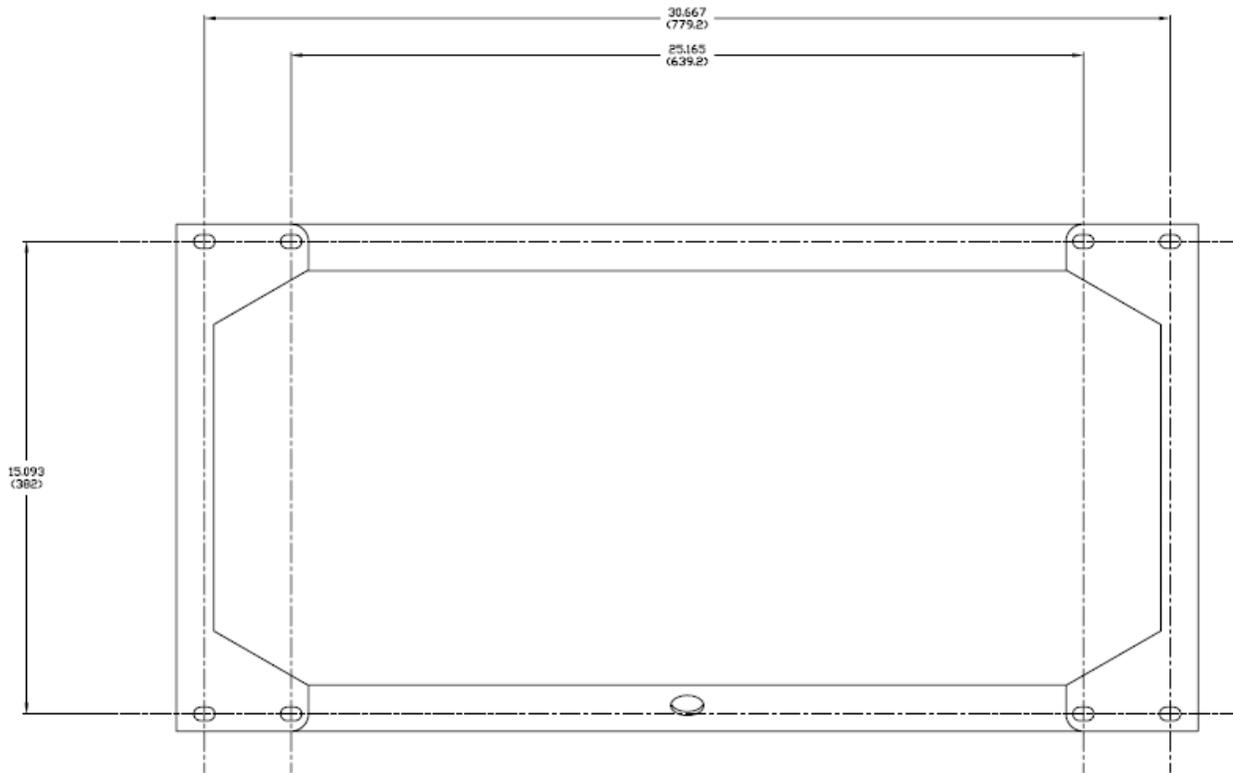
Attach crimper to optional secured stand or bench.

▲ **WARNING:**

- DO NOT mount crimper directly on casters!
- Crimper is top heavy! Crimper MUST BE bolted to optional stand or a secured bench capable of supporting 804 lbs.

Place crimper on stand bolted to floor or on a secured bench capable of supporting over 804 lbs. The proper bench height is approximately 32".

Position crimper so operator may feed hose assemblies into the rear or front of crimper head. If using the stand, bolt crimper using the four 6mm Allen head bolts (included) through predrilled holes. If mounting to a bench, drill four 1/2" holes aligning with holes in crimper and bolt together.



2. Fill crimper with oil unless oil already filled (check sight glass on front of reservoir)

Remove the shipping cap / breather assembly behind the crimper head. Fill the GC96 with 12 gallons (45 liters) of AW46 oil.

The GC96 crimper has been designed to operate in a 32°F to 122°F (0C to 50C) ambient temperature range with AW46 oil.

NOTE- If the GC96 crimper has been stored below -4°F ambient temperature, the crimper should be acclimated after delivery to its work facility for 24 hours prior to use. If the crimper isn't acclimated or the crimper is stored or operated outside the indicated temperature range, 32°F to 122°F (0C to 50C) operating and -4°F to 122°F (-20C to 50C) for storage, it is possible that there may be oil leakage at the kickers. Additionally, if the correct breather assembly isn't installed, oil droplets may form at the oil level sight glass, around the shipping cap/ breather assembly and at the reservoir deck plate. If either of these conditions occurs, the operator should wipe off these surfaces and replace the shipping cap with the breather assembly, if necessary. The crimper will then operate normally.

3. Install power cord plug.

The crimper is equipped with an *Inverter* which allows the machine to run from any 20amp 220-250VAC outlet. The crimper also is equipped with a NEMA L6-20 power cord plug.



▲ WARNING:

- Have a qualified electrician install the correct NEMA L6-20 outlet for your power supply.
- Incorrect electrical connection can cause damage to component or an electrical hazard for personnel.

NOTE: Incorrect power cord installation will void your equipment warranty.

Turn power switch on. It will take several seconds (approx. 120 sec.) for the TOUCH SCREEN control panel to boot up and show the CRIMP SCREEN. Once the CRIMP SCREEN is showing Press the CRIMP button to check the pump motor operates. If motor is not operating contact your local Gates supplier.

4. Install foot pedal.

This crimper can also be activated by using a foot pedal. The foot pedal has an auto retract feature and is activated after the head gets to crimp diameter. The protective metal case surrounding the pedal will avoid accidental activation. Install foot pedal by plugging it into the lower right side control panel.



5. Position control panel to a comfortable working position.

The control panel can be rotated to a position that is more accessible depending on where the operator is working. Loosening the locking handle located to the left of the control panel will allow panel to pivot approximately 90 degrees left or right.

6. Lubricate die shoe grease fittings.

Press and hold top CRIMP button and cycle head to fully closed position or until grease fittings are exposed.

Turn power switch off. Using grease gun, grease front (16) die shoe grease fittings until grease appears between die and die cone surface (approx 1 ½ pumps). Cycle crimper 5 times (alternate between top CRIMP button and bottom RETRACT button, or actuate with foot peddle) to distribute grease evenly.

Lubrication should be done whenever the sliding surfaces of the die cone get shiny or about every 250 crimps.

7. Install die set.

Refer to the **Using GC96 and GC32 series die sets** section for instructions on installing the desired die set

8. Calibration

Before crimping a hose assembly, check calibration. Calibration is the proper relationship between a setting and the crimp diameter. It should be checked only if you find the crimp measurements are no longer within Gates crimping specifications or new parts have replaced old parts on the crimper or if crimper has been used heavily or abused. Calibration should be used if a large discrepancy, greater than the Gates specified tolerance range of +/- 0.010.

For the GC96 there are two possible methods to field calibrate the crimper.

1- Calibration with the GC32-33 die and the GC96 Spacer die set.

- A. Install the GC96 spacer die set using the die removal tool (Prod. No 7482-9181).
- B. Press OPTIONS then TOOLS on the TOUCH SCREEN control panel. Press Die CNG to adjust the crimper head to accept the GC32 Quick Change Tool.
- C. Load the GC32-33 die set using the Quick Change Tool.
- D. Set the Set Point Value to **1.15**.
- E. While holding the thread end of an 8G MegaCrimp® coupling, insert coupling into crimper so that ferrule is 1/8" from front edge of die shoe.
- F. Press and hold top blue CRIMP button. Crimper will close down to position defined by the Set Point Value. Once it reaches that position, crimper will automatically shut off.

NOTE: CRIMP button and foot pedal operate on a "dead man" control. It only operates as long as you depress the CRIMP button or hold foot pedal down. It stops immediately when switch is released.

▲ **WARNING:**

To prevent serious injury:

- **Keep away from all moving parts! If bodily contact should occur with a moving part, immediately release CRIMP button or foot pedal.**
- **Do not operate crimper with hand, fingers, or any body part in crimper mouth. Serious injury can occur**
- **Keep additional personnel away from crimper while operating.**

G. Remove coupling and measure crimp diameter. Crimp diameter must measure 1.000" +/- .003". If the crimp diameter is acceptable, no adjustment is necessary.

- If crimp diameter is not acceptable, crimper must be calibrated. Proceed as follows:

a. Press **OPTIONS** then **TOOLS** on the TOUCH SCREEN control panel. Press **OFFSET**. Then press **Open Keypad**. Type in **4296** and press **ENTER**.

b. Use Calibration equation to determine approximate new setting.

Adjusted Setting = Factory Offset Value- [(Actual COD - Target COD) x 2200]

Changing the **Offset Value** by approximately 2 will change crimp diameter 0.001". Changing the **Offset Value** by approximately 50 will change crimp diameter approximately 0.025".

c. Type in the **Adjusted Setting** and press **ENTER**.

NOTE- If the ENTER key is not pressed, the new offset value will not be loaded!

H. Repeat calibration steps until published crimp diameter is achieved. Crimper is now calibrated.

2- Calibration with the GC96-610 die and the GC96 Calibration Piece

A. Install the GC96-610 die set using the die removal tool (Prod. No 7482-9181).

B. Set the Set Point Value to **8.56**.

C. While holding the end of the GC96 Calibration Piece (Prod. No. 7482-9200), insert the piece into crimper.

D. Press and hold top blue CRIMP button. Crimper will close down to position defined by the Set Point Value. Once it reaches that position, crimper will automatically shut off.

NOTE: CRIMP button and foot pedal operate on a "dead man" control. It only operates as long as you depress the CRIMP button or hold foot pedal down. It stops immediately when switch is released.

▲ **WARNING:**

To prevent serious injury:

- **Keep away from all moving parts! If bodily contact should occur with a moving part, immediately release CRIMP button or foot pedal.**
- **Do not operate crimper with hand, fingers, or any body part in crimper mouth. Serious injury can occur.**
- **Keep additional personnel away from crimper while operating.**

E. Remove piece and measure crimp diameter. Crimp diameter must measure 3.920" +/- .003".

F. If the crimp diameter is acceptable, no adjustment is necessary.

G. If crimp diameter is not acceptable, crimper must be calibrated. Proceed as follows:

a. Press **OPTIONS** then **TOOLS** on the TOUCH SCREEN control panel. Press **OFFSET**. Then press **Open Keypad**. Type in **4296** and press **ENTER**.

b. Use Calibration equation to determine approximate new setting.

Adjusted Setting = Factory Offset Value- [(Actual COD - Target COD) x 2200]

Changing the **Offset Value** by approximately 2 will change crimp diameter 0.001". Changing the **Offset Value** by approximately 50 will change crimp diameter approximately 0.025".

c. Type in the **Adjusted Setting** and press **ENTER**.

NOTE- If the ENTER key is not pressed, the new offset value isn't loaded and the crimper will crimp to the previous set point!

H. Repeat calibration steps until published crimp diameter is achieved. Crimper is now calibrated.

NOTE: CRIMP button and foot pedal operate on a "dead man" control. It only operates as long as you depress the CRIMP button or hold foot pedal down. It stops immediately when switch is released.

▲ **WARNING:**

To prevent serious injury:

- Keep away from all moving parts! If bodily contact should occur with a moving part, immediately release CRIMP button or foot pedal.
- Do not operate crimper with hand, fingers, or any body part in crimper mouth. Serious injury can occur.
- Keep additional personnel away from crimper while operating.

Using GC96 and GC32 series die sets

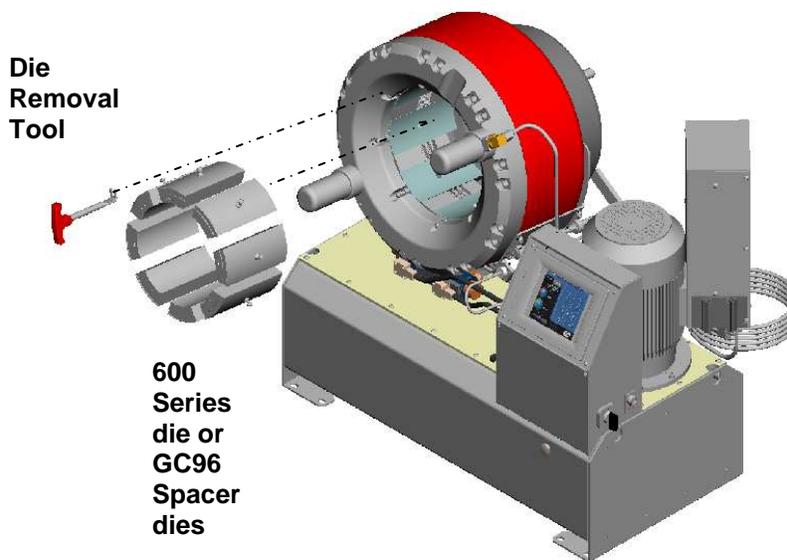


Fig. 1 Installing the 600 series dies into the GC96 head

Installing the GC96 600 Series and Spacer Die Sets

A. Refer to Fig. 1. On the front of the GC96 crimper head, pull a die shoe locking pin out with the Die Removal Tool (Prod. No 7482-9181).

B. Take the desired GC96 die segment (GC96 -610, through -614 and Spacer) and slide the die locking pin in the crimper shoe hole with the die brand (or part number) facing toward the operator. Release the locking pin when the die pin is installed. Use the same procedure on the other seven die segments.

C. If the GC96 spacer dies are installed, follow the procedure in step **A.** for installation.

D. To remove the dies, place a hand under the desired shoe to remove. Pull the corresponding die shoe locking pin out with the Die Removal Tool and catch the die finger. Set the die finger aside.

E. Repeat step D. on the remaining die fingers.

Note- There is not a die storage system available for the GC96 large bore dies.

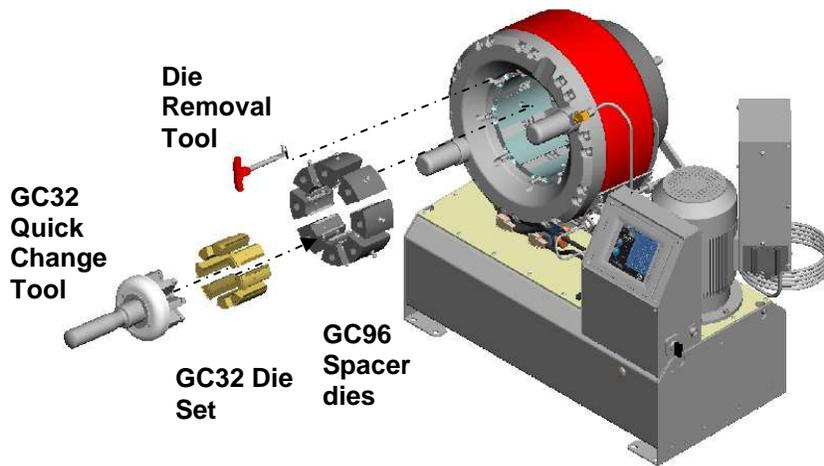


Fig. 2 Installing the GC32 dies in the GC96 crimper

Installing the GC32 standard Die Sets and using the Quick Change Tool Refer to Fig. 2.



A. Refer to Fig. 3. To load the GC32 die sets with the Gates GC32 Quick Change Tool (QCT),

- Press the **OPTIONS** SCREENS tab,
- Press the **TOOLS** tab.
- Press the **DIE CNG** button
-

B. This will position the shoes to accept the QCT. Depending on the position of the head, the head may fully open. If this happens, press the **DIE CNG** button again and the shoes will position to allow changing the dies out with the QCT.

Fig. 3

WARNING- CLOSING THE CRIMPER HEAD ON THE QUICK CHANGE TOOL WILL DAMAGE THE QUICK CHANGE TOOL.

C. Installing the GC32 die set into the GC96 Crimper

- Using the Gates Quick Change Tool (QCT), select dies from the storage receptacle.
- Align die finger dovetails with die shoe receptacles on GC96 spacer dies installed in crimper head.
- Press the QCT in until it bottoms out on the die shoe surface. The die is then set.
- Release the QCT by twisting to the left, or counterclockwise, until die fingers are disengaged.
- Withdraw the QCT.

D. Unloading GC32 standard die sets using the QCT

- Perform step A & B above to position the head to accept the QCT.
- Press the Quick Change Tool (QCT) in until it bottoms out on the die shoe surface.
- Twist QCT clockwise until die fingers are engaged and withdraw QCT. This will pull the die fingers out of the crimper head.
- Press die fingers back into storage receptacle.
- Twist QCT handle counterclockwise to unload die fingers.
- Withdraw QCT.

GC96 Display Panel Operation

After applying power to the GC96, the control panel will load the “**MAIN WORKING DISPLAY**”. This takes several seconds to load. The Control Panel is TOUCH SCREEN therefore the designated circles on the screen perform as functional buttons. There are two main tabs on the TOUCH SCREEN panel CRIMP and OPTIONS. Functionality described below.

Note- The GC96 Touch Screen can ‘freeze’ in start up. If this happens, turn off the crimper for 5 minutes then return and try again. If the problem persists, call Gates Product Application.

Gates Hose Product application phone number: 303-744-5070

Crimp Screen

CRIMP – Pressing the crimp button will cause the Crimp Dies to close. This is a “Dead Man” control feature.



RETRACT – Pressing the retract button will cause the dies to open. This is a “Dead Man” control feature.

RETRACT TIMER – This slider is a visual indicator for the retract time and can be adjusted between 0.5 to 6 seconds in 0.5 second increments.

This is achieved by pressing and sliding the LOZENGE button located at the bottom.

NOTE- The GC96 crimper has an automatic retract feature. If the crimper is left unattended for 15 minutes, the

automatic retract feature will cause the crimper to fully retract if left in a partial or fully closed position while the crimper is energized.

SET POINT – The ring around the CRIMP and RETRACT will indicate the machine attitude

Flashing GREEN indicates NORMAL or non-operating GOOD condition

NON-Flashing (Solid) GREEN indicates that a button is pressed

NON-Flashing (Solid) RED with the note at the top of the screen **CRIMP FINISHED, CHECK CRIMP DIAMETER!** indicates the dies are at SET POINT (Completed Crimp Position)

NON-Flashing (Solid) RED with the note at the top of the screen

... **SENSOR FAULT!** ...indicates a Sensor Problem – Check potentiometer connection.

Set Point Value – Maximum setting is **20.00**. By pressing numbers on the Key Pad, the operator can input Gates Crimp Settings. Once the proper setting is typed in, the SET POINT VALUE will flash until the ENTER key is pressed and then the value will appear solid.

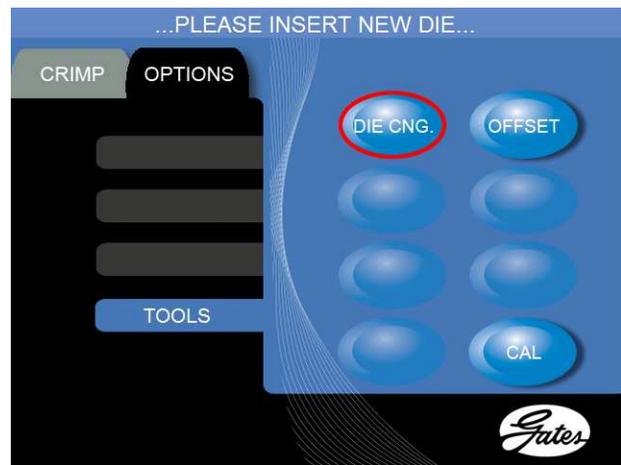
NOTE- If the ENTER key is not pressed, the new value isn't loaded and the crimper will crimp to the previous set point!

Options Screen



DIE CNG – Holding this button will automatically select head direction and move the head to a position more suitable for Standard GC32 Die Changes. It may be necessary to press the button twice to get it into the die change position.

The **OPTIONS SCREEN** allows the operator to press **TOOLS** and perform die changing with the GC32 Quick Change Tool and also to perform Field Calibrations with the Offset button.



OFFSET– Allows the operator to input a value of **0 to 500** to perform a field calibration on the GC96 crimper. When the **OFFSET** button is pressed, a keypad is revealed and a value may be input and **ENTERED** and will cause the crimp OD to be larger or smaller for a given setting. See calibration section for further details.

NOTE- If the **ENTER** key is not pressed, the new offset value will not be loaded!



CAL – Allows access to Factory Calibration and is not necessary for normal operation of the GC96 crimper. **Strictly ONLY for USE by qualified Gates Maintenance Engineers.**

Hose Preparation

1. Cut hose end square and clean any debris from tube interior.
2. Bend grounding wire, if present, inside of hose; extending wire approximately $\frac{1}{2}$ " (12.7 mm)
3. Measure outer diameter of hose with PI tape.
4. Based on hose outer diameter, select the proper ferrule. Mark a line on the hose cover at the distance from the end of the hose that equals the insertion depth. This becomes a visual check to determine if the hose is fully bottomed into the fitting.
5. Slide the ferrule over the stem collar. If the ferrule has flats, be sure they line up with the flats on the hose collar.
6. Lubrication should only be used if necessary.
7. Insert the stem into the hose squarely without causing damage to the tube.

Operating Instruction

1. Plug in and turn power switch on.

2. **Select correct die set.**

Using Gates GC96 Crimp Data Sheets, select correct die set for the hose and coupling being crimped.

3. **Load die set.**

Refer to the section **Using GC96 and GC32 series die sets**. To install the GC96 series large bore and GC96 spacer dies pull back on each spring-loaded locking pin on the crimper head with the die release tool. Slide each large bore or spacer die pin in each crimper shoe hole with the die brand (or part number) facing toward the operator. Release each locking pin after the die pin is installed.

If the spacer dies are installed, the Gates standard GC32 series die sets can be installed using the Gates GC32 QCT.

4. **Select correct setting.**

- Reference the GC96 Crimp Data Sheets.
- If crimping large diameter hose with control panel settings based on hose diameter, measure the outside diameter of the hose with a pi tape.
- Select the approximate control panel setting for the specific hose/coupling combinations.
- Enter this setting into the control panel.

▲ **WARNING:**

Improperly made assemblies could result in blowing the hose out of the fittings at high pressure, risk of fire and/or serious injury or death.

- Crimp **MUST MEET** specified crimp diameter. All settings are approximate!
- Machine tolerances exist for each crimper, die set and supporting piece of equipment, which will affect your actual crimp setting.
- **ALWAYS** check the crimp diameter to ensure that it is within published limits.

5. Set RETRACT TIME if necessary.

The RETRACT TIME can be adjusted to control the final die shoe position after crimping.

- Place an uncrimped coupling in front of the crimper mouth.
- Adjust the RETRACT TIME using the slider on the CRIMP SCREEN.
- Press and hold bottom RETRACT button until mouth clears coupling.

6. Install assembly into crimper head.

- Insert straight assemblies through either the front or back of crimper head. If a bent tube is being crimped, it must be crimped by loading assembly from the rear of crimper.
- Jog crimp dies until they just contact the ferrule. Be sure the ferrule and crimp dies are lined up properly to achieve proper crimp length.

7. Begin the crimp.

- Press and hold top CRIMP button or foot pedal.
- When crimping a two-piece coupling as soon as the die fingers contact the ferrule, pull slightly on the hose assembly. That ensures the ferrule-locking collar is properly located over the stem locking groove.
- Crimper will close to the position selected for the SET POINT VALUE. Once it reaches that position, the crimper stops automatically.
- Press and hold the RETRACT button until the assembly can be removed.
- Crimp is now complete.

NOTE: While in CRIMP mode, the CRIMP button and foot pedal operate on a “dead man” control. They only operate as long as they are depressed. The crimper stops immediately when button or pedal is released. Press the RETRACT button to retract. If using the foot pedal, when the crimper reaches the crimp setting, the crimper switches to retract. The crimper will then automatically open to the RETRACT position as long as the foot pedal is depressed.

▲ **WARNING:**

To prevent serious injury:

- Keep away from all moving parts! If bodily contact should occur with a moving part, immediately release CRIMP button or foot pedal.
- Do not operate crimper with hand, fingers, or any body part in crimper mouth. Serious injury can occur.
- Keep additional personnel away from crimper while operating.

8. Remove hose assembly.

9. Unload die set.

Refer to the section **Using GC96 and GC32 series die sets.**

If the spacer dies are installed and a Gates standard GC32 die was used for crimping, the Gates standard GC32 series die sets can be removed using the Gates GC32 QCT.

To remove the dies, place a hand under the desired shoe to remove. Pull the corresponding die shoe locking pin out with the Die Removal Tool and catch the die finger. Set the die finger aside.

Measuring and Adjusting Crimp Diameters

▲ **WARNING:**

Protect the safety of people using your assemblies! Your measured crimp diameters MUST be in tolerance range as listed in the Crimp Data Manual.

NOTE: DO NOT measure on top of part number stamps or ridges.

1. Measure crimp diameter.

- Measure halfway between ridges. (Fig. 1) To be sure crimp diameter is being properly measured, mark a crimp flat. Beginning with that flat, count 4 flats to get the diameter. Be sure caliper fingers DO NOT touch ridges or part number stamps. (See Photo 3.)
- Measure halfway between the ends of the crimped portion of the ferrule. (Fig. 2)

2. Check crimp diameter.

- The measured crimp diameter must be within 0.010" of the published crimp diameter.
- If the measured crimp diameter is too large, re-crimp to proper crimp diameter. If it is too small then discard.

3. Adjust the crimp diameter (if necessary).

- If crimp diameter is not within specified crimp tolerance, an adjustment to the crimp set point value needs to be made.
- To obtain a smaller crimp diameter, change **Set Point Value** to a smaller number.
- To get a larger crimp diameter, change **Set Point Value** to a larger number. Changing the **Set Point Value** by approximately .02 will change crimp diameter .001".
- After the correct diameter is achieved, record this new setting in your crimp data manual for future reference.

Maintenance

This crimper requires minimal maintenance. However, the following practices are recommended to ensure maximum reliability and service.

Lubrication

Lubricate sliding surfaces of die cone whenever they become shiny or approximately every 250 crimp cycles. Use Lubrimatic Moly EP Grease or equivalent.

- Press CRIMP button to close crimper mouth and expose grease fittings.
- Shut power switch off.
- Using grease gun, grease through both front and back die shoe grease fittings until grease appears on die cone surface.
- Operate crimper through a full CRIMP and RETRACT cycle 5 times to distribute grease evenly.

Check oil level.

- Check hydraulic oil level in pump reservoir after every 10 hours of use.
- Hydraulic oil should be visible in sight glass. To check oil level, push CRIMP button to fully close crimp head. If oil level drops below the site glass, oil is needed.
- Add Tellus AW 46 (Grade 46) hydraulic oil or equivalent.

Change the oil.

(**NOTE:** Frequency depends on the pump's general working conditions, severity of use, and overall cleanliness.)

- For general shop conditions, change oil every 300 hours.
- Drain, clean and refill reservoir with Tellus AW 46 or equivalent

Foam Filler Pads

Check every 1000 crimps. If foam pad does not fill space between die shoes, order new set and install.

▲ WARNING:

- **Avoid electrical shock or hydraulic related injury!**
- **Disconnect crimper from power source before removing control panel or touch screen, loosening hydraulic tubing or removing any components.**

Troubleshooting Guide

All equipment is tested for proper performance before it is shipped from the factory. However, if you experience any difficulties, check the list below to help restore equipment to proper operating standards.

PROBLEM	CORRECTION
<ul style="list-style-type: none"> Pump motor will not start. 	<ul style="list-style-type: none"> Check electrical connections.
<ul style="list-style-type: none"> Touch Screen freeze during start up. 	<ul style="list-style-type: none"> Turn off the crimper for 5 minutes then return and try again. If the problem persists, call Gates Product Application
<ul style="list-style-type: none"> Will not hold crimp calibration. 	<ul style="list-style-type: none"> Flange head bolts are loose. Check torque of flange bolts to 215 Nm or 1903 in lbf every 6 months of operation.

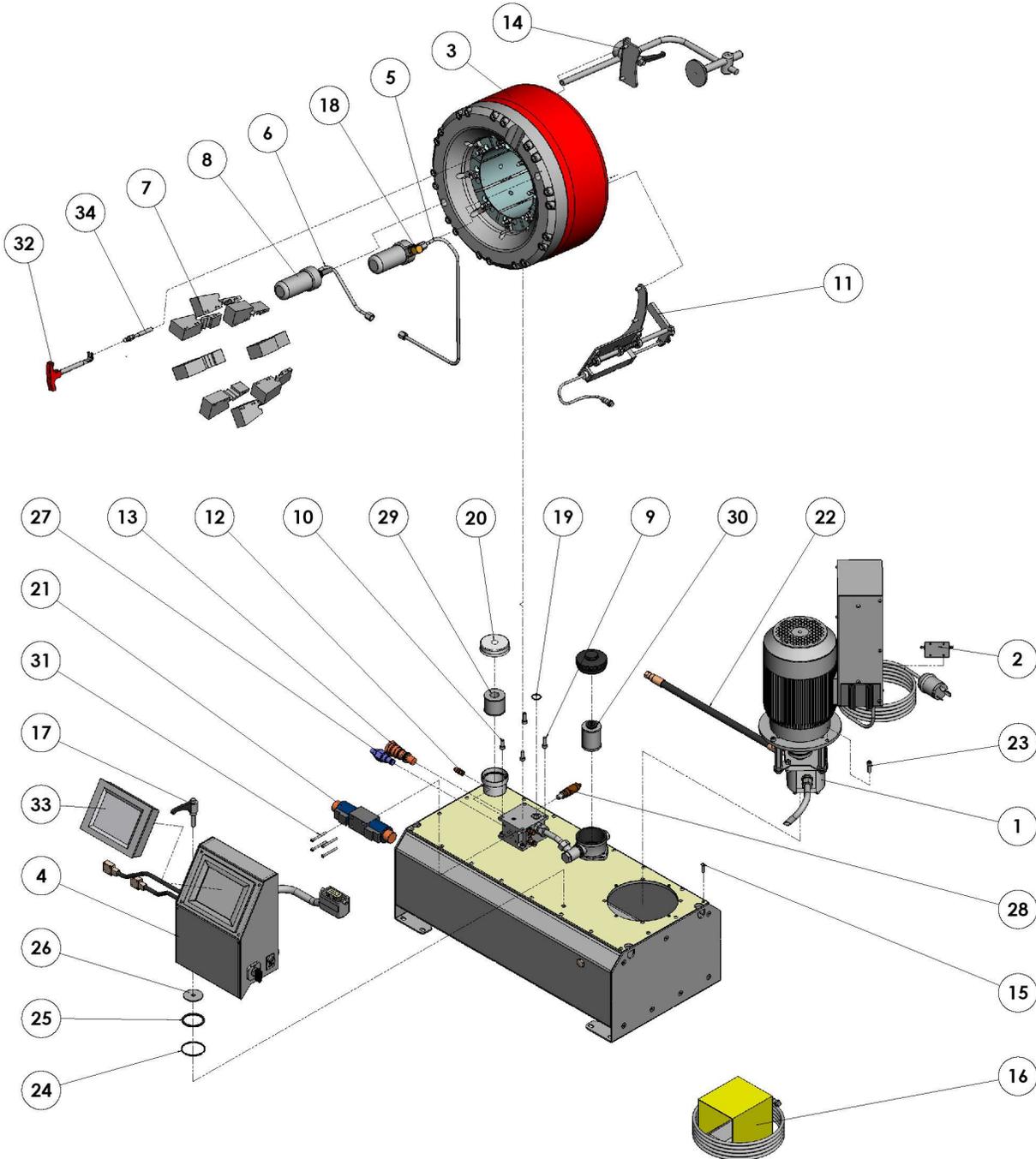
Schematic and Replacement Parts List

GC32 Die Set Available

Die Set	Product Number	Part Number	Notes
32-21	7482-7025		Requires 96 Spacer
32-22	7482-7026		Requires 96 Spacer
32-31	7482-7027		Requires 96 Spacer
32-33	7482-7028		Requires 96 Spacer
32-34	7482-7029		Requires 96 Spacer
32-35	7482-7030		Requires 96 Spacer
32-36	7482-7031		Requires 96 Spacer
32-37	7482-7032		Requires 96 Spacer
32-38	7482-7033		Requires 96 Spacer
32-39	7482-7034		Requires 96 Spacer
32-310L	7482-7035		Requires 96 Spacer
32-311	7482-7036		Requires 96 Spacer
32-312	7482-7037		Requires 96 Spacer
32-313	7482-7038		Requires 96 Spacer
32-314	7482-7039		Requires 96 Spacer
32-40	7482-7040		Air Conditioning
32-41	7482-7041		Air Conditioning
32-42	7482-7042		Air Conditioning
32-43	7482-7043		Air Conditioning
32-44	7482-7044		Power Steering
32-45	7482-7045		Grease
32-46	7482-7046		Battery Cable

32-81	7482-7047		GL, Requires 96 Spacer
32-82	7482-7048		GL, Requires 96 Spacer
32-83	7482-7049		GL, Requires 96 Spacer
32-84	7482-7050		GL, Requires 96 Spacer
32-85	7482-7051		GL, Requires 96 Spacer
32-86	7482-7052		GL, Requires 96 Spacer
96-87	7482-9087		GL, Large Bore
96-88	7482-9088		GL, Large Bore
96-89	7482-9089		GL, Large Bore
32-301	7482-7157		Clamp Collar
96 Spacer	7482-9600		Required for GC32 dies
96-610	7482-9610		Crimps 3 1/2" to 4 1/2"
96-611	7482-9611		Crimps 4 1/3" to 5"
96-612	7482-9612		Crimps 5" to 5 3/4"
96-613	7482-9613		Crimps 5 1/2" to 6 2/5"
96-614	7482-9614		Crimps 6 1/4" to 7 1/4"

SCHEMATIC



REPLACEMENT PARTS LIST

No.	Item	QTY	Product No.	Part No.
1	GC96 Power Unit Replacement Kit (w/ Invertor)	1	7481-0045	
2	GC32 and GC96 brake resistor	1	7482-7210	
3	GC96 Head Replacement Kit	1	7482-9100	
4	GC96 Touch Screen Panel Replacement Kit (includes Touch Screen Panel)	1	7482-9101	
5	Kicker Tubing (Upper)	1	7482-9116	
6	Kicker Tubing (Lower)	1	7482-9117	
7	Foam Fillers	8	7482-9119	
8	GC96 Kicker Replacement Kit	2	7482-9179	
9	Long Mounting Bolts (Head)	2	7482-7181	
10	Short Mounting Bolts (Head)	2	7482-7106	
11	GC96 potentiometer assembly	1	7482-9199	
12	Valve block adaptors	1	7482-7102	
13	Pilot operated Check	1	7482-7103	
14	Depth Stop (Optional)	1	7482-9108	
15	Reservoir Deck screws	20	7482-9110	
16	Foot Pedal	1	7482-7111	
17	Control Panel Post	1	7482-7115	
18	Kicker Adaptor	1	7482-7118	
19	Head Seal	1	7482-7126	
20	Breather Cap	1	7482-7175	
21	2 Position 3 Way Solenoid Valve	1	7482-7180	
22	Hose Assembly	1	3663-9628	
23	Pump bolts	4	7482-7186	
24	Outer Washer (Control Panel)	1	7482-7190	
25	O-ring (Control Panel)	1	7482-7191	
26	Inner Washer (Control Panel)	1	7482-7192	
27	Relief Valve	1	7482-7193	
28	Back Pressure Control Cartridge	1	7482-7194	
29	Breather Element	1	7482-7195	
30	Oil Filter Element	1	7482-7196	
31	Solenoid Bolts set	4	7482-7171	
32	Die Release Tool	1	7482-9181	
33	Touch Screen Replacement Kit (No Panel)	1	7482-9090	
	Mirror (not shown)	1	7482-9109	
34	GC96 Die Retainer Cartridge	1	7482-9201	

TWO-YEAR LIMITED WARRANTY ON EQUIPMENT

For two years from the date of shipment of the equipment to the original user, Gates Corporation will, at its option, replace or repair any unit which proves to be defective in material or workmanship, or both, at no cost to the original user of the equipment. This is the exclusive remedy. **THERE IS NO OTHER EXPRESS OR IMPLIED WARRANTY. ALL INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO ONE YEAR FROM DATE OF SHIPMENT OF THE EQUIPMENT TO THE ORIGINAL USER. LIABILITY FOR CONSEQUENTIAL AND INCIDENTAL DAMAGES UNDER ANY AND ALL WARRANTIES IS EXCLUDED TO THE EXTENT EXCLUSION IS PERMITTED BY LAW.** Some states do not allow the exclusion of incidental or consequential damages, and some states do not allow limitation on how long an implied warranty lasts, so the above limitation and exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state. For warranty service, contact Service Department, Gates Corporation, 1551 Wewatta Street, P.O. Box 5887, Denver, CO 80217.

How to Order Repair Parts

All parts for the GC96 Crimper listed in the **current replacement parts price sheets** can be ordered directly from Gates Corporation, Iola Distribution Center, 999 Michigan Avenue, P.O. Box 606, Iola, KS 66749, Phone (316) 365-6961.

When ordering, be sure to include the following information:

1. Name of unit shown on front.
2. Product number or part number of parts needed.
3. Description of parts needed.
4. Quantity of parts needed.
5. Serial number of machine.

For selling prices on inventoried parts, refer to **Hydraulic Equipment and Parts List Price Schedule**. Selling prices for parts not shown in these lists will be furnished on request, or parts will be shipped at prevailing prices and you will be billed accordingly. For information regarding prices, contact your local Gates representative or Gates Corporation, 1551 Wewatta Street, P.O. Box 5887, Denver, CO 80217.

When returning inoperable equipment, contact your Gates sales representative and request a return good authorization form. Fill out and send to:

Gates Corporation

Attention: Fluid Power Product Application.

1551 Wewatta Street

P.O. Box 5887

Denver, Colorado 80217-5887

www.gates.com