

STINGRAY PUMP 20-70HP

PARTS LIST

A. PARTS ORDERING. When ordering parts please provide the following information.

1. Serial number of pump (located on nameplate). Size of pump (2 X 3 X 10 or 4 x 5 x 11)
2. Part description (located on parts list on the following pages).
3. Part number (located on parts list).
4. Quantity of parts needed.

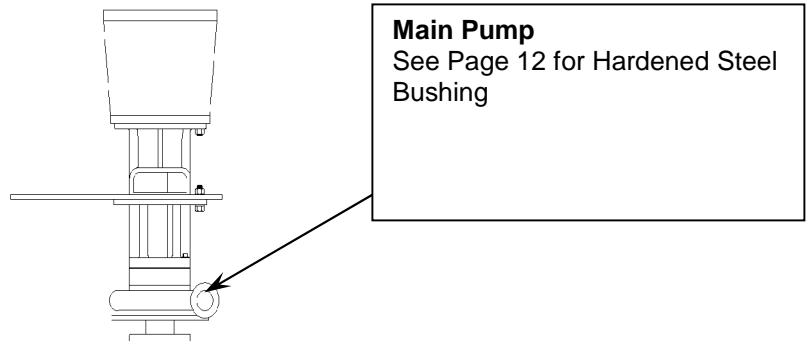
For replacement parts contact:

StingRay Tech Services
2450 Adie Road Suite 100
Maryland Heights, MO, 63043
www.stingrayservice.com

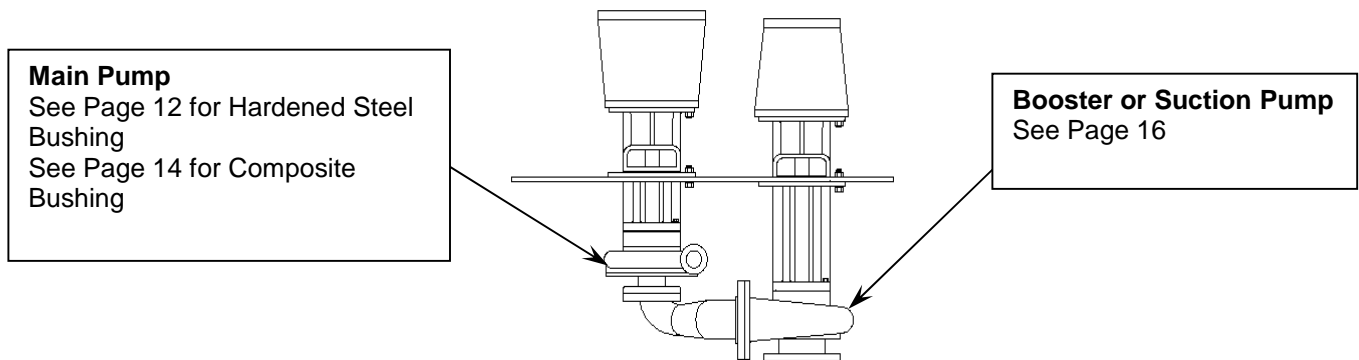
Toll-free: 800-543-6278
Switchboard: 314-567-3705
Fax: 314-567-6318
Email: service@stingwash.com

If motor or motor parts are required, please specify name of manufacturer, horsepower and frame size from motor nameplate.

B. PARTS DESCRIPTION & DRAWINGS. To determine the proper drawing to reference, determine if you have a simplex pump (single wash pump) or a duplex pump (suction pump feeding main wash pump). Refer to the following figures:



Simplex (Single) Pump System



Duplex (Dual) Pump System

In some applications the pump may have been upgraded to fit your cleaning needs. These options may include:

1531 Frame Heavy-duty Main Pump

1530 Frame Chemical Pump w/ SS Shafts and Viton seals for corrosive chemical applications such as CEEBEE 300LF

Please use the following drawing s to indentify the parts except for the bearing frame, cartridges, caps, shafts, seals, and bearings. Please call MART Tech Services 888-720-7222 for information on these parts.

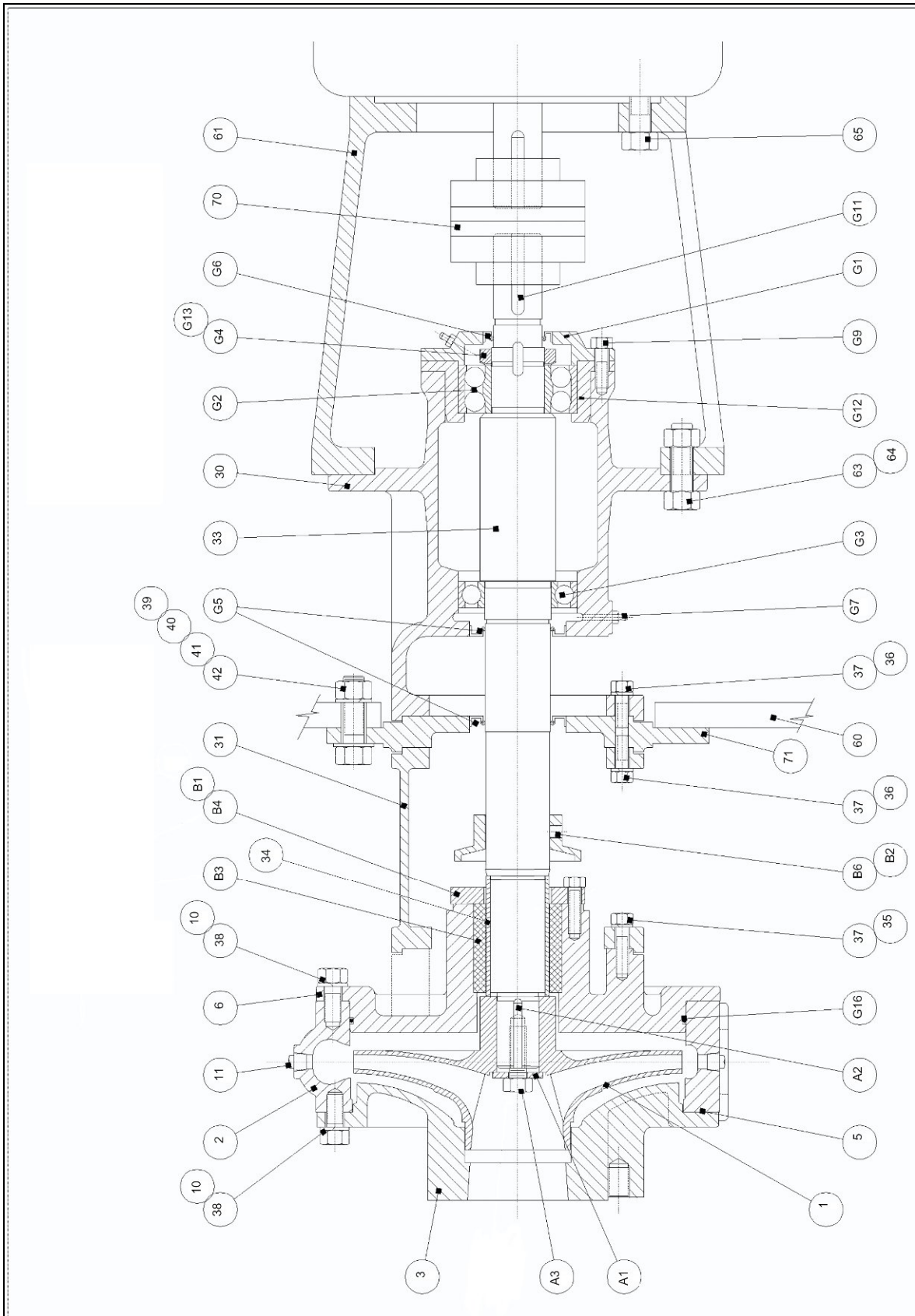


Fig. 1 3x2x10 Main Pump Cut Away 1530 Frame Hardened Steel Throttle Bushing

3x2x10 Main Pump 1530 Frame Hardened Steel/Composite Throttle Bushing w/Sleeve			
Sym	Part #	PART DESCRIPTION	
1	"A" Kit	Impeller	30220 "A" Kit
2		Volute	30281 "B" Kit STL
3	"A" Kit	Suction head	85170 "B" Kit COM
4	"A" Kit	Gasket (suction head)	51173 "C" Kit
6	53037	Backhead	
10		Capscrew (suction head-casing and backhead-casing)	
11		Plug (casing)	
30	30300	Bearing frame 1530 (Call for 1531 HD Pump)	
31	52306	Column	
33	53203	Shaft (Call for 1531 HD & SS Pump)	
34	"B" Kit	Shaft sleeve	
35		Capscrew (column-backhead)	
36		Capscrew (frame-column)	
37		Lockwasher (column-backhead, column-base)	
38		Lockwasher (suction head-casing, backhead-casing)	
39		Capscrew (column-base)	
40		Hex nut (column-base)	
41		Washer (column-base)	
42		Lockwasher (column-base)	
60		Baseplate	
61	52395	Intermediate 15HP-20HP	
	52390	Intermediate 30HP	
	52392	Intermediate 40HP-50HP	
63		Hex head bolt (frame-intermediate)	
64		Hex nut (frame-intermediate)	
65		Hex head bolt (motor-intermediate)	
	72556/		
70	71919	Coupling 40-50HP/ 30HP	
71		Ring	
A1	"A" Kit	Impeller washer	
A2	"A" Kit	Impeller key	
A3	"A" Kit	Impeller stud	
A5	"A" Kit	Impeller jam nut	
B1	"B" Kit	Locking ring	
B2	"B" Kit	Slinger	
B3	"B" Kit	Throttle bushing	
B4	"B" Kit	Capscrew (locking ring-backhead)	
B6	"B" Kit	Setscrew (slinger)	
G1	53044	Bearing cap (Call for 1531 HD Pump)	
G2	"C" Kit	Thrust bearing (Call for 1531 HD Pump)	
G3	"C" Kit	Radial bearing (Call for 1531 HD Pump)	
G4	"C" Kit	Bearing locknut (Call for 1531 HD Pump)	
G5	"C" Kit	Lip seal (frame) (Call for 1531 HD & SS Pump)	
G6	"C" Kit	Lip seal (bearing cap) (Call for 1531 HD Pump)	
G7		Grease zerk	
G9		Hex head bolt (bearing cap-frame)	
G10		Plug	
G11		Coupling key	
G12	53045	Bearing cartridge (Call for 1531 HD Pump)	
G13		Bearing lockwasher	
G16	46790	O-ring	

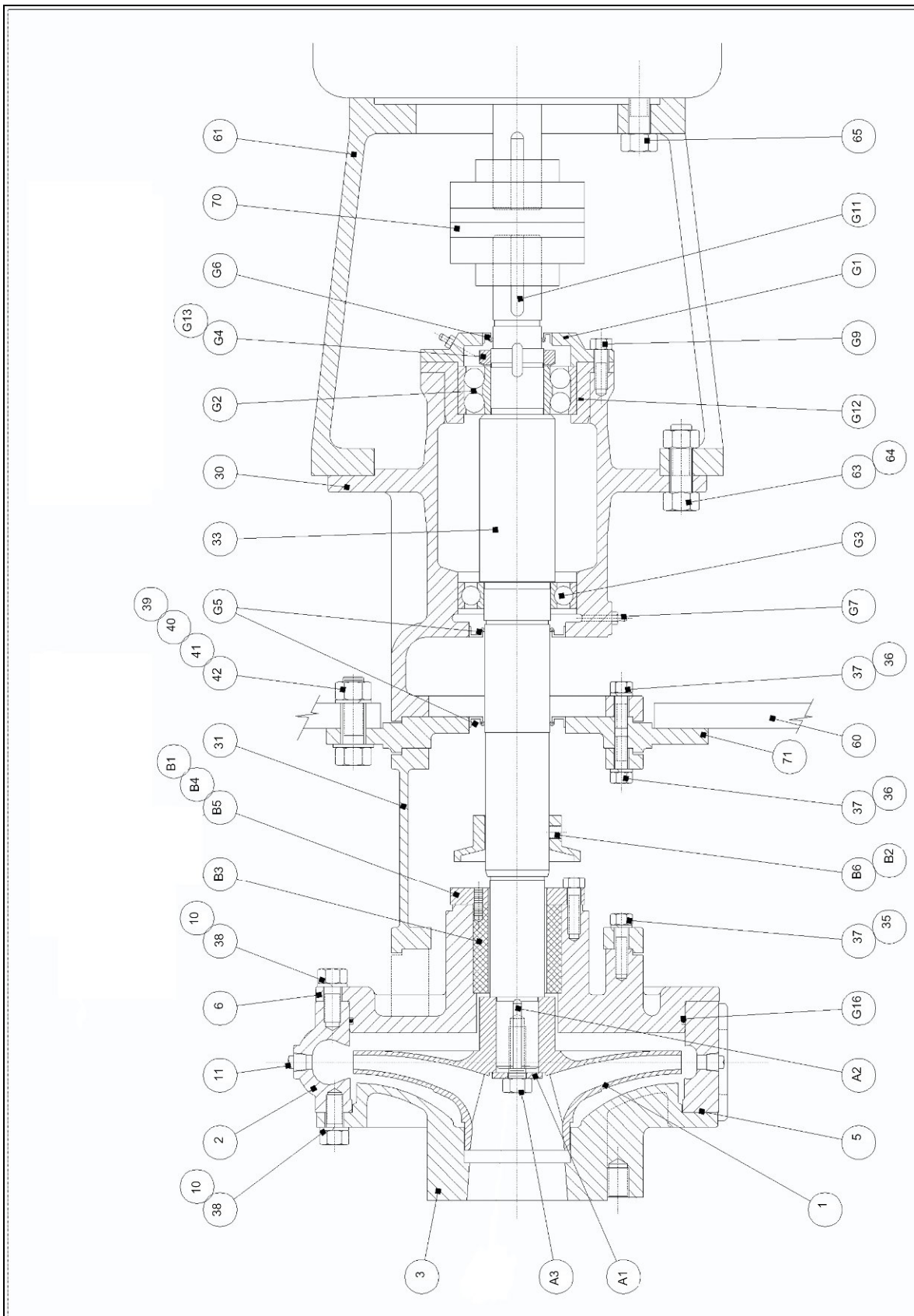


Fig. 2 3x2x10 Main Pump Cut Away 1530 Frame Composite Throttle Bushing

3x2x10 Main Pump 1530 Frame Composite Throttle Bushing w/o Sleeve					
Sym	Part #	PART DESCRIPTION			
1	"A" Kit	Impeller		30220	"A" Kit
2		Volute		30280	"B" Kit
3	"A" Kit	Suction head		51173	"C" Kit
4	"A" Kit	Gasket (suction head)			
6	53037	Backhead			
10		Capscrew (suction head-casing and backhead-casing)			
11		Plug (casing)			
30	30300	Bearing frame			
31	52306	Column			
33	50489	Shaft			
35		Capscrew (column-backhead)			
36		Capscrew (frame-column)			
37		Lockwasher (column-backhead, column-base)			
38		Lockwasher (suction head-casing,backhead-casing)			
39		Capscrew (column-base)			
40		Hex nut (column-base)			
41		Washer (column-base)			
42		Lockwasher (column-base)			
60		Baseplate			
61	52395	Intermediate 15HP-20HP			
	52390	Intermediate 30HP			
	52392	Intermediate 40HP-50HP			
63		Hex head bolt (frame-intermediate)			
64		Hex nut (frame-intermediate)			
65		Hex head bolt (motor-intermediate)			
	72556/				
70	71919	Coupling 40-50HP/ 30HP			
71		Ring			
A1	"A" Kit	Impeller washer			
A2	"A" Kit	Impeller key			
A3	"A" Kit	Impeller stud			
A5	"A" Kit	Impeller jam nut			
B1	"B" Kit	Locking ring			
B2	"B" Kit	Slinger			
B3	"B" Kit	Throttle bushing			
B4	"B" Kit	Capscrew (locking ring-backhead)			
B5	"B" Kit	Setscrew (locking ring-bushing,)			
B6	"B" Kit	Setscrew (slinger)			
G1	53044	Bearing cap			
G2	"C" Kit	Thrust bearing			
G3	"C" Kit	Radial bearing			
G4	"C" Kit	Bearing locknut			
G5	"C" Kit	Lip seal (bearing frame, column)			
G6	"C" Kit	Lip seal (bearing cap)			
G7		Grease zerk			
G9		Hex head bolt (bearing cap-frame)			
G10		Plug			
G11		Coupling key			
G12	53045	Bearing cartridge			
G13		Bearing lockwasher			
G16	"A" Kit	O-ring			

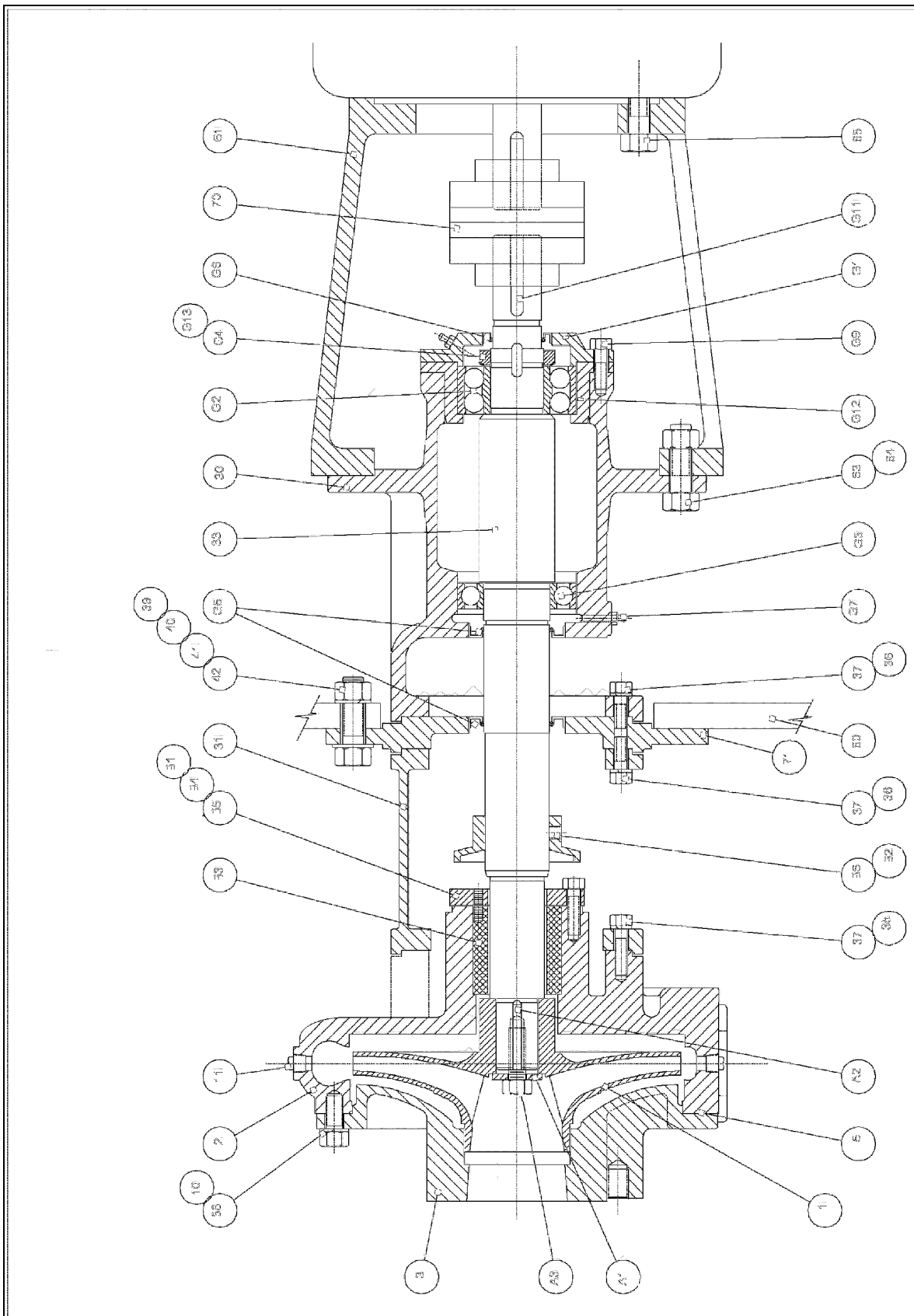


Fig. 4 4x5x11 Booster Pump Cut Away 1530 Frame Composite Throttle Bushing

4x5x11Booster Pump 1530 Frame Composite Throttle Bushing w/o Sleeve					
Sym	Part #	PART DESCRIPTION		Part #	Kit
1	"A" Kit	Impeller		30230	"A" Kit
2		Volute/ Backhead		30280	"B" Kit
3	"A" Kit	Suction head		51173	"C" Kit
4	"A" Kit	Gasket (suction head)		52238	Gasket Kit
11		Plug (casing)			
30	30300	Bearing frame		Optional Upgrade: Harden Steel Bushing	
31	52306	Column			
33	51174	Shaft			
35		Capscrew (column-backhead)			
36		Capscrew (frame-column)			
37		Lockwasher (column-backhead, column-base)		30281	"B" Kit
39		Capscrew (column-base)		51804	Shaft
40		Hex nut (column-base)			
41		Washer (column-base)			
42		Lockwasher (column-base)			
60		Baseplate			
61	52395	Intermediate 15HP-20HP			
	52390	Intermediate 30HP			
	52392	Intermediate 40HP-50HP			
63		Hex head bolt (frame-intermediate)			
64		Hex nut (frame-intermediate)			
65		Hex head bolt (motor-intermediate)			
70	72555	Coupling			
71		Ring			
A1	"A" Kit	Impeller washer			
A2	"A" Kit	Impeller key			
A3	"A" Kit	Impeller stud			
A5	"A" Kit	Impeller jam nut			
B1	"B" Kit	Locking ring			
B2	"B" Kit	Slinger			
B3	"B" Kit	Throttle bushing			
B4	"B" Kit	Capscrew (locking ring-backhead)			
B5	"B" Kit	Setscrew (locking ring-bushing,)			
B6	"B" Kit	Setscrew (slinger)			
G1	53044	Bearing cap			
G2	"C" Kit	Thrust bearing			
G3	"C" Kit	Radial bearing			
G4	"C" Kit	Bearing locknut			
G5	"C" Kit	Lip seal (bearing frame, column)			
G6	"C" Kit	Lip seal (bearing cap)			
G7		Grease zerk			
G9		Hex head bolt (bearing cap-frame)			
G10		Plug			
G11		Coupling key			
G12	53045	Bearing cartridge			
G13		Bearing lockwasher			

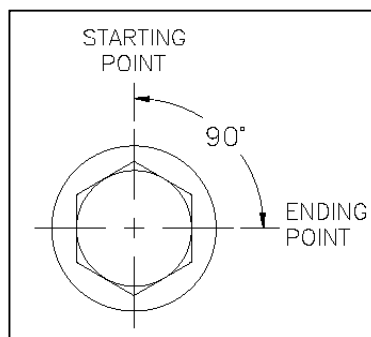
Table 5. Recommended Torque Values (except for impeller capscrew)

Bolt Size	Material	
	Steel (or otherwise noted)	316 Stainless Steel
¼"-20	5	7
5/16"-18	11	12
3/8"-16	18	21
½"-13	39	45
5/8"-11	83	97
¾"-10	105	132
7/8"-9	160	203
1"-8	236	300

Torque the impeller cap-screw as shown below.



Impeller Cap Screw & Washer



Torque Capscrew – ¼ turn

FIGURE 1: IMPELLER CAP-SCREW TORQUE METHOD

Follow these instructions for installation of the impeller cap-screw

1. Install the flange head capscrew with washer into the shaft (Apply Loctite 263 to the threads). Hand-tighten the screw until it is snug in the shaft and clamps the impeller washer tightly. Then, tighten the capscrew ¼ turn (90°), approximately 80-90 ft-lbs.
2. To ensure proper seating, loosen the capscrew, re-snug and retighten the capscrew ¼ turn (90°).

Use Loctite 263 Red when installing capscrew

STINGRAY Pump Repair Kits & Application Upgrades

Please reference the appropriate exploded view drawing to verify the correct part number for your application.



- A Kit Main Pump 20-50 hp
 - Impeller (1) trimmed to size
 - Suction Head (1)
 - Volute Gasket (1)
 - Bolts (8)
 - Impeller Bolt (1)
 - Impeller Washer (1)
 - Impeller Key (1)
 - O-Ring (1)
- 1530-30220



- B Kit Main Pump 15-50 hp
 - Composite Throttle Bushing (1)
 - Shaft Sleeve SS (1)
 - Step Key SS (1)
 - Locking Ring (1)
 - Slinger (1)
 - Hex Bolts (2)
 - Set Screws (2)
- 1530-85170



- B Kit Main Pump 15-50 hp
 - Throttle Bushing Hardened Steel (1)
 - Shaft Sleeve SS (1)
 - Step Key SS (1)
 - Locking Ring (1)
 - Slinger (1)
 - Hex Bolts (2)
 - Set Screws (2)
- 1530-30281



- C Kit Main Pump 15-50 hp
 - Oil Seal (1)
 - Viton Seal (2)
 - Radial Bearing (1)
 - Thrust Bearing (1)
 - Bearing Locking Nut (1)
- 1530-51173
1531 HD-85240



- Main Pump 20-50 hp Shaft s are
 - available in several different options of
 - material and use. W/ indicates the use
 - of a shaft sleeve in the application.
- 1530 w/ -53203
1530 w/o-50489
1530 SS w/-30334
1531 HD w/-85241



A Kit Booster Pump 15-20 hp
 Impeller (1) trimmed to size
 Suction Head (1)
 Volute Gasket (1)
 Bolts (12)
 Impeller Bolt (1)
 Impeller Washer (1)
 Impeller Key (1)
 O-Ring (1)

1530-30230



B Kit Booster Pump 15-50 hp
 Composite Throttle Bushing (1)
 Step Key (1)
 Locking Ring (1)
 Slinger (1)
 Locking Ring Set Screw (2)
 Hex Bolts (2)
 Set Screws (2)

1530-30280



Booster Pump 15-20 hp Shaft

1530-51174
 1530-30335



Duplex Gasket Kit

1530-52238



Viton Lip Seals
 Stainless Steel Housing

1530 SS-30425

STINGRAY Pump Motor Couplings



Assy, Pump Coupling, 15&20hp
1 Coupling 1-3/8
1 Coupling 1-5/8
1 Insert

72555



Assy, Pump Coupling, 30hp, Simplex
1 Coupling 1-3/8
1 Coupling 1-5/8
1 Insert
1 Collar

71919



Assy, Pump Coupling, 40&50hp
1 Coupling, 1-3/8
1 Coupling, 1-7/8
1 Coupling, Body

72556



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