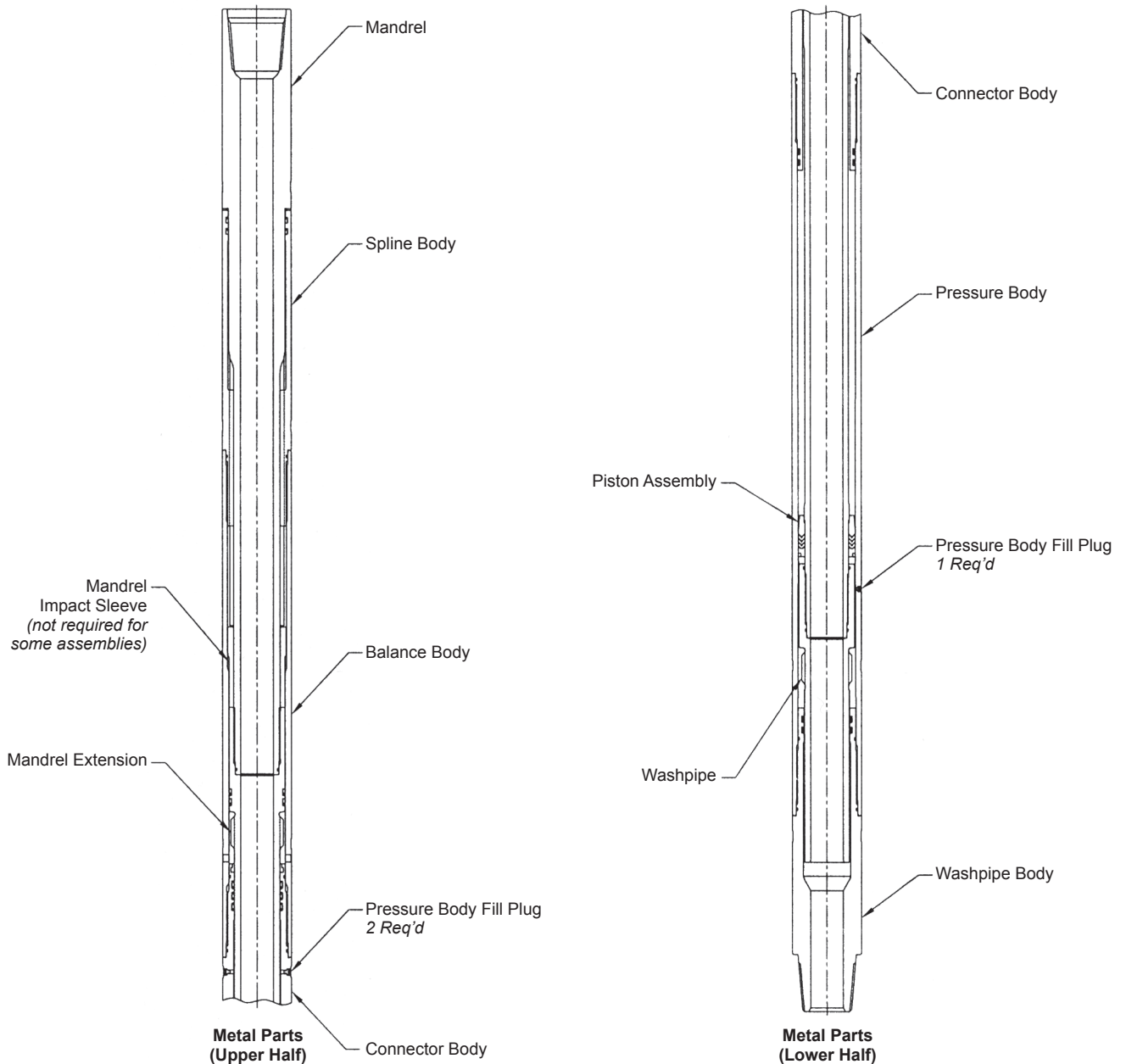




Superior Energizers



SUPERIOR ENERGIZERS

Overview

The Superior Energizer is run in conjunction with a Superior Fishing Jar of the same size. Its function is to supply intensified impact during the jarring operation. Each size of Logan Superior Energizer is designed to match a corresponding size of Superior Fishing Jar. The Superior Energizer is essentially a fluid spring, which stores energy when a strain is pulled on the fishing string. When the strain is removed by the free stroke of the fishing jar, the

stored energy is released, accelerating the collars upward until a blow of high impact is struck. The tool absorbs much of the jarring shock from the rebounding string to protect tools and string from damage.

Operation

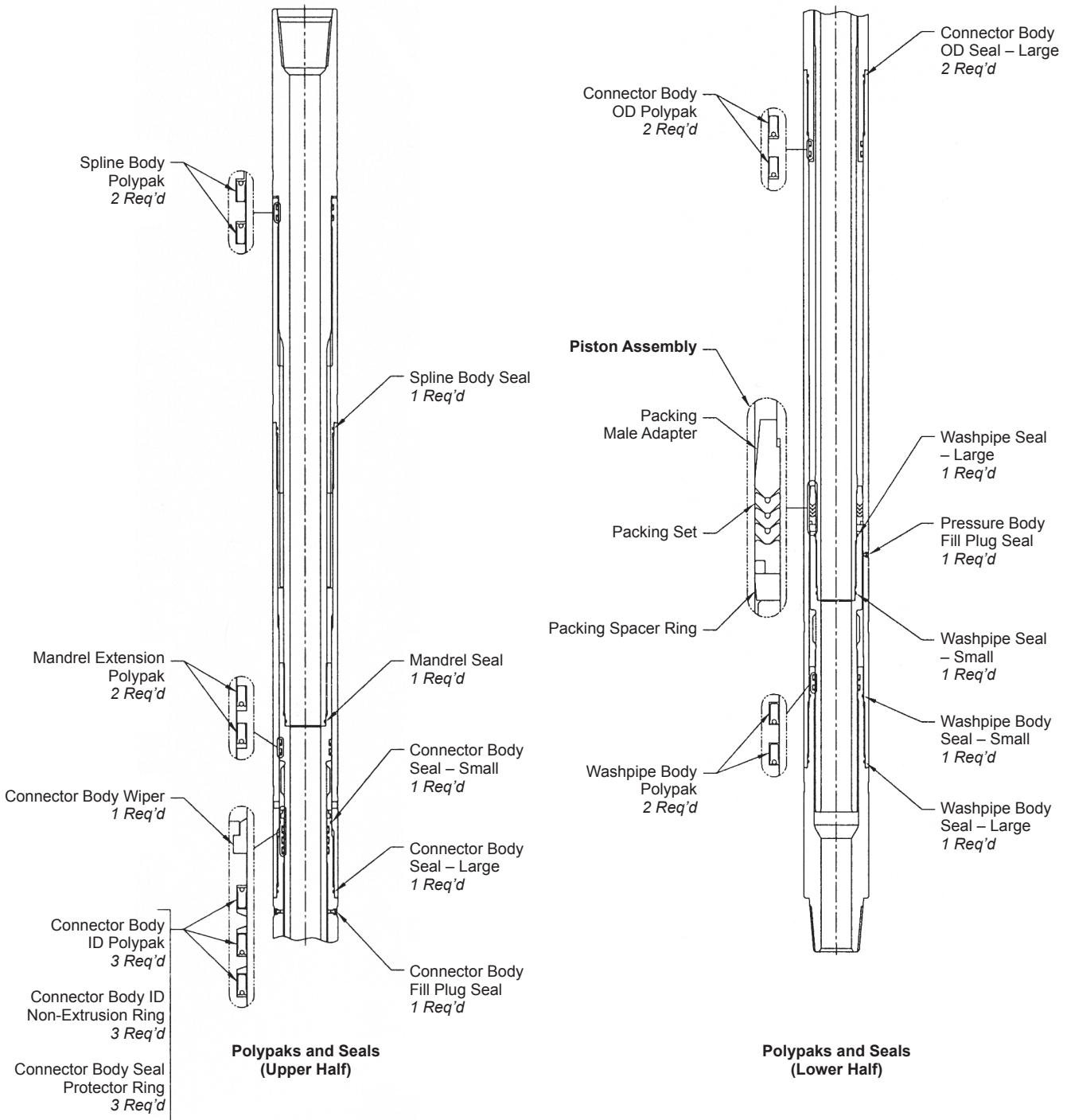
Operation of the Logan Superior Energizer is simple to use and requires only a straight pull at a speed determined by the job. It is com-

pletely safe to assemble since no high pressure pre-loading is required.

The Logan Superior Energizer can transmit full torque in either direction at all times while maintaining full circulation throughout the tool.

When ordering, please specify:

- (1) Name and number of assembly or part
- (2) Connections, if other than standard
- (3) Name and number of any desired spares
- (4) Outside diameter, if other than standard



Superior Energizers

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TOOL JOINT CONNECTION	2-3/8 API Reg	2-3/8 EUE & 2-7/8 PAC	2-3/8 API IF	2-3/8 EUE	2-7/8 API IF	3-1/2 API IF	4-1/2 API IF
OUTSIDE DIAMETER — INCHES	3-1/8	3-1/16 & 3-1/8	3-3/4	3-3/4	4-1/4	4-3/4	6-1/4
INSIDE DIAMETER — INCHES	1	1-1/2	1-1/2	1-7/8	2	2-1/4	2-1/4
COMPLETE ASSEMBLY Logan Part No.	614-312	614-306 & 614-313	614-375	614-376	614-425	614-475	614-625

COMPONENTS

MANDREL	Logan Part No.	BX10	BX11	BX12	BX18	BX13	BX14	BX15
MANDREL SEAL	Logan Part No. No. Req'd	...	568-225 1	568-225 1	** ...	568-229 1	568-232 1	568-236 1
SPLINE BODY	Logan Part No.	BX20	BX21	BX22	BX28	BX23	BX24	BX25
SPLINE BODY SEAL	Logan Part No. No. Req'd	568-230 1	568-230 1	568-234 1	** ...	568-238 1	568-242 1	568-254 1
SPLINE BODY POLYPAK	Logan Part No. No. Req'd	BD205-1 2	BD205-1 2	BD202-3 2	** ...	BD202-2 2	BD202-1 2	BD203-1 2
MANDREL SLEEVE	Logan Part No.	BX30	BX31	...	BX38	...	BX34	...
BALANCE BODY	Logan Part No.	BX40	BX41	BX42	BX48	BX43	BX44	BX45
MANDREL EXTENSION	Logan Part No.	BX50	BX51	BX52	BX58	BX53	BX54	BX55
MANDREL EXTENSION POLYPAK	Logan Part No. No. Req'd	BD205-2 2	BD205-2 1	BD201-2 2	** ...	BX144-3 2	BD202-2 2	BD203-2 2
PISTON ASSEMBLY	Logan Part No.	BX60	BX61	BX62	BX68	BX63	BX64	BX65
<i>Consists of:</i>								
PACKING SET	Logan Part No.	BX60-1	BX61-1	BX62-1	BX68-1	BX63-1	BX64-1	BX65-1
PACKING	Logan Part No.	BX60-2	BX61-2	BX62-2	BX68-2	BX63-2	BX64-2	BX65-2
MALE ADAPTER								
PACKING SPACER RING	Logan Part No.	BX60-3	BX61-3	BX62-3	BX68-3	BX63-3	BX64-3	BX65-3
CONNECTOR BODY	Logan Part No.	BX70	BX71	BX72	BX78	BX73	BX74	BX75
CONNECTOR BODY WIPER	Logan Part No.	...	...	BD71	**	BD76	BX84	BD73
CONNECTOR BODY ID POLYPAK	Logan Part No. No. Req'd	BD200-3 3	BD205-3 3	BD201-3 3	** ...	AQ29005 3	BX144-3 3	BD203-3 3
CONNECTOR BODY ID NON-EXTRUSION RING	Logan Part No. No. Req'd	L365-30 2	L365-32 2	BD231 3	** ...	BD236 3	BX154 3	BD233 3
CONNECTOR BODY SEAL PROTECTOR RING	Logan Part No. No. Req'd	L375-30 2	8-228 2	** ...	** ...	** ...	L375-41 3	BD273 3
CONNECTOR BODY OD PARBAK RING	Logan Part No. No. Req'd	8-330 1	...	...	** ...	...	...	...
CONNECTOR BODY OD NON-EXTRUSION RING	Logan Part No. No. Req'd	BX160 1	L366-33.5 2	...	** ...	...	** ...	...
CONNECTOR BODY SEAL (SMALL)	Logan Part No. No. Req'd	568-330 2	568-228 2	568-232 1	** ...	568-236 1	568-239 1	568-250 1
CONNECTOR BODY SEAL (LARGE)	Logan Part No. No. Req'd	568-230 2	568-230 2	568-234 2	** ...	568-238 2	568-242 2	568-252 2
CONNECTOR BODY FILL PLUG	Logan Part No. No. Req'd	AG10002 2	AG10000 2	AG10002 2	** ...	AG10002 2	AG10002 2	AG10002 2
CONNECTOR BODY FILL PLUG SEAL	Logan Part No. No. Req'd	568-006 2	568-005 2	568-006 2	** ...	568-006 2	568-006 2	568-006 2

* Redress Kits include O-Ring Packing Sets, Polypak Kits, and Connector Body Wipers

** To be advised by engineering

LOGAN GENERAL CATALOG

OIL TOOLS

SUPERIOR ENERGIZERS

TOOL JOINT CONNECTION	2-3/8 API Reg	2-3/8 EUE & 2-7/8 PAC	2-3/8 API IF	2-3/8 EUE	2-7/8 API IF	3-1/2 API IF	4-1/2 API IF
OUTSIDE DIAMETER — INCHES	3-1/8	3-1/16 & 3-1/8	3-3/4	3-3/4	4-1/4	4-3/4	6-1/4
INSIDE DIAMETER — INCHES	1	1-1/2	1-1/2	1-7/8	2	2-1/4	2-1/4
COMPLETE ASSEMBLY Logan Part No.	614-312	614-306 & 614-313	614-375	614-376	614-425	614-475	614-625

COMPONENTS (CONTINUED)

CONNECTOR BODY	Logan Part No.	...	...	AQ29003	**	AQ29005	BD202-5	BD203-5
OD POLYPAK	No. Req'd	...	...	2	...	2	2	2
PRESSURE BODY	Logan Part No.	BX90	BX91	BX92	BX98	BX93	BX94	BX95
PRESSURE BODY	Logan Part No.	AG10004	AG10004	AG10004	**	AG10000	AG10000	AG10000
FILL PLUG	No. Req'd	1	1	1	...	1	1	1
PRESSURE BODY	Logan Part No.	...	...	...	**	568-005	568-005	568-005
FILL PLUG SEAL	No. Req'd	...	...	...	...	1	1	1
WASHPIPE	Logan Part No.	BX100	BX101	BX102	BX108	BX103	BX104	BX105
WASHPIPE SEAL	Logan Part No.	568-130	...	568-227	**	568-231	568-234	568-238
(LARGE)	No. Req'd	1	...	1	...	1	1	1
WASHPIPE SEAL	Logan Part No.	568-221	568-224	568-225	**	568-229	568-232	568-234
(SMALL)	No. Req'd	1	1	1	...	1	1	1
WASHPIPE BODY	Logan Part No.	BX110	BX111	BX112	BX118	BX113	BX114	BX115
WASHPIPE BODY SEAL	Logan Part No.	568-230	568-230	568-234	**	568-238	568-242	568-252
(LARGE)	No. Req'd	1	1	1	...	1	1	1
WASHPIPE BODY SEAL	Logan Part No.	568-228	568-228	568-232	**	568-236	568-240	568-250
(SMALL)	No. Req'd	1	1	1	...	1	1	1
WASHPIPE BODY	Logan Part No.	BD205-2	BD205-3	BD201-3	**	AQ29003	BX144-3	BD203-3
POLYPAK	No. Req'd	2	2	2	...	2	2	2
REDRESS KITS *	Logan Part No.	BX120	BX121	BX122	BX128	BX123	BX124	BX125
O-RING PACKING SET	Logan Part No.	BX130	BX131	BX132	BX138	BX133	BX134	BX135
POLYPAK KIT	Logan Part No.	BX140	BX141	BX142	BX148	BX143	BX144	BX145
<i>Consists of:</i>								
SPLINE BODY	Logan Part No.	BD205-1	BD205-1	BD202-3	**	BD202-2	BD202-1	BD203-1
POLYPAK	No. Req'd	2	2	2	...	2	2	2
MANDREL EXTENSION	Logan Part No.	BD205-2	BD205-2	BD201-2	**	BX144-3	BD202-2	BD203-2
POLYPAK	No. Req'd	2	1	2	...	2	2	2
CONNECTOR BODY	Logan Part No.	BD200-3	BD205-3	BD201-3	**	AQ29005	BX144-3	BD203-3
ID POLYPAK	No. Req'd	3	3	3	...	3	3	3
CONNECTOR BODY	Logan Part No.	...	...	AQ29003	**	AQ29005	BD202-5	BD203-5
OD POLYPAK	No. Req'd	...	...	2	...	2	2	2
WASHPIPE BODY	Logan Part No.	BD200-3	BD205-3	BD201-3	**	AQ29003	BX144-3	BD203-3
POLYPAK	No. Req'd	2	2	2	...	2	2	2
MANDREL EXTENSION	Logan Part No.	...	BD205-6	BX142-2	**	BX143-5	BX144-5	BX145-5
ASSEMBLY SLEEVE	No. Req'd	...	1	1	...	1	1	1

* Redress Kits include O-Ring Packing Sets, Polypak Kits, and Connector Body Wipers

** To be advised by engineering

Superior Energizers

SUPERIOR ENERGIZERS

TOOL JOINT CONNECTION	5-1/2 API Reg	6-5/8 API Reg					
OUTSIDE DIAMETER — INCHES	6-3/4	7-3/4					
INSIDE DIAMETER — INCHES	2-3/4	3-1/16					
COMPLETE ASSEMBLY Logan Part No.	614-675	614-775					

COMPONENTS

MANDREL	Logan Part No.	BX16	BX17				
MANDREL SEAL	Logan Part No.	**	**				
	No. Req'd	...	...		
SPLINE BODY	Logan Part No.	BX26	BX27				
SPLINE BODY SEAL	Logan Part No.	**	**				
	No. Req'd	...	...		
SPLINE BODY POLYPAK	Logan Part No.	**	**				
	No. Req'd	...	...		
MANDREL SLEEVE	Logan Part No.	BX36	BX37				
BALANCE BODY	Logan Part No.	BX46	BX47				
MANDREL EXTENSION	Logan Part No.	BX56	BX57				
MANDREL EXTENSION POLYPAK	Logan Part No.	**	**				
	No. Req'd	...	...		
PISTON ASSEMBLY	Logan Part No.	BX66	BX67				
<i>Consists of:</i>							
PACKING SET	Logan Part No.	BX66-1	BX67-1				
PACKING	Logan Part No.	BX66-2	BX67-2				
MALE ADAPTER							
PACKING SPACER RING	Logan Part No.	BX66-3	BX67-3				
CONNECTOR BODY	Logan Part No.	BX76	BX77				
CONNECTOR BODY WIPER	Logan Part No.	BX86	BD74				
CONNECTOR BODY ID POLYPAK	Logan Part No.	**	**				
	No. Req'd	...	...		
CONNECTOR BODY ID NON-EXTRUSION RING	Logan Part No.	**	**				
	No. Req'd	...	...		
CONNECTOR BODY SEAL PROTECTOR RING	Logan Part No.	**	**				
	No. Req'd	...	...		
CONNECTOR BODY OD PARBAK RING	Logan Part No.	**	**				
	No. Req'd	...	...		
CONNECTOR BODY OD NON-EXTRUSION RING	Logan Part No.	**	**				
	No. Req'd	...	...		
CONNECTOR BODY SEAL (SMALL)	Logan Part No.	**	**				
	No. Req'd	...	...		
CONNECTOR BODY SEAL (LARGE)	Logan Part No.	**	**				
	No. Req'd	...	...		
CONNECTOR BODY FILL PLUG	Logan Part No.	**	**				
	No. Req'd	...	...		
CONNECTOR BODY FILL PLUG SEAL	Logan Part No.	**	**				
	No. Req'd	...	...		
CONNECTOR BODY OD POLYPAK	Logan Part No.	**	**				
	No. Req'd	...	...		

* Redress Kits include O-Ring Packing Sets, Polypak Kits, and Connector Body Wipers

** To be advised by engineering

LOGAN GENERAL CATALOG

OIL TOOLS

SUPERIOR ENERGIZERS

TOOL JOINT CONNECTION	5-1/2 API Reg	6-5/8 API Reg					
OUTSIDE DIAMETER — INCHES	6-3/4	7-3/4					
INSIDE DIAMETER — INCHES	2-3/4	3-1/16					
COMPLETE ASSEMBLY Logan Part No.	614-675	614-775					

COMPONENTS

CONNECTOR BODY	Logan Part No.	**	**				
OD POLYPAK	No. Req'd	...	...		
PRESSURE BODY	Logan Part No.	BX96	BX97				
PRESSURE BODY	Logan Part No.	**	**				
FILL PLUG	No. Req'd	...	...		
PRESSURE BODY	Logan Part No.	**	**				
FILL PLUG SEAL	No. Req'd	...	...		
WASHPIPE	Logan Part No.	BX106	BX107				
WASHPIPE SEAL	Logan Part No.	**	**				
(LARGE)	No. Req'd	...	...		
WASHPIPE SEAL	Logan Part No.	**	**				
(SMALL)	No. Req'd	...	...		
WASHPIPE BODY	Logan Part No.	BX116	BX117				
WASHPIPE BODY SEAL	Logan Part No.	**	**				
(LARGE)							
WASHPIPE BODY SEAL	Logan Part No.	**	**				
(SMALL)	No. Req'd	...	...		
WASHPIPE BODY	Logan Part No.	**	**				
POLYPAK	No. Req'd	...	...		
REDRESS KITS *	Logan Part No.	BX126	BX127				
O-RING PACKING SET	Logan Part No.	BX136	BX137				
POLYPAK KIT	Logan Part No.	BX146	BX147				
<i>Consists of:</i>							
SPLINE BODY	Logan Part No.	**	**				
POLYPAK	No. Req'd	...	...		
MANDREL EXTENSION	Logan Part No.	**	**				
POLYPAK	No. Req'd	...	...		
CONNECTOR BODY	Logan Part No.	**	**				
ID POLYPAK	No. Req'd	...	...		
CONNECTOR BODY	Logan Part No.	**	**				
OD POLYPAK	No. Req'd	...	...		
WASHPIPE BODY	Logan Part No.	**	**				
POLYPAK	No. Req'd	...	...		
MANDREL EXTENSION	Logan Part No.	**	**				
ASSEMBLY SLEEVE	No. Req'd	...	...		

* Redress Kits include O-Ring Packing Sets, Polypak Kits, and Connector Body Wipers

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