

BLACKMER GEAR PUMP

PARTS LIST

MODELS: G1-2 and G1-4

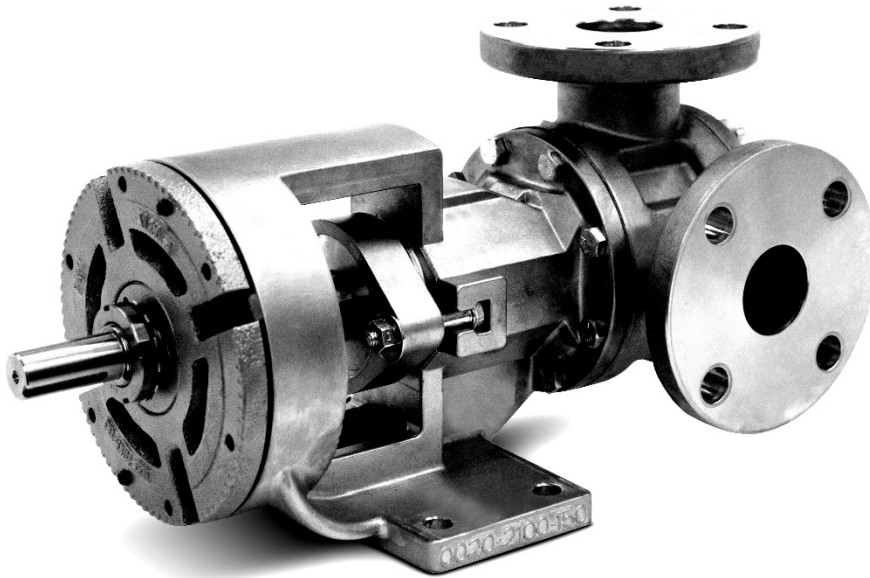
Keep with Instructions 1902-a00 for Installation, Operation and Maintenance

960714

INSTRUCTIONS NO. 1902-a01

Section	1902
Effective	October 2023
Replaces	October 2022

G Series Sealed Internal Gear Pumps



Where Innovation Flows

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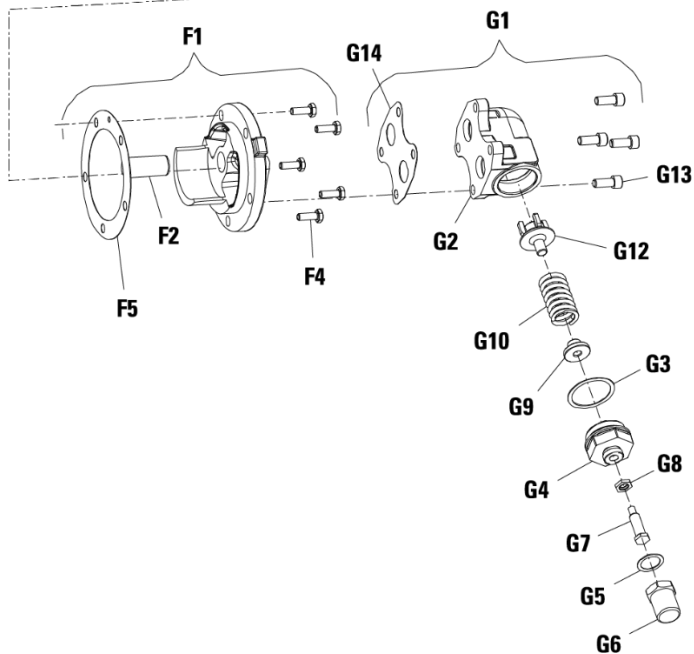
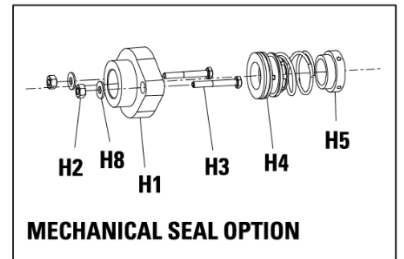
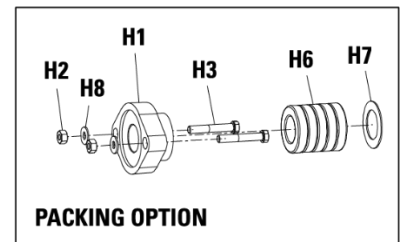
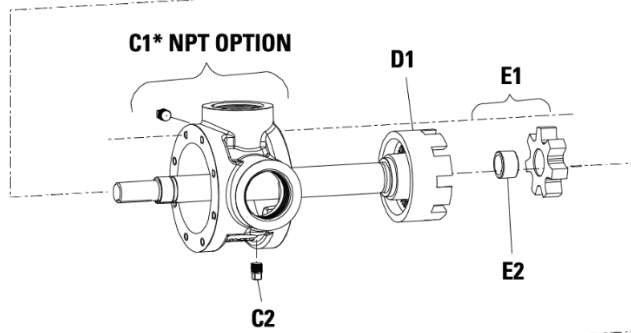
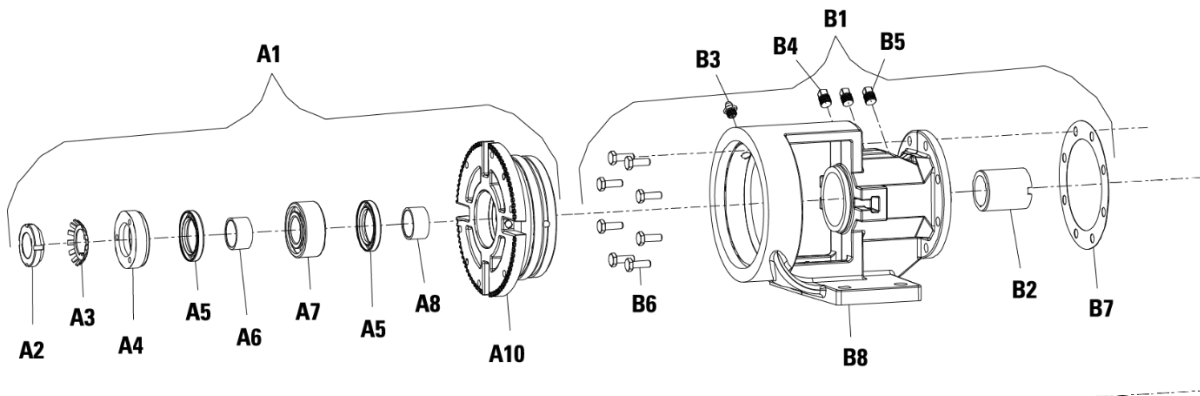
Always read the most current version of this manual before performing any work on or around this pump. The most current version of this manual is freely available on the web at www.blackmer.com

Blackmer pumps are specifically configured for your unique application conditions. Those application conditions and the details of the pump configuration were documented during the ordering process. Keep that information available in a safe place, as it may be needed when troubleshooting pump problems or when ordering spare parts or repairs.

Blackmer Gear Pumps are covered by one or more of the following patents: U.S. Patent Nos. 7549205, 7137793, 7183683, 8,608,465B2 Australian Patent No. AU2005233534B2; Korean Patent No. 10-2006-7023162; Mexican Patent No. PA/2006/011436, Russian Patent No. 2006138540(041952); China Patent No. ZL 201280031563.6; and other patents pending.

EXPLODED VIEW AND PARTS LISTING

G1-2 and G1-4



Parts Listing

CAST IRON

Item	Description	G1-2	G1-4	Qty.	Material
A1	HOUSING, BEARING ASSEMBLY (INCLUDES A2 THRU A13)	0020-1000-110		1	CAST IRON
A2	LOCKNUT, SHAFT	0020-1710-230		1	STEEL
A3	LOCKWASHER, SHAFT	0020-1720-230		1	STEEL
A4	ENDCAP, BEARING HOUSING	0020-1200-230		1	STEEL
A5	LIP SEAL, BEARING HOUSING	0020-1900-900		2	BUNA-N
A6	COLLAR, OUTER BEARING SPACER	0020-1300-230		1	STEEL
A7	BEARING	0020-1400-230		1	STEEL
A8	COLLAR, INNER BEARING SPACER	0020-1300-230		1	STEEL
A10	HOUSING, BEARING	0020-1100-110		1	CAST IRON
A11	SET SCREW (1/4"-20 X 5/8"), BEARING HOUSING (NOT SHOWN)	S57U250625WA6L7		2	STEEL
A12	SET SCREW (5/16"-18 X 5/8"), END CAP (NOT SHOWN)	S57U313625WA6L7		2	STEEL
A13	INSERT, BEARING HOUSING (NOT SHOWN)	0020-1790-400		2	NYLON
B1	BRACKET, ASSEMBLY (INCLUDES B2 THRU B8)	0020-2000-110		1	CAST IRON/CARBON GRAPHITE
		0020-2010-110		1	CAST IRON/BRONZE
B2	BUSHING, BRACKET	0020-2800-300		1	CARBON GRAPHITE
		0020-2800-320		1	BRONZE
B3	FITTING, GREASE (1/8" NPT)	GRSF-013NST-230		1	STEEL
B4	PLUG, PIPE (1/8" NPT)	PLUG-013NSH-230		2	STEEL
B5	PLUG, PIPE (1/8" NPT) (USED WITH LUBRICATED BUSHING)	PLUG-013NSH-230		1	STEEL
	FITTING, GREASE PIN (1/8" NPT) (USED WITH NON-LUBRICATED BUSHING)	GRSF-013NST-230		1	STEEL
B6	SCREWS (5/16"-18 X 3/4"), BRACKET	S01C312750WA2A2		8	STEEL
B7	GASKET, BRACKET	0020-2900-950		1	INTERFACE TS-9003
B8	BRACKET	0020-2100-110		1	CAST IRON
C1	CASE, 1.5" NPT KIT (INCLUDES B6, B7, C2, F4, F5)	0020-3000-110		1	CAST IRON
C2	PLUG, PIPE (1/8" NPT)	PLUG-013NSH-230		2	STEEL
D1	ROTOR, ASSEMBLY (A/B CLEARANCE)	0020-4000-121	0040-4000-121	1	CAST IRON/STEEL
	ROTOR, ASSEMBLY (C CLEARANCE)	0020-4002-121	0040-4002-121	1	CAST IRON/STEEL
	ROTOR, ASSEMBLY (D CLEARANCE)	0020-4003-121	0040-4003-121	1	CAST IRON/STEEL
	ROTOR, ASSEMBLY (E CLEARANCE)	0020-4004-130	0040-4004-130		STEEL
E1	GEAR, IDLER ASSEMBLY	0020-5000-110	0040-5000-110	1	CAST IRON/CARBON GRAPHITE
		0020-5010-110	0040-5010-110	1	CAST IRON/BRONZE
E2	BUSHING, IDLER	0020-5800-300	0040-5800-300	1	CARBON GRAPHITE
		0020-5800-320	0040-5800-320	1	BRONZE
F1	HEAD, KIT (INCLUDES F2 THRU F5, G13, G14)	0020-6010-110	0040-6010-110	1	CAST IRON/STEEL
F2	PIN, IDLER	0020-6200-231	0040-6200-231	1	HARDENED STEEL
F4	CAPSCREW (5/16"-18 X 3/4"), HEAD	S01C312750WA2A2		5	STEEL
F5	GASKET, HEAD	0020-6900-950		1	INTERFACE TS-9003
G1	VALVE, COVER ASSEMBLY (INCLUDES G2, G13, AND G14)	0020-7000-230		1	STAINLESS STEEL/STEEL
	VALVE, ASSEMBLY-75 PSI (INCLUDES G2 THRU G14)	0020-7001-110		1	CAST IRON
	VALVE, ASSEMBLY-125 PSI (INCLUDES G2 THRU G14)	0020-7002-110		1	CAST IRON
	VALVE, ASSEMBLY-200 PSI (INCLUDES G2 THRU G14)	0020-7003-110		1	CAST IRON
G2	VALVE, BODY	0020-7100-110		1	CAST IRON
	VALVE, COVER (NOT SHOWN)	0020-7101-250		1	STAINLESS STEEL
G3	VALVE, GASKET BONNET	0020-7910-951		1	KLINGERSIL® C-4401
G4	VALVE, BONNET	0020-7200-110		1	CAST IRON
G5	VALVE, GASKET CAP	0020-7920-951		1	KLINGERSIL® C-4401
G6	VALVE, CAP	0020-7300-230		1	STEEL
G7	VALVE, ADJUSTMENT SCREW	0020-7700-230		1	STEEL
G8	VALVE, LOCK NUT	0020-7710-230		1	STEEL
G9	VALVE, SPRING GUIDE	0020-7500-230		1	STEEL

Item	Description	G1-2	G1-4	Qty.	Material
G10	VALVE, SPRING-75 PSI		0020-7600-250	1	STAINLESS STEEL
	VALVE, SPRING-125 PSI		0020-7601-250	1	STAINLESS STEEL
	VALVE, SPRING-200 PSI		0020-7602-250	1	STAINLESS STEEL
G12	VALVE, POPPET		0020-7400-110	1	CAST IRON
G13	CAPSCREW (5/16"-18 X 3/4"), VALVE		S14U312750WA6L7	4	STEEL
G14	GASKET, VALVE		0020-7900-950	1	INTERFACE TS-9003
H1	GLAND, PACKING		0020-8200-110	1	CAST IRON
H2	NUT (5/16"-18), PACKING GLAND		N04C312281WA2A2	2	STEEL
H3	CAPSCREW (5/16"-18), PACKING GLAND		S01C312B25CLOA1	2	STAINLESS STEEL
H4	TYPE 1, COMPONENT SEAL		0020-8000-900	1	BUNA-N
	TYPE 1, COMPONENT SEAL		0020-8000-910	1	FKM
	TYPE 9, COMPONENT SEAL		0020-8001-920	1	PTFE
H5	COLLAR, MECHANICAL SEAL ASSEMBLY		0020-8050-230	1	STEEL
H6	PACKING, KIT (INCLUDES H7)		0020-8100-925K	1	PTFE - GRAPHITE
H7	WASHER, PACKING RETAINING		0020-8150-230	1	STEEL
H8	WASHER, PACKING GLAND		W2337ACLOA1	2	STAINLESS STEEL

STAINLESS STEEL

Item	Description	G1-2	G1-4	Qty.	Material
A1	HOUSING, BEARING ASSEMBLY (INCLUDES A2 THRU A13)	0020-1000-110		1	CAST IRON
A2	LOCKNUT, SHAFT	0020-1710-230		1	STEEL
A3	LOCKWASHER, SHAFT	0020-1720-230		1	STEEL
A4	ENDCAP, BEARING HOUSING	0020-1200-230		1	STEEL
A5	LIP SEAL, BEARING HOUSING	0020-1900-900		2	BUNA-N
A6	COLLAR, OUTER BEARING SPACER	0020-1300-230		1	STEEL
A7	BEARING	0020-1400-230		1	STEEL
A8	COLLAR, INNER BEARING SPACER	0020-1300-230		1	STEEL
A10	HOUSING, BEARING	0020-1100-110		1	CAST IRON
A11	SET SCREW (1/4"-20 X 5/8"), BEARING HOUSING (NOT SHOWN)	S57U250625WA6L7		2	STEEL
A12	SET SCREW (5/16"-18 X 5/8"), END CAP (NOT SHOWN)	S57U313625WA6L7		2	STEEL
A13	INSERT, BEARING HOUSING (NOT SHOWN)	0020-1790-400		2	NYLON
B1	BRACKET, ASSEMBLY (INCLUDES B2 THRU B8)	0020-2000-150		1	STAINLESS STEEL/CARBON GRAPHITE
B2	BUSHING, BRACKET	0020-2800-300		1	CARBON GRAPHITE
B3	FITTING, GREASE (1/8" NPT)	GRSF-013NST-230		1	STEEL
B4	PLUG, PIPE (1/8" NPT)	PLUG-013NSH-250		2	STAINLESS STEEL
B5	PLUG, PIPE (1/8" NPT)	PLUG-013NSH-250		1	STAINLESS STEEL
B6	SCREWS (5/16"-18 X 3/4"), BRACKET	S01C312750AA9A1		8	STAINLESS STEEL
B7	GASKET, BRACKET	0020-2900-950		1	INTERFACE TS-9003
B8	BRACKET	0020-2100-150		1	STAINLESS STEEL
C1	CASE, 1.5" ANSI KIT (INCLUDES B6, B7, C2, F4, F5)	0020-3001-150		1	STAINLESS STEEL
C2	PLUG, PIPE (1/8" NPT)	PLUG-013NSH-250		2	STAINLESS STEEL
D1	ROTOR, ASSEMBLY (A/B CLEARANCE)	0020-4000-155	0040-4000-155	1	STAINLESS STEEL
		0020-4000-176	0040-4000-176	1	NITRONIC 60/STAINLESS STEEL
	ROTOR, ASSEMBLY (C CLEARANCE)	0020-4002-155	0040-4002-155	1	STAINLESS STEEL
		0020-4002-176	0040-4002-176	1	NITRONIC 60/STAINLESS STEEL
	ROTOR, ASSEMBLY (D CLEARANCE)	0020-4003-155	0040-4003-155	1	STAINLESS STEEL
E1	GEAR, IDLER ASSEMBLY	0020-5000-255	0040-5000-255	1	STAINLESS STEEL/CARBON GRAPHITE
		0020-5000-276	0040-5000-276	1	NITRONIC 60/CARBON GRAPHITE
E2	BUSHING, IDLER	0020-5801-300	0040-5801-300	1	CARBON GRAPHITE
F1	HEAD, KIT (INCLUDES F2 THRU F5, G13, G14)	0020-6010-150	0040-6010-150	1	STAINLESS/HARDENED STAINLESS
F2	PIN, IDLER	0020-6200-254	0040-6200-254	1	HARDENED STAINLESS STEEL
F4	CAPSCREW (5/16"-18 X 3/4"), HEAD	S01C312750AA9A1		5	STAINLESS STEEL
F5	GASKET, HEAD	0020-6900-950		1	INTERFACE TS-9003
G1	VALVE, COVER ASSEMBLY (INCLUDES G2, G13, AND G14)	0020-7000-250		1	STAINLESS STEEL/STAINLESS STEEL
	VALVE, ASSEMBLY-75 PSI (INCLUDES G2 THRU G14)	0020-7001-150		1	STAINLESS STEEL
	VALVE, ASSEMBLY-125 PSI (INCLUDES G2 THRU G14)	0020-7002-150		1	STAINLESS STEEL
	VALVE, ASSEMBLY-150 PSI (INCLUDES G2 THRU G14)	0020-7003-150		1	STAINLESS STEEL
G2	VALVE, BODY	0020-7100-150		1	STAINLESS STEEL
	VALVE, COVER (NOT SHOWN)	0020-7101-250		1	STAINLESS STEEL
G3	VALVE, GASKET BONNET	0020-7910-951		1	KLINGERSIL® C-4401
G4	VALVE, BONNET	0020-7200-150		1	STAINLESS STEEL
G5	VALVE, GASKET CAP	0020-7920-951		1	KLINGERSIL® C-4401
G6	VALVE, CAP	0020-7300-250		1	STAINLESS STEEL
G7	VALVE, ADJUSTMENT SCREW	0020-7700-255		1	STAINLESS STEEL
G8	VALVE, LOCK NUT	0020-7710-255		1	STAINLESS STEEL
G9	VALVE, SPRING GUIDE	0020-7500-250		1	STAINLESS STEEL
G10	VALVE, SPRING-75 PSI	0020-7600-250		1	STAINLESS STEEL
	VALVE, SPRING-125 PSI	0020-7601-250		1	STAINLESS STEEL
	VALVE, SPRING-200 PSI	0020-7602-250		1	STAINLESS STEEL
G12	VALVE, POPPET	0020-7400-150		1	STAINLESS STEEL
G13	CAPSCREW (5/16"-18 X 3/4"), VALVE	S14U312750AA9A1		4	STAINLESS STEEL
G14	GASKET, VALVE	0020-7900-950		1	INTERFACE TS-9003

Item	Description	G1-2	G1-4	Qty.	Material
H1	GLAND, PACKING		0020-8200-150	1	STAINLESS STEEL
H2	NUT (5/16"-18), PACKING GLAND		N04C312281AA9A1	2	STAINLESS STEEL
H3	CAPSCREW (5/16"-18 X 3/4"), PACKING GLAND		S01C312B25CL0A1	2	STAINLESS STEEL
H4	TYPE 9, COMPONENT SEAL		0020-8001-920	1	PTFE
H6	PACKING, KIT (INCLUDES H7)		0020-8100-925K	1	PTFE - GRAPHITE
H7	WASHER, PACKING RETAINING		0020-8150-250	1	STAINLESS STEEL
H8	WASHER, PACKING GLAND		W2337ACL0A1	2	STAINLESS STEEL

CARBON STEEL

Item	Description	G1-2	G1-4	Qty.	Material
A1	HOUSING, BEARING ASSEMBLY (INCLUDES A2 THRU A13)	0020-1000-110		1	CAST IRON
A2	LOCKNUT, SHAFT	0020-1710-230		1	STEEL
A3	LOCKWASHER, SHAFT	0020-1720-230		1	STEEL
A4	ENDCAP, BEARING HOUSING	0020-1200-230		1	STEEL
A5	LIP SEAL, BEARING HOUSING	0020-1900-900		2	BUNA-N
A6	COLLAR, OUTER BEARING SPACER	0020-1300-230		1	STEEL
A7	BEARING	0020-1400-230		1	STEEL
A8	COLLAR, INNER BEARING SPACER	0020-1300-230		1	STEEL
A10	HOUSING, BEARING	0020-1100-110		1	CAST IRON
A11	SET SCREW (1/4"-20 X 5/8"), BEARING HOUSING (NOT SHOWN)	S57U250625WA6L7		2	STEEL
A12	SET SCREW (5/16"-18 X 5/8"), END CAP (NOT SHOWN)	S57U313625WA6L7		2	STEEL
A13	INSERT, BEARING HOUSING (NOT SHOWN)	0020-1790-400		2	NYLON
B1	BRACKET, ASSEMBLY (INCLUDES B2 THRU B8)	0020-2000-130		1	CARBON STEEL/CARBON GRAPHITE
		0020-2010-130		1	CARBON STEEL/BRONZE
		0020-2800-300		1	CARBON GRAPHITE
B2	BUSHING, BRACKET	0020-2800-320		1	BRONZE
		GRSF-013NST-230		1	STEEL
		PLUG-013NSH-230		2	STEEL
B4	PLUG, PIPE (1/8" NPT)	PLUG-013NSH-230		2	STEEL
B5	PLUG, PIPE (1/8" NPT) (USED WITH LUBRICATED BUSHING)	PLUG-013NSH-230		1	STEEL
	FITTING, GREASE PIN (1/8" NPT) (USED WITH NON-LUBRICATED BUSHING)	GRSF-013NST-230		1	STEEL
B6	SCREWS (5/16"-18 X 3/4"), BRACKET	S01C312750WA2A2		8	STEEL
B7	GASKET, BRACKET	0020-2900-950		1	INTERFACE TS-9003
B8	BRACKET	0020-2100-130		1	CARBON STEEL
C1	CASE, 1.5" ANSI KIT (INCLUDES B6, B7, C2, F4, F5)	0020-3001-130		1	CARBON STEEL
C2	PLUG, PIPE (1/8" NPT)	PLUG-013NSH-230		2	STEEL
D1	ROTOR, ASSEMBLY (A/B/C CLEARANCE)	0020-4000-130	0040-4000-170	1	CAST STEEL/STEEL
	ROTOR, ASSEMBLY (D CLEARANCE)	0020-4003-130	0040-4003-170	1	CAST STEEL/STEEL
	ROTOR, ASSEMBLY (E CLEARANCE)	0020-4004-130	0040-4004-170		CAST STEEL/STEEL
E1	GEAR, IDLER ASSEMBLY	0020-5000-110	0040-5000-110	1	CAST IRON/CARBON GRAPHITE
		0020-5010-110	0040-5010-110	1	CAST IRON/BRONZE
E2	BUSHING, IDLER	0020-5800-300	0040-5800-300	1	CARBON GRAPHITE
		0020-5800-320	0040-5800-320	1	BRONZE
F1	HEAD, KIT (INCLUDES F2 THRU F5, G13, G14)	0020-6010-130	0040-6010-130	1	CARBON STEEL/STEEL
F2	PIN, IDLER	0020-6200-231	0040-6200-231	1	HARDENED STEEL
F4	CAPSCREW (5/16"-18 X 3/4"), HEAD	S01C312750WA2A2		5	STEEL
F5	GASKET, HEAD	0020-6900-950		1	INTERFACE TS-9003
G1	VALVE, COVER ASSEMBLY (INCLUDES G2, G13, AND G14)	0020-7000-230		1	STAINLESS STEEL/STEEL
	VALVE, ASSEMBLY-75 PSI (INCLUDES G2 THRU G14)	0020-7001-130		1	CARBON STEEL
	VALVE, ASSEMBLY-125 PSI (INCLUDES G2 THRU G14)	0020-7002-130		1	CARBON STEEL
	VALVE, ASSEMBLY-200 PSI (INCLUDES G2 THRU G14)	0020-7003-130		1	CARBON STEEL
G2	VALVE, BODY	0020-7100-130		1	CARBON STEEL
	VALVE, COVER (NOT SHOWN)	0020-7101-250		1	STAINLESS STEEL
G3	VALVE, GASKET BONNET	0020-7910-951		1	KLINGERSIL® C-4401
G4	VALVE, BONNET	0020-7200-130		1	CARBON STEEL
G5	VALVE, GASKET CAP	0020-7920-951		1	KLINGERSIL® C-4401
G6	VALVE, CAP	0020-7300-230		1	STEEL
G7	VALVE, ADJUSTMENT SCREW	0020-7700-230		1	STEEL
G8	VALVE, LOCK NUT	0020-7710-230		1	STEEL
G9	VALVE, SPRING GUIDE	0020-7500-230		1	STEEL
G10	VALVE, SPRING-75 PSI	0020-7600-250		1	STAINLESS STEEL
	VALVE, SPRING-125 PSI	0020-7601-250		1	STAINLESS STEEL
	VALVE, SPRING-200 PSI	0020-7602-250		1	STAINLESS STEEL
G12	VALVE, POPPET	0020-7400-110		1	CAST IRON
G13	CAPSCREW (5/16"-18 X 3/4"), VALVE	S14U312750WA6L7		4	STEEL
G14	GASKET, VALVE	0020-7900-950		1	INTERFACE TS-9003
H1	GLAND, PACKING	0020-8200-110		1	CAST IRON
H2	NUT (5/16"-18), PACKING GLAND	N04C312281WA2A2		2	STEEL
H3	CAPSCREW (5/16"-18), PACKING GLAND	S01C312B25CL0A1		2	STAINLESS STEEL
H4	TYPE 1, COMPONENT SEAL	0020-8000-900		1	BUNA-N
	TYPE 1, COMPONENT SEAL	0020-8000-910		1	FKM
	TYPE 9, COMPONENT SEAL	0020-8001-920		1	PTFE
H5	COLLAR, MECHANICAL SEAL ASSEMBLY	0020-8050-230		1	STEEL

Item	Description	G1-2	G1-4	Qty.	Material
H6	PACKING, KIT (INCLUDES H7)		0020-8100-925K	1	PTFE - GRAPHITE
H7	WASHER, PACKING RETAINING		0020-8150-230	1	STEEL
H8	WASHER, PACKING GLAND		W2337ACL0A1	2	STAINLESS STEEL

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