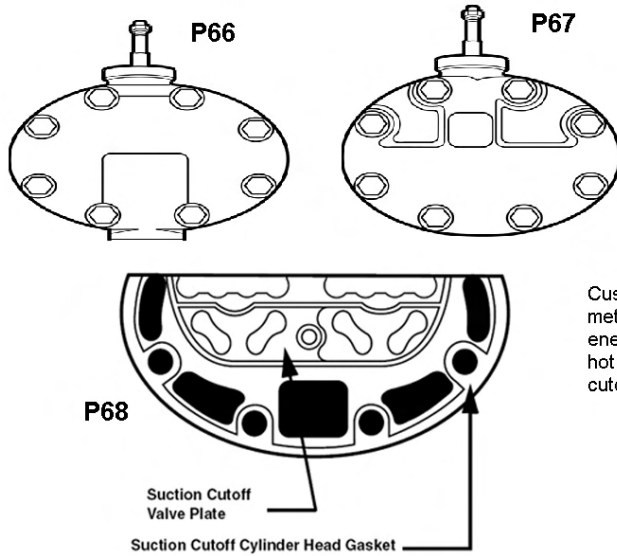


# COMPRESSORS, CHILLERS & CONDENSERS

## CARLYLE SEMI-HERMETIC COMPRESSORS/ACCESSORIES

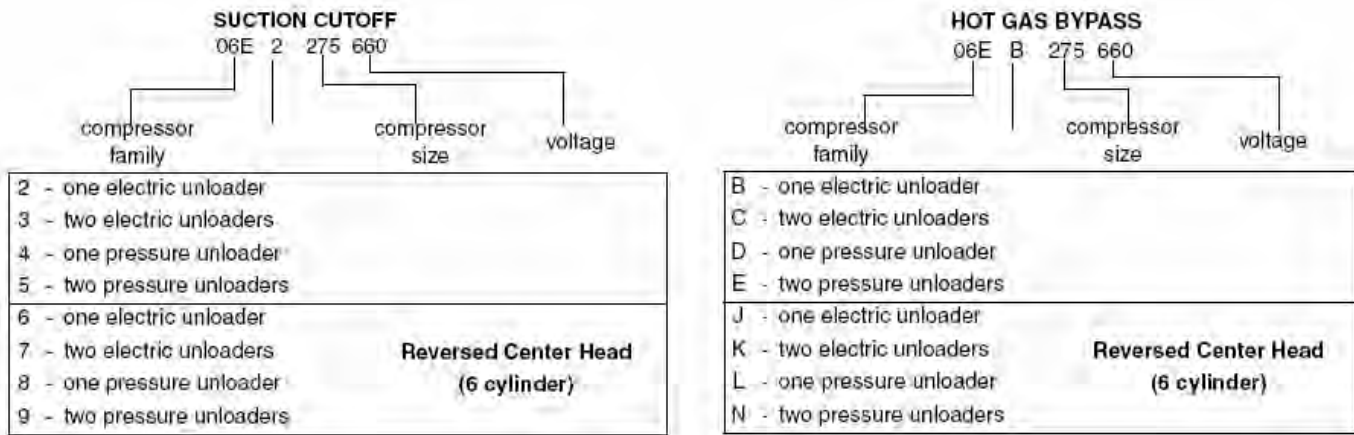
### SUCTION CUTOFF UNLOADING VS HOT GAS BYPASS UNLOADING



Custom cutoff unloading is the "State of the Art" unloading method for the 06D/06E compressors. There are substantial energy savings and improved compressor reliability when a hot gas bypass unloading system is replaced with suction cutoff unloading.

Since 1981 many of the Commercial Products Carrier produced with 06E compressors utilized "Suction Cutoff Unloading" in place of Hot Gas Bypass Unloading. It is easy to identify a suction cutoff unloading compressor from a hot gas bypass unloading compressor. This can be done in one of two ways:

#1) The Finished Goods (new) compressor model number is different than the hot gas bypass model number.



#2) The unloading heads themselves physically look different.

The parts used in Hot Gas Bypass are different from those used in Suction Cutoff Unloading. These differences are:

HOT GAS BYPASS PART NO	SUCTION CUTOFF PART NO	DESCRIPTION
06EA660105	--	Valve Plate Package
06EA503314	--	Cylinder Head Gasket
--	06EA660137	Valve Plate Package
--	06EA503334	Cylinder Head Gasket
--	06EA503524	Cylinder Head

The valve plate gasket for both Hot Gas Bypass and Suction Cutoff is 06EA504884.

Both hot gas bypass and suction cutoff use the same Control Valve Packages:

Pressure Control Valve P/N      **06EA660100**  
 Electric Control Valve P/N      **06EA660135**

These control valves are similar to those you used in the past except that the bypass piston is now separate from the valve and the pressure control valve has had internal modifications that allow it to operate on suction cutoff applications

# COMPRESSORS, CHILLERS & CONDENSERS

## CARLYLE SEMI-HERMETIC COMPRESSORS/ACCESSORIES

### 06D SUCTION CUTOFF UNLOADING KITS

#### ELECTRIC CAPACITY CONTROL



The capacity control valve in this package is actuated by an electric solenoid. The solenoid is either energized or de-energized by the action of an external controller. The solenoid coil is not supplied with this package.

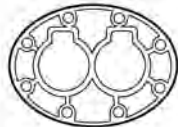
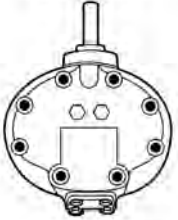
This package can be used to (1) convert an 06D compressor with hot gas bypass unloading to electrically operated suction cutoff unloading, (2) add unloading or (3) add a second bank of unloading to an 06D compressor.

The kit consists of the following:

- Cylinder Head Assembly (incl. capacity control valve)
- Valve Plate Gasket
- Cylinder Head Gasket
- Cylinder Head Bolts
- Instructions

Solenoid Coils for electric unloader valve:

PART NO.	VOLTAGE
EF19ZE024	24
EF19ZE120	120
EF19ZE240	208-240



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#### PRESSURE CAPACITY CONTROL

##### PRESSURE OPERATED

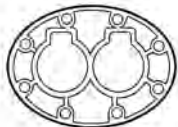
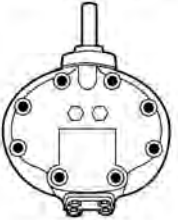
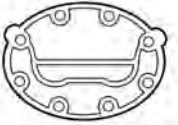
**NOT RECOMMENDED FOR REFRIGERATION APPLICATIONS**



The capacity control valve in this package is controlled by suction pressure and actuated by discharge pressure. This package can be used to (1) convert an 06D compressor with hot gas bypass unloading to suction cutoff unloading, (2) add unloading, or (3) add a second bank of unloading to an 06D compressor.

The kit consists of the following:

- Cylinder Head Assembly (incl. capacity control valve)
- Valve Plate Gasket
- Cylinder Head Gasket
- Cylinder Head Bolts
- Instructions



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# COMPRESSORS, CHILLERS & CONDENSERS

## CARLYLE SEMI-HERMETIC COMPRESSORS/ACCESSORIES

### 06D SUCTION CUTOFF UNLOADING KITS

#### SUCTION CUTOFF UNLOADING

This kit contains the parts used internally for the suction cutoff unloading head. It is used for both electric and pressure operated suction cutoff unloading applications.

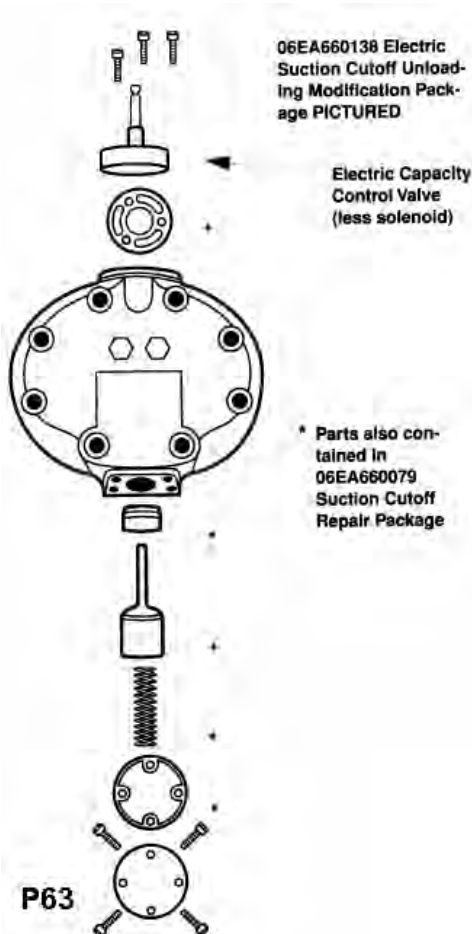
The kit **does not** contain the capacity control valve.

The kit contains the following:

- Piston and Ring
- Valve Body
- Spring
- Capacity Control Valve Gasket
- Cover Gasket
- Strainer
- Instructions

### 06E SUCTION CUTOFF UNLOADING KIT

#### ELECTRIC CAPACITY CONTROL



The capacity control valve in this package is actuated by an electric solenoid. The solenoid is either energized or de-energized by the action of an external controller.

The solenoid coil is not supplied with this package.

This package can be used to (1) convert an 06E compressor with hot gas bypass unloading to electrically operated suction cutoff unloading, (2) add unloading, or (3) add a second bank of unloading to an 06E compressor.

The kit contains the following:

- Cylinder Head Assembly (incl. capacity control valve)
- Valve Plate Gaskets (AC & Ref.)
- Suction Valves
- Cylinder Head Gasket
- Capscrews
- Washers
- Instructions

Solenoid coils for electric unloader valve:

PART NO.	VOLTAGE
EF19ZE024	24
EF19ZE120	120
EF19ZE240	208-240

# COMPRESSORS, CHILLERS & CONDENSERS

## CARLYLE SEMI-HERMETIC COMPRESSORS/ACCESSORIES

### 06E SUCTION CUTOFF UNLOADING KIT

#### PRESSURE CAPACITY CONTROL

NOT RECOMMENDED FOR REFRIGERATION APPLICATIONS

The capacity control valve in this package is controlled by suction pressure and actuated by discharge pressure. This package can be used to (1) convert an 06E compressor with hot gas bypass unloading to pressure operated suction cutoff unloading, (2) add unloading, or (3) add a second bank of unloading to an 06E compressor.

The kit contains the following:

- Cylinder Head Assembly (incl. capacity control valve)
- Valve Plate Gaskets (AC & Ref.)
- Suction Valves
- Cylinder Head Gasket
- Capscrews
- Washers
- Wrench
- Instructions

#### SUCTION CUTOFF UNLOADING

This kit contains the parts used internally for the suction cutoff unloading head. It is used for both electric and pressure operated suction cutoff unloading applications.

The kit **does not** contain the capacity control valve.

The kit contains the following:

- Piston and Ring
- Valve Body
- Spring
- Capacity Control Valve Gasket
- Cover Gasket
- Strainer
- Instructions

#### CONTROL VALVE KITS

These kits contain the capacity control valve. The 06D and 06E compressors use the same capacity control valve. (The piston assembly is used with hot gas bypass unloading only.)

#### **06EA660100 Pressure operated kit contains the following:**

- Pressure Operated Capacity Control Valve
- Capacity Control Valve Gasket
- Piston Assembly (for HGBP)
- Wrench
- Instructions

#### **06EA660135 Electrically operated kit contains the following:**

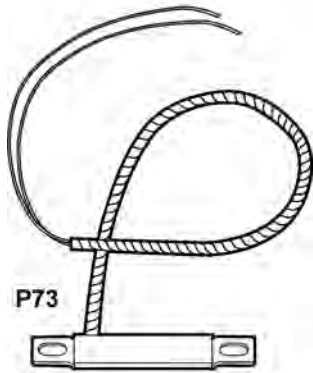
- Electrically Operated Capacity Control Valve (Select appropriate solenoid coil: 24, 120, or 208-240V)
- Capacity Control Valve Gasket
- Piston Assembly (for HGBP)
- Instructions

# COMPRESSORS, CHILLERS & CONDENSERS

## CARLYLE SEMI-HERMETIC COMPRESSORS/ACCESSORIES

### CRANKCASE HEATERS

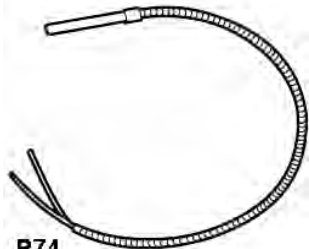
**BAR/STRIP STYLE**  
**06D, 2 CYL. AND 4 CYL. 8, 9, 13, 16 CFM MODELS**



PART NO	WATTS	VOLTS	LEAD LENGTH (in)	CONDUIT LENGTH (in)
06DA660091	50	115	39	24
06DA660092	50	230	39	24

Dimensions: 7 1/2" Long, 1" Wide, 1/2" Thick

**06D, 06E, 06CC, 06CY**



- NEW STRAIGHT TUBE HEATER DESIGN
- KIT CONTAINS CRANKCASE HEATER, RETAINER CLIP AND ANTI-SHORT BUSHING, HEAT CONDUCTING GREASE (P/N: 38AQ680001)

CRANKCASE HEATER PACKAGE	HEATER NUMBER	WATTS	VOLTS	CONDUIT LENGTH (in)	WIRE LENGTH (in)
06EA660165	HT36DM132	180	115	19	24
06EA660167	HT36DM134	180	115	52	73
06EA660166	HT36DM432	180	230	19	24
06EA660168	HT36DM434	180	230	52	73
06DA660076	HT36DL480	125	480	NONE	24
06EA660107	HT36FL379	125	120	52	73
06EA660108	HT36FL479	125	240	52	73

### LIQUID INJECTION VALVES (For R-22 Low Temp. Apps)

**06DR, 06EY, 06CY**

PART NO.	VALVE SIZE	USAGE
EA11ZC011	1/2 Ton	All 06DR, 06CY16, 18, 24, 25, 28, 37
EA11ZC022	1 Ton	06EY750, 765, 775 — 06CY550, 665, 675
EA11ZC030	1 1/2 Ton	06EY799 — 06CY899

## COMPRESSORS, CHILLERS & CONDENSERS

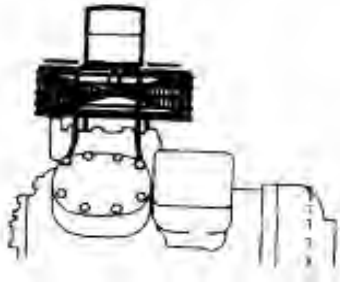
### CARLYLE SEMI-HERMETIC COMPRESSORS/ACCESSORIES

#### OPTIONAL ACCESSORIES

06D

#### CYLINDER HEAD COOLING FAN PACKAGE

	P/N	
06DR	06DR660014	208/230-1-60/1550 RPM
06EY	06ER660011	208/230-1-60/1550 RPM



Part No.: 06DA660095

Terminal Lug Socket Tool

Part No.: P920-0009

#### 06E TERMINAL LUGS



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**NOTE:** For some 200/230 volt across the line installations, the connection of 3 power wires to the compressor may not be possible because the wire diameter may be too large to fit the below listed lugs. In these instances we recommend that 6 motor leads and 6 terminal lugs be used to connect to the compressor terminal plate. The use of 6 leads (instead of 3) allows for a wire size reduction. Consult the National Electric Code or your local electric code for the appropriate wire sizing information.

**FITS WIRE SIZE**

#8 to #4  
#4 to #1

**PART NO.**

HY85TB008 \*  
HY85TB004

**PART NO: HY85TB004, -008**

\* 6 per package

#### 06D SIGHT GLASS REMOVAL TOOL

PART NO

T-133300B-1

#### 06D TERMINAL LUG SOCKET TOOL

PART NO

P920-0009

#### 06D TERMINAL BOX KITS

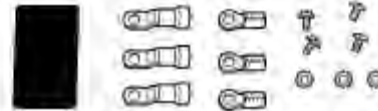
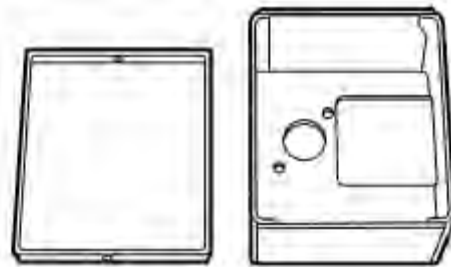


P69N

This kit consists of the terminal box and cover plus all screws, washers, and terminals.

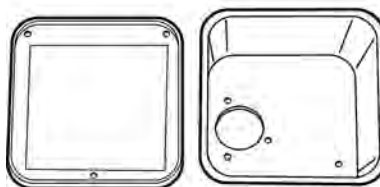
PART NO

06DA660075

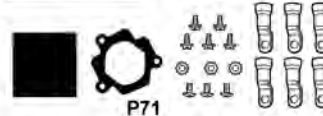


P70

06DA660075 can be used in place of 06DA660078 Terminal Box and Cover Package if overloads are to be used with the compressor. However, it may be necessary to field fabricate a mounting box spacer to allow the 06DA660075 box to mount on the compressor body without interfering with the Compressor Terminal Insulator.



The 06DA660078 Terminal Box and Cover Package mounts directly to the Terminal Plate.



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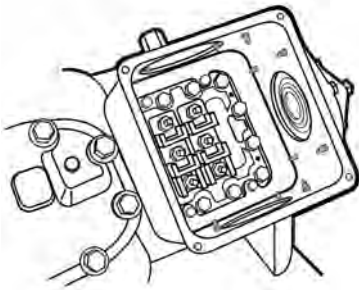
PART NO

06DA660078

# COMPRESSORS, CHILLERS & CONDENSERS

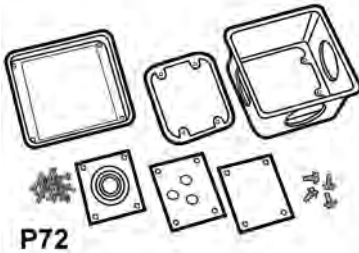
## CARLYLE SEMI-HERMETIC COMPRESSORS/ACCESSORIES

### 06E TERMINAL BOX KITS

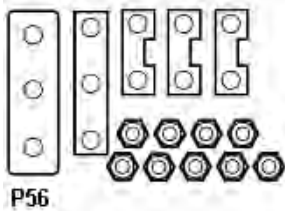


This kit consists of the terminal box, cover, gasket and 3 cover plates (one blank, one with 3 knockouts, one with concentric knockouts). Screws are included.

**Part No.: 06EA660095**



### OLD TERMINAL PLATE KIT



**Part No.: 06EA660141**

### 06D Replacement Terminal Plate Kit

**Part No.: 06DA660-134**

### Replacement Gasket Only

**Part No.: 6D401061**

### 06D, 06E ELECTRONIC LUBE OIL CONTROL



- Solid State
- LED'S continuously display status of the compressor lubrication system.
- When control is connected to 06E bearing head or 6D68-952A (new 06D bearing head) external tubing is eliminated.
- Timing is not cumulative as in controls using a thermal timing circuit. Each time a low oil pressure condition is sensed the time delay will be of full duration.
- Short cycle protection - select either 35, 65 or 100 second time delay periods to prevent rapid cycling (feature can also be bypassed)
- Manual Reset

PART NO

06DA660115

### SPECIAL GASKET FOR TRANSDUCER & BEARING HEAD CONNECTION

PART NO

06DA680-063

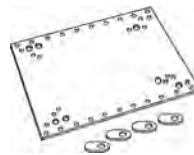
### 06D, 06E LUBE OIL CONTROL



PART NO

060B2008

### 06D, 06E COMPRESSOR MOUNTING PLATE KIT



This universal mounting plate kit will accommodate any size 06D or 06E compressor offered by RCD. The kit includes the predrilled mounting plate, spacers and template.

PART NO

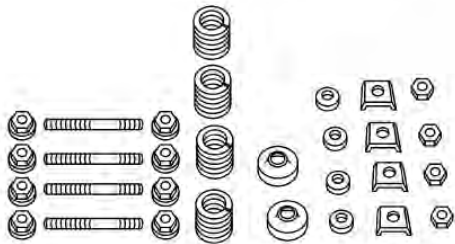
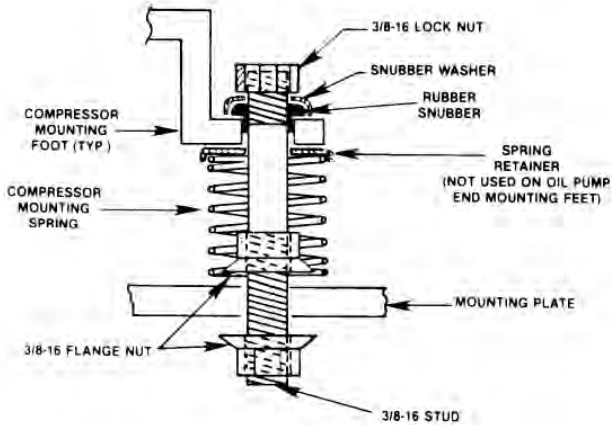
06EA660096

# COMPRESSORS, CHILLERS & CONDENSERS

COMPRESSORS, CHILLERS & CONDENSERS

## CARLYLE SEMI-HERMETIC COMPRESSORS/ACCESSORIES

### 06D, 06E SUSPENSION KIT



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COMPRESSOR MODEL NO.	SUSPENSION KIT PART NO.	
06ET150 250 265 175 275 299	06EA660089 ↓	
06EX150 250 166 266 265 175 275 199 299		
06EY150 166 175 099		
06EZ150 266 175 199		
06DX8186 7246 8246 3286 3376 5376		06DA660056 06DA660057 ↓

COMPRESSOR MODEL NO.	SUSPENSION KIT PART NO.
06DR1096 0136 3166 7186 8206 7246 2286 3376	06DA660058 06DA660056 06DA660056 06DA660056 06DA660056 06DA660057 06DA660057 06DA660057
06DM8086 3136 3166 8186 3376 5376 7246 8246	06DA660058 06DA660056 06DA660056 06DA660056 06DA660056 06DA660057 06DA660057 06DA660057
06CY016 018 124 228 337 550 665 675 899	06DA660057 06DA660057 06DA660057 06DA660057 06EA660089 06EA660089 06EA660089 06EA660089

# COMPRESSORS, CHILLERS & CONDENSERS

## CARLYLE SEMI-HERMETIC COMPRESSORS/ACCESSORIES

### 06D COMPRESSOR OVERLOADS

COMPRESSOR SIZE	VOLTAGE	PART NO.	REMARKS
06DR109	208/230-1-60	HN69GZ025 HN69GZ032	Common Start
06DM808 06DR013	208/230-1-60	HN69GZ024 HN69GZ014	Common Start
06DM313 06DM316 06DR316 06DR718	208/230-1-60	HN69GZ106 HN69GZ037	Common Start
06DR109	208/230	HN69GZ007	2 Required
	460	HN69GZ015	2 Required
	575	HN69GZ011	2 Required
06DM808 06DR013	208/230	HN69GZ053	2 Required
	460	HN69GZ012	2 Required
	575	HN69GZ012	2 Required
06DM313 06DM316 06DR316 06DR718	208/230	HN69GZ024	2 Required
	460	HN69GZ014	2 Required
	575	HN69GZ032	2 Required
06DA818 06DR820 06DR724 (25)	208/230	HN69GZ214	2 Required
	460	HN69GZ038	2 Required
	575	HN69GZ037	2 Required
06DA824 (25) 06DR228	208/230	HN69GZ306	2 Required
	460	HN69GZ010	2 Required
	575	HN69GZ053	2 Required
06DA328 06DM337 06DR337	208/230	HN69GZ309	3 Required
	460	HN69GZ024	2 Required
	575	HN69GZ025	2 Required
06DA537 06DR541	208/230	HN69GZ214	4 Required**
	460	HN69GZ106 or HN69GZ307	2 Required
	575	HN69GZ301	2 Required

\*Based on new High Efficiency (HE) extended voltage compressor models.

\*\*Two overloads in parallel in legs 1 and 3.

**NOTE:** Most 06D compressors have internal thermostat installed in motor & wired across terminals 8 & 9 at the terminal block. It trips (opens) control circuit at 221°F (105°C) and resets at 181°F (83°C).

# COMPRESSORS, CHILLERS & CONDENSERS

## CARLYLE SEMI-HERMETIC COMPRESSORS/ACCESSORIES

### SHIPPING PAD INFORMATION

COMPRESSORS, CHILLERS & CONDENSERS

MODEL	SUCTION VALVE BLANK OFF PAD	BOLTS	SUCTION VALVE PAD GASKET	DISCHARGE VALVE BLANK OFF PAD	BOLTS	DISCHARGE VALVE PAD GASKET
<b>06DR</b>						
<b>109</b>	06DA504283*	(2) AA06GR199	6D23-1421	06DA504283*	(2) AA06GR199	6D23-1421
<b>013, 316</b>	06DA504253*	(2) AA06GR202	6D40-1131	06DA504243*	(2) AA06GR202	6D23-1421
<b>718, 820</b>	06DA502573*	(4) AA06GR293	6D68-1131	06DA504243*	(2) AA06GR202	6D23-1421
<b>724, 228, 337</b>	06DA502573*	(4) AA06GR293	6D68-1131	06DA504253*	(2) AA06GR202	6D40-1131
<b>06DM</b>						
<b>808</b>	06DA504283*	(2) AA06GR199	6D23-1421	06DA504283*	(2) AA06GR199	6D23-1421
<b>313, 316, 818</b>	06DA504253*	(2) AA06GR202	6D40-1131	06DA504243*	(2) AA06GR202	6D23-1421
<b>724, 824</b>						
<b>2 BOLT SUC. VAL.</b>	06DA504253*	(2) AA06GR202	6D40-1131	06DA504243*	(2) AA06GR202	6D40-1421
<b>4 BOLT SUC. VAL.</b>	06EA502573*	(4) AA06GR293	6D68-1131	06DA504243*	(2) AA06GR202	6D40-1421
<b>337, 537</b>	06EA502573*	(4) AA06GR293	6D68-1131	06DA504253*	(2) AA06GR202	6D40-1421
<b>06DX</b>						
<b>818</b>	06DA504253*	(2) AA06GR202	6D40-1131	06DA504243*	(2) AA06GR202	6D23-1421
<b>724, 824 W/:</b>						
<b>2 BOLT SUC. VAL.</b>	06DA504253*	(2) AA06GR202	6D40-1131	06DA504243*	(2) AA06GR202	6D40-1131
<b>4 BOLT SUC. VAL.</b>	06EA502273*	(4) AA06GR293	6D68-1131	06DA504243*	(2) AA06GR202	6D40-1131
<b>328, 337, 537</b>	06EA502273*	(4) AA06GR293	6D68-1131	06DA504253*	(2) AA06GR202	6D40-1131
<b>06DS</b>						
<b>313, 818</b>	06DA504253*	(2) AA06GR202	6D40-1131	06DA504243*	(2) AA06GR202	6D23-1421
<b>824</b>	06EA502573*	(4) AA06GR293	6D68-1131	06DA504243*	(2) AA06GR202	6D40-1131
<b>328, 537</b>	06EA502573*	(4) AA06GR293	6D68-1131	06DA504253*	(2) AA06GR202	6D40-1131
<b>06ET</b>						
<b>150, 250</b>	06EA502573*	(4) AA06GR293	6D68-1131	06DA504253*	(2) AA06GR200	6D40-1131
<b>265</b>	06EA502573*	(4) AA06GR293	6D68-1131	06EA502573*	(4) AA06GR200	6D68-1131
<b>175, 275, 199, 299</b>	06EA402653*	(4) AA06GR323	06EA500181	06EA502573*	(4) AA06GR293	6D68-1131
<b>06EX</b>						
<b>150, 250</b>	06EA502573*	(4) AA06GR293	6D68-1131	06DA504253*	(2) AA06GR200	6D40-1131
<b>265</b>	06EA502573*	(4) AA06GR293	6D68-1131	06EA502573*	(4) AA06GR200	6D68-1131
<b>166</b>	06EA502573*	(4) AA06GR293	6D68-1131	06DA504253*	(2) AA06GR200	6D40-1131
<b>175, 275, 199, 299</b>	06EA402653*	(4) AA06GR323	06EA500181	06EA502573*	(4) AA06GR293	6D68-1131
<b>06EY</b>						
<b>150, 165</b>	06EA402653*	(4) AA06GR323	06EA500181	06DA504253*	(2) AA06GR200	6D40-1131
<b>166, 175, 099</b>	06EA402653*	(4) AA06GR323	06EA500181	06EA502573*	(4) AA06GR293	6D68-1131
<b>06EZ</b>						
<b>150, 266</b>	06EA402653*	(4) AA06GR323	06EA500181	06DA504253*	(2) AA06GR200	6D40-1131
<b>175, 199</b>	06EA402653*	(4) AA06GR323	06EA500181	06EA502573*	(4) AA06GR293	6D68-1131

\*05GA501762 plug required.

Unloader valve blank off plate: 06DA501032 for both 06D and 06E models.