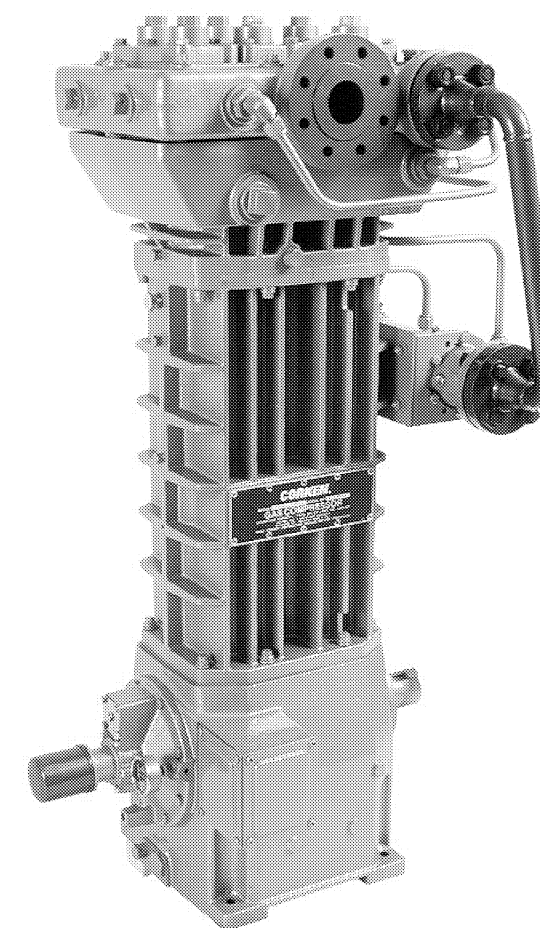


# IMPORTANT INSTRUCTIONS

## PACKING SET REPLACEMENT

**PART NUMBER 1725-2X**



*Solutions beyond products...*  
**CORKEN**  
**IDEX**

9201 North I-35 Service Road • Oklahoma City, OK 73131

Phone: 405.946.5576 • Fax: 405.948.7343

E-mail: [cocsalesdept@idexcorp.com](mailto:cocsalesdept@idexcorp.com)

Web Address: [www.corken.com](http://www.corken.com)

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**CORKEN**  
**IDEX**

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Warning: (1) Periodic inspection and maintenance of Corken products is essential. (2) Inspection, maintenance and installation of Corken products must be made only by experienced, trained and qualified personnel. (3) Maintenance, use and installation of Corken products must comply with Corken instructions, applicable laws and safety standards (such as NFPA Pamphlet 58 for LP-Gas and ANSI K61. 1-1972 for Anhydrous Ammonia). (4) Transfer of toxic, dangerous, flammable or explosive substances using Corken products is at user's risk and equipment should be operated only by qualified personnel according to applicable laws and safety standards.

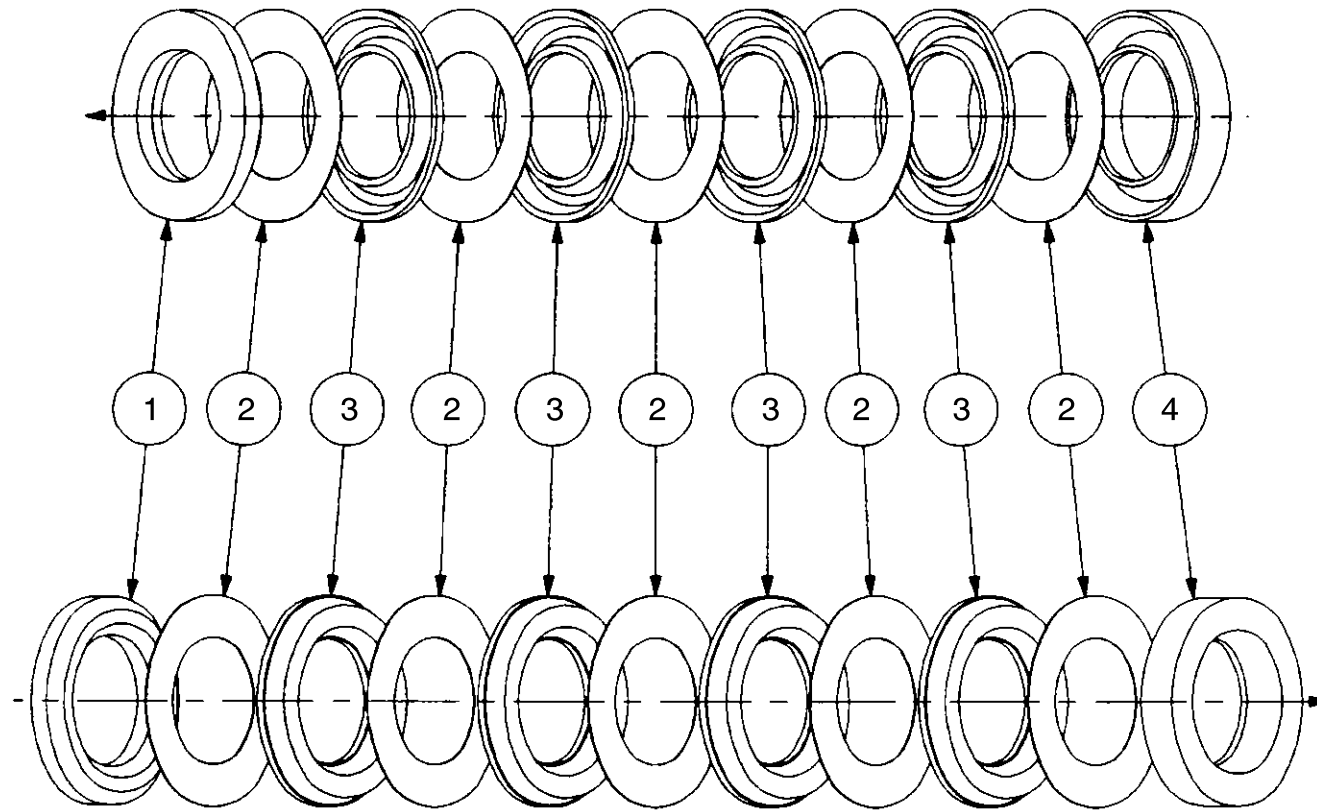


## OPTIONAL K-RING PACKING SETS

### WARNING!

Do not use k-ring spacers in NH3 service.

Assemble k-ring packing using the illustration below and the packing replacement instructions enclosed.



**Packing Sets**  
1452-1X, 1452-2X

No.	Part No.	Description
1	1453-1	Male Packing Ring
2	4274	Packing Ring Spacer
3	1454 or 1454-2	Packing Ring
4	1452-1	Female Packing Ring

**Packing Sets**  
1725-2X

No.	Part No.	Description
1	1724	Male Packing Ring
2	4275	Packing Ring Spacer
3	1725-2	Packing Ring
4	1723	Female Packing Ring

**NOTE:** Quantity of packing rings and spacers will vary depending on compressor model and packing style.

The k-ring spacer is made of a thin film of an advanced, temperature resistant engineering polymer. A k-ring is placed between each v-ring mating surface. The new design uses one less v-ring than the standard design to accommodate the k-rings. The k-ring counteracts the tendency of the v-rings to stick together, especially on higher temperature applications which approach the 350° F (175° C) limit for Corken compressors. The spacing of the v-rings allows each v-ring to seal more tightly. The spacing also improves heat dissipation which extends packing life by lowering frictional wear.

## PACKING REPLACEMENT INSTRUCTIONS GAS COMPRESSORS PACKING SET 1725-2X

### CAUTION

Bleed all pressure from the compressor and piping before starting to install new piston rod packing. After repair the unit should be pressure tested and checked for leaks at all joints and gasket surfaces. When the compressor is being used with toxic! dangerous, flammable or explosive gases this pressure and leak testing should be done with air or a dry, inert gas such as nitrogen.

### GENERAL INSTRUCTIONS

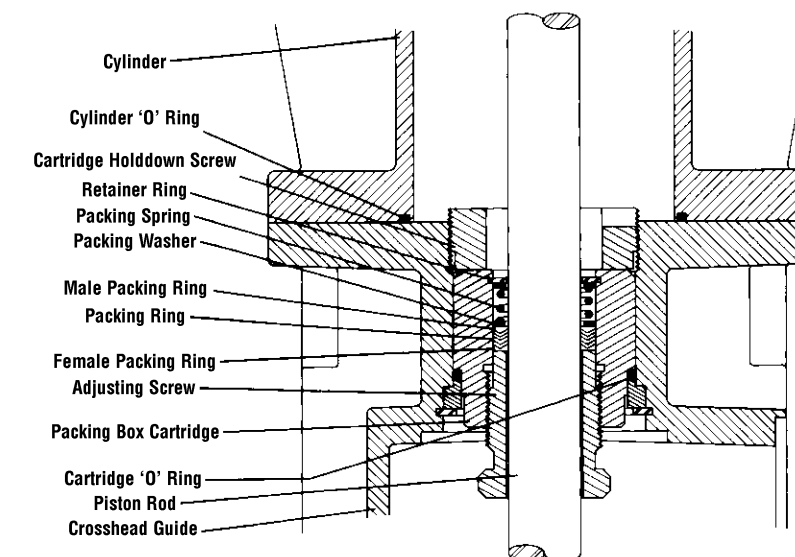
For simplicity, heads, pistons, and inspection plates are not shown. The illustrations are for general reference only; for specific construction details and actual part numbers consult

your CORKEN Service Manual, Section E. Use instructions below which apply to the MODEL and SERIAL NUMBER of your compressor. Be careful to arrange packing sets in the proper order for your particular model; also, care should be taken that the inside area of the packing box is not scratched. Replace all gaskets and O-rings as they are not normally reusable.

**CLEANLINESS:** Sealing a reciprocating piston rod is a very difficult task. Keep all parts, tools, and your hands clean during installation. Your new packing needs every chance it can get, so keep it clean.

**WORKMANSHIP:** Your Corken compressor is a precision piece of equipment with very close tolerances. Treat it as such. Never beat on it to get parts in or out.

### ALL MODELS 690, 691, 691-4



### DEREPRESSURIZE AND OPEN COMPRESSOR:

If you are water cooling your machine drain all water passages first. Remove head, pistons and cylinder. Then remove cartridge holddown screw and packing box cartridge. Loosen adjusting screw at bottom of packing box cartridge. Remove retainer ring, washers, packing spring and old packing from packing box cartridge.

### REPLACE PACKING:

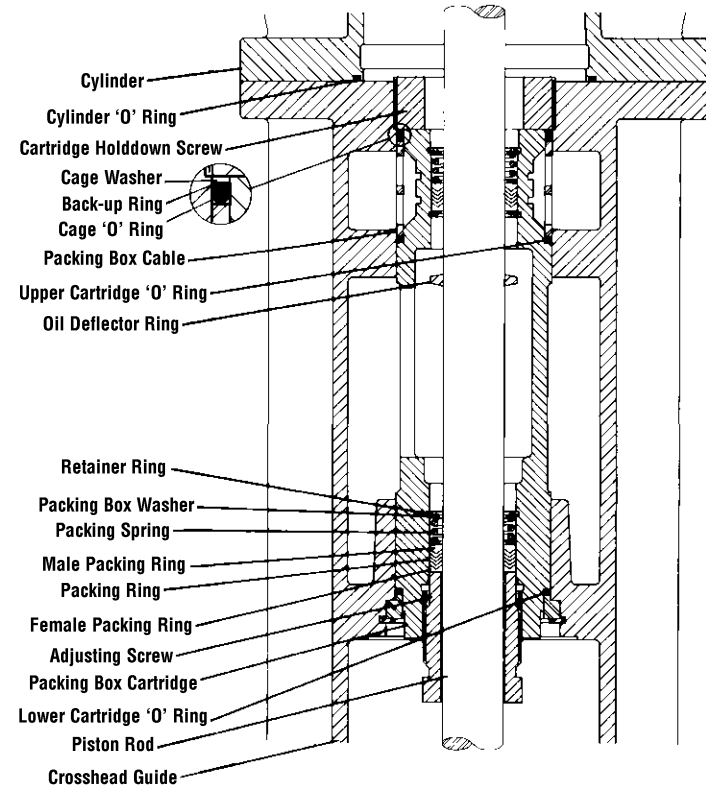
Clean then lightly oil packing area inside packing box cartridge. Thread in adjusting screw until locking device is engaged into first thread of packing cartridge. Install packing rings including male and female packing rings as shown in illustration, one at a time, pushing in each completely before adding the next ring. Insert a packing washer, packing spring and another packing washer. Push down on washer and insert retainer ring.

### COMPLETING INSTALLATION:

Oil piston rod and replace cartridge o-ring. Install packing installation cone part number 3905 onto piston rod. Slip packing box cartridge over piston rod gently; care should be taken that the lips of the packing rings are not damaged. Install and tighten cartridge holddown screw. Replace cylinder o-ring, cylinder, pistons and head. Test compressor. Remove inspection plate to expose adjusting screws. Rock flywheel back and forth and listen for a leak. Tighten adjusting screws as necessary and replace inspection plate. After all leaks are found and corrected, repressurize the system.

**NOTE:** Adjusting screws should be turned only 1/4 turn at a time. Overtightening the adjusting screw can cause excessive heat in the packing and possible damage.

**ALL MODELS D590, FD591, D690, D691, D691-4**



**DEREPRESSURIZE AND OPEN COMPRESSOR:**

If you are water cooling your machine drain all water passages first. Remove head, pistons and cylinder. Then remove cartridge holddown screw, cage washer backup ring, packing box cage packing box cartridge and oil deflector ring. Loosen adjusting screw at bottom of packing box cartridge. Remove retainer

rings, washers, packing springs and old packing from both sections of packing box cartridge.

**REPLACE PACKING:**

Clean, then lightly oil. Packing area inside packing box cartridge. See lower packing set in Table 1 or illustration.

Install retainer ring, a packing box washer, packing spring and another packing box washer. Install packing rings including male and female packing rings, one at a time pushing in each completely before adding the next ring. Thread in adjusting screw until locking device is engaged into first thread of packing cartridge. Follow arrangement in Table 1 or illustration to replace upper packing sets in a similar manner.

**COMPLETING INSTALLATION:**

Oil piston rod and replace lower cartridge o-ring. Install packing installation cone part number 3905 onto piston rod. Slip packing box cartridge over piston rod gently; care should be taken that the lips of the packing rings are not damaged. Install oil deflector ring on piston rod, through opening in packing box cartridge, between the packing sets. Replace upper cartridge o-ring, packing box cage, cage o-ring, backup ring and cage washer. Install and tighten cartridge holddown screw. Replace cylinder o-ring, cylinder, pistons and head. Test compressor. Remove inspection plate to expose adjusting screws. Rock flywheel back and forth and listen for a leak. Tighten adjusting screws as necessary and replace inspection plate. After all leaks are found and corrected, repressurize the system.

**NOTE:** Adjusting screws should be turned only 1/4 turn at a time. Overtightening the adjusting screw can cause excessive heat in the packing and possible damage.

**TABLE 1**

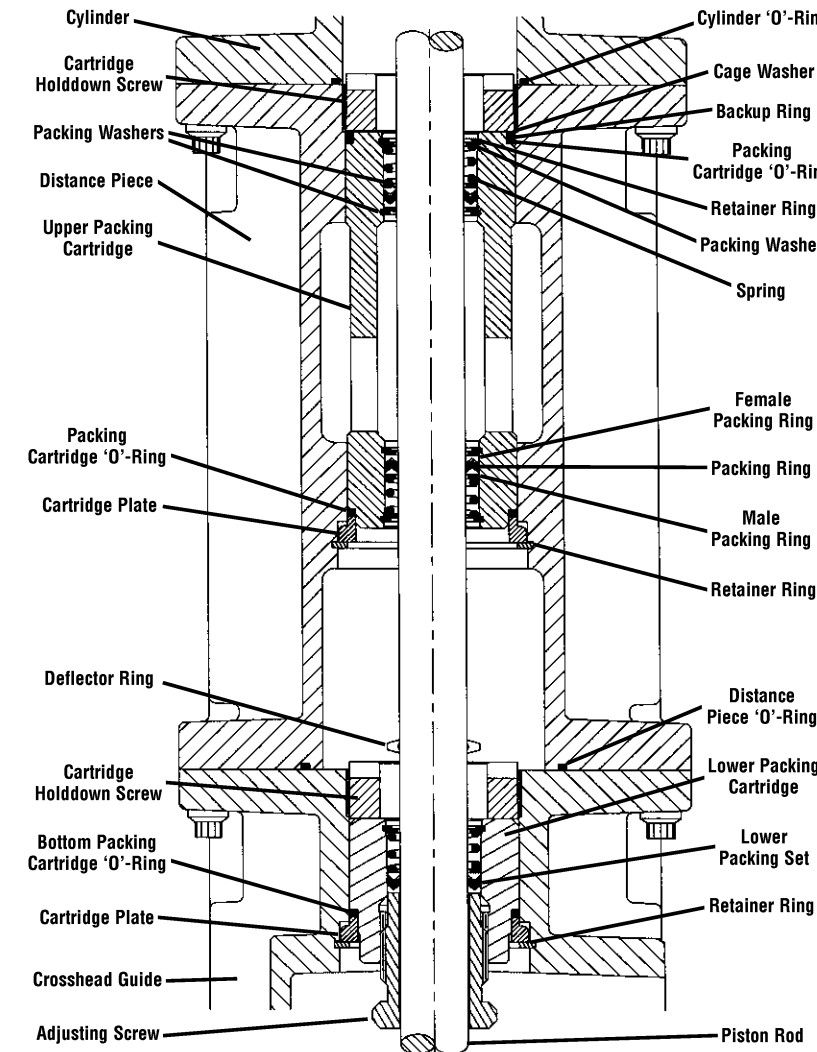
	PACKING SPECIFICATION	
	'A' (Also shown in illustrations)	'B'
<b>UPPER PACKING SETS</b>		
<b>LOWER PACKING SETS</b>		

The position of the packing varies on these machines. Install as indicated in the table above. The current packing specification is indicated by the first letter code following the basic model number.

**Example:**

FD691**A**M4FBANSNN whereas **A** is the packing specification.

**GAS COMPRESSORS DOUBLE DISTANCE PIECE (MODELS T591, T691) PACKING SET 1725-2X**



**DEREPRESSURIZE AND OPEN COMPRESSOR:**

Remove head, pistons and cylinder. Then remove cartridge holddown screw, cage washer backup ring and packing box cartridge. Remove retainer ring at bottom of packing box cartridge. Remove retainer rings, washers, packing springs and old packing from packing box cartridge. Remove lower packing cartridge holddown screw and packing cartridge from crosshead guide. Remove retainer ring and packing as mentioned earlier.

**REPLACE PACKING:**

Clean, then lightly oil, packing area inside packing box cartridge. See lower packing set in Table 2 or illustration. Install retainer ring, a packing box washer, packing spring and another packing box washer. Install packing rings including mate and female packing rings, one at a time, pushing in each completely before adding the next ring. The quantity of packing rings required will vary due to tolerances; a good rule of thumb is to put in as many as are removed. Thread in adjusting screw. Follow arrangement in Table 2 or illustration to replace upper packing sets in a similar manner.

**COMPLETING INSTALLATION:**

Oil piston rod and replace lower cartridge o-ring. Install packing installation cone part number 3905 onto piston rod. Slip packing box cartridge over piston rod gently; care should be taken that the lips of the packing rings are not damaged. Install bottom of deflector ring on piston rod, through opening in packing box cartridge, between the packing sets. Replace upper cartridge o-ring and spacer. Install and tighten cartridge holddown screw. Replace distance piece o-ring distance piece and top oil deflector ring. Replace adapter plate o-ring, then install adapter plate carefully. Replace cylinder o-ring, cylinder, pistons and head. Test compressor. Remove inspection plate to expose adjusting screws. Rock flywheel back and forth and listen for a leak. Tighten adjusting screws as necessary and replace inspection plate. After all leaks are found and corrected, repressurize the system.

**TABLE 2**

	'T' STYLE PACKING SPECIFICATION	
	'G'	'H'
<b>UPPER PACKING SETS</b>		
<b>MIDDLE PACKING SETS</b>		
<b>LOWER PACKING SETS</b>		

The position of the packing varies on these machines. Install as indicated in the table above.

The current packing specification is indicated by the first letter code following the basic model number.

**Example:**

FT691**H**M4FBANSNN whereas **H** is the packing specification.

**Caution:** Adjustments made to the lower packing set should be made in very small increments. Excessive tightening of the adjustment screw can lead to premature packing failure.