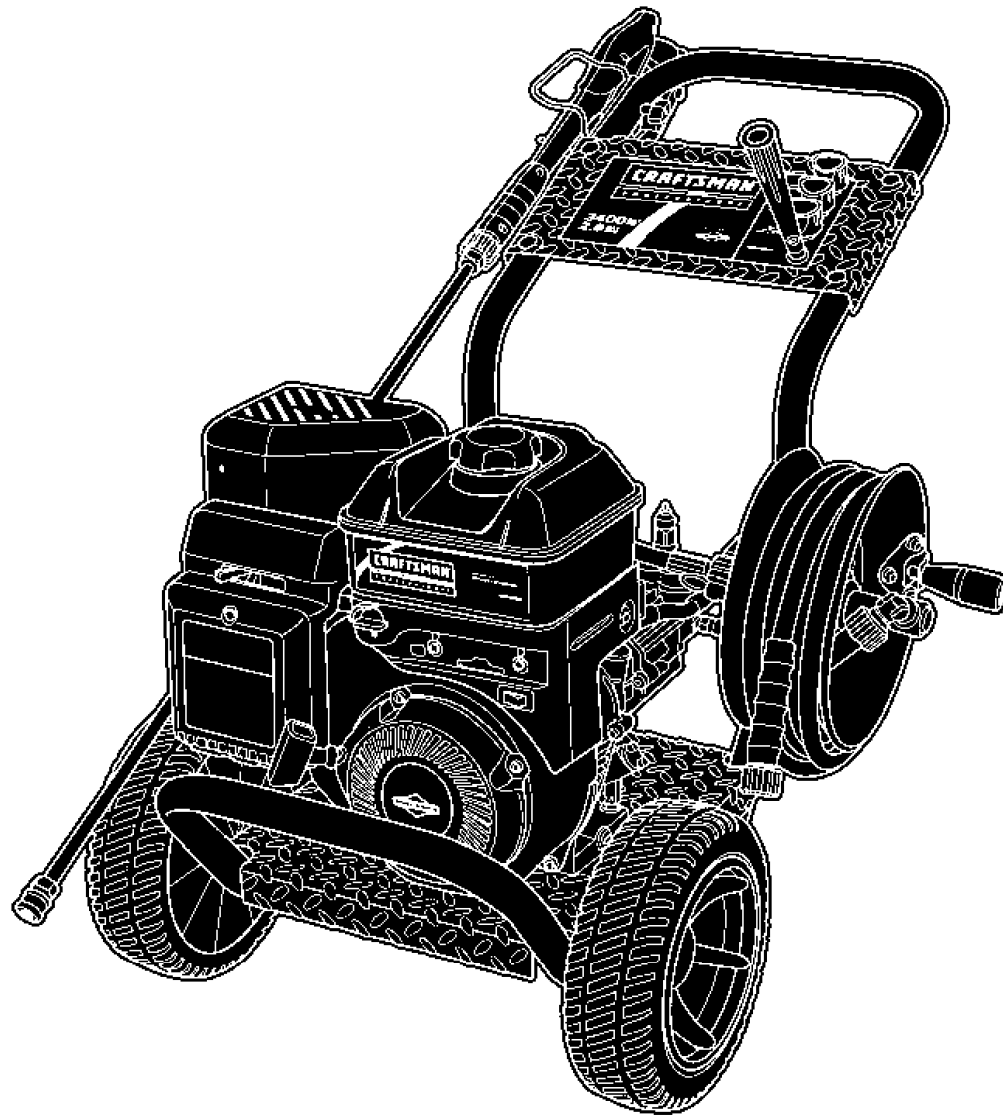


Mfg. No: 020299-0  
580.752090, 3,400 PSI Craftsman





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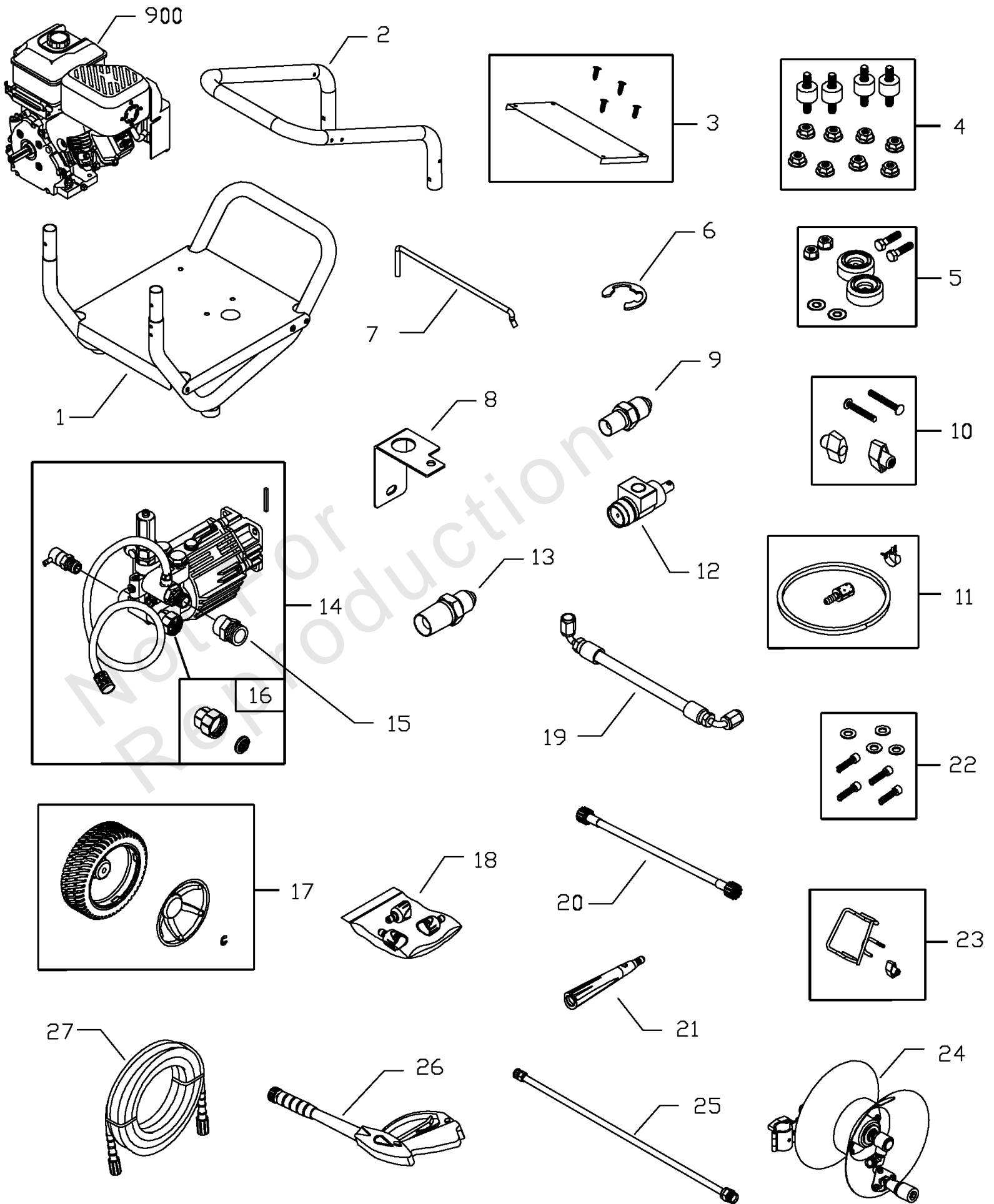
Model Components	Page
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Not For  
Reproduction

# Main Unit

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 020299-0



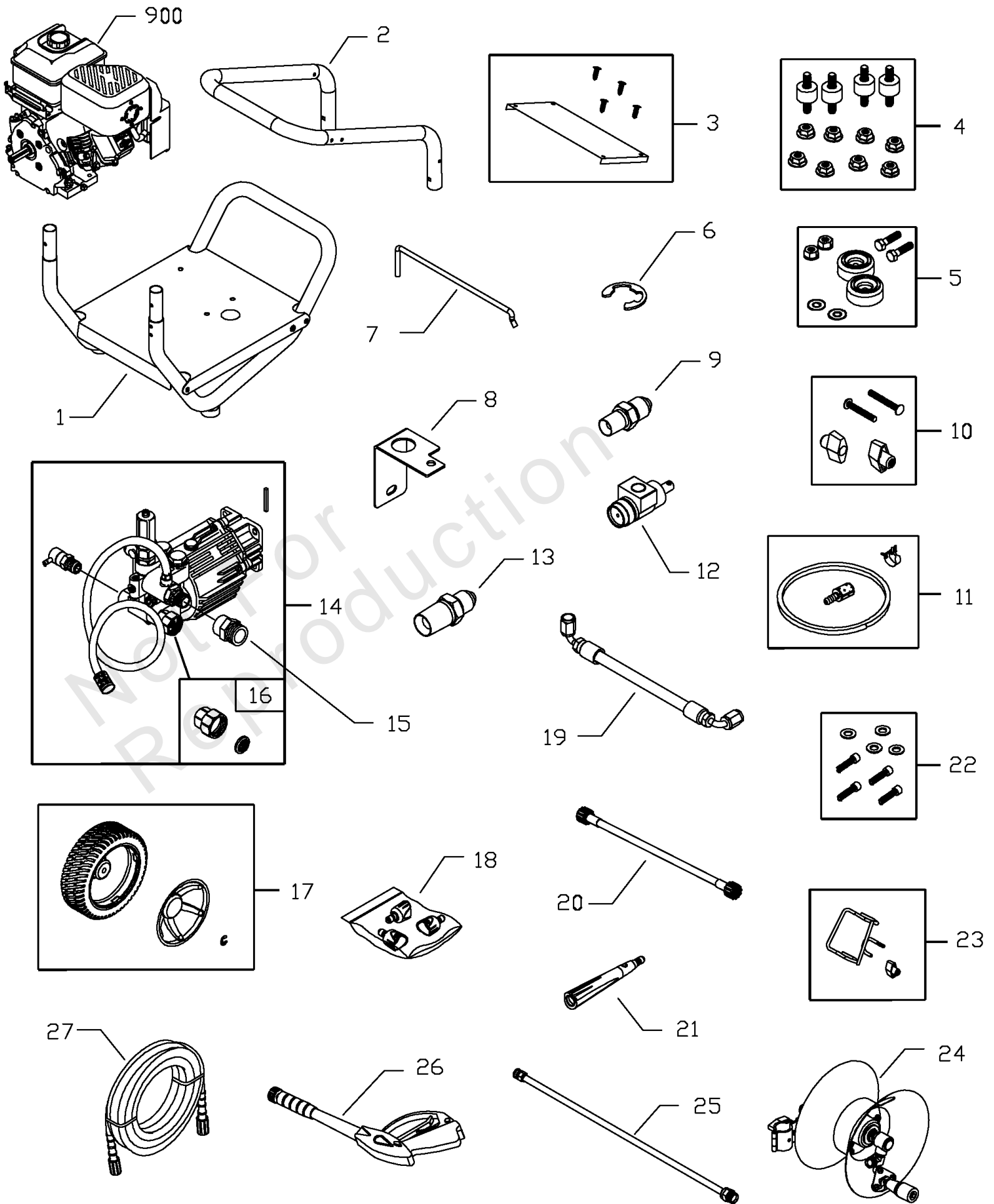
## Main Unit

REF NO	PART NO	QTY	DESCRIPTION
1	202966GS		ASSY, Base
2	B201499GS		HANDLE
3	202903GS		KIT, Billboard
	195964GS		Clips, Tree
4	192134GS		KIT, Engine Mounting Hrdwr
5	192553GS		KIT, Vibration Mount
6	202351GS		E-RING, Thrttl Cntrl
7	202873GS		WIRE, Idle Control
8	B200973GS		BRACKET
9	202429GS		FITTING, Hose to Thrttl Cntrl
10	B2203GS		KIT, Handle Fastening
11	192796GS		KIT, Chem Hose & Filter
12	202352GS		THROTTLE CONTROL
13	202428GS		FITTING, Thrttl Cntrl, Hose to Pump
14	202005GS		ASSY, Pump -(see "Pump")
	194298GS		Valve, Thermal Relief
	23139DGS		Key
15	95457GS		ADAPTER
16	194004GS		KIT, Inlet, Grdn Hose
17	202978GS		KIT, Wheel
	200517GS		Hubcap
	192050GS		E-Ring
18	201758GS		KIT, Nozzle
	201580RGS		Nozzle, QC, Project Pro, Yellow
	201580XGS		Nozzle, QC, Project Pro, Orange
	201580AAGS		Nozzle, QC, Project Pro, Red
19	202427GS		ASSY, Hose Swivel, Thrttl Cntrl
20	202418GS		HOSE, Whip
21	198423GS		ASSY, Nozzle, Foaming
22	192131GS		KIT, Pump Mounting Hrdwr
23	201661GS		KIT, Gun Holder Weldment
24	202136GS		ASSY, Hose Reel
	203488GS		Kit, Hrdwr, Hose Reel
25	193814GS		EXTENSION, QC
26	199990GS		GUN
27	202419GS		HOSE
900	~NSP		ENGINE (150212-0119-E9)
	203780GS		MANUAL, Operator's -Not Illustrated
	87815GS		GOGGLES -Not Illustrated
	30809GS		GROMMET -Not Illustrated
	AB3061BGS		OIL BOTTLE -Not Illustrated
	201314GS		AXLE -Not Illustrated
	199462GS		BOTTLE, Cncntrt, Hydro-Foam -Not Illustrated
	203167GS		KIT, Decals, Srv -Not Illustrated
	194256GS		KIT, Tag/Warning Srv -Not Illustrated

# Main Unit

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 020299-0



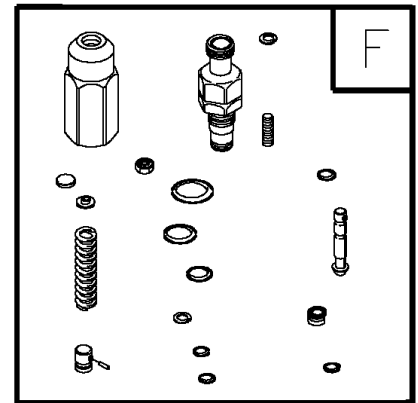
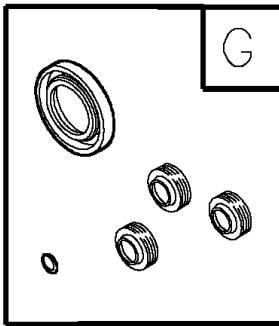
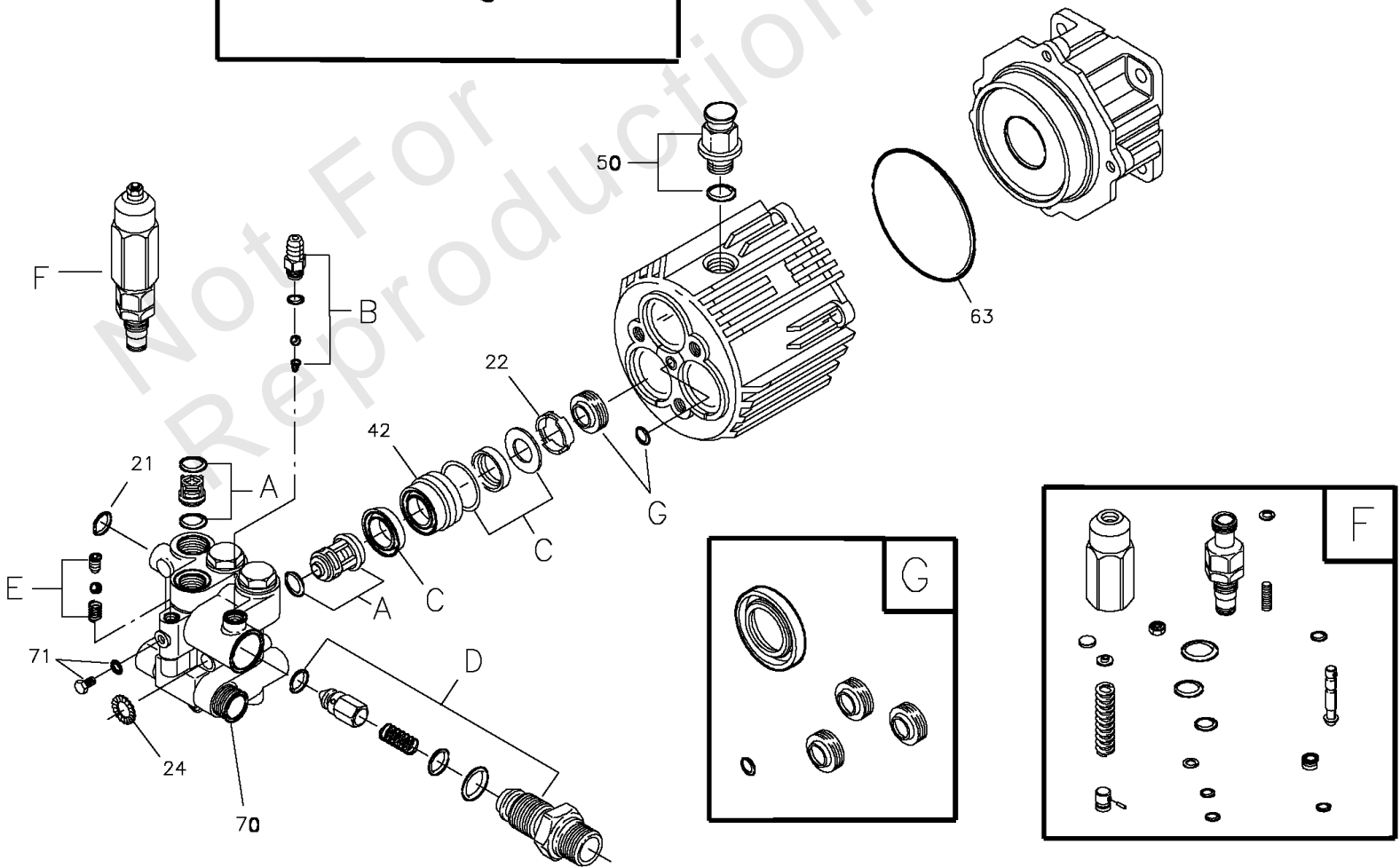
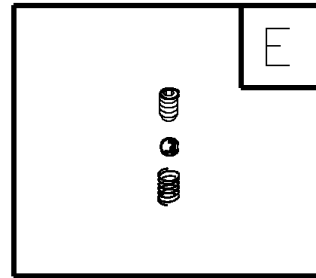
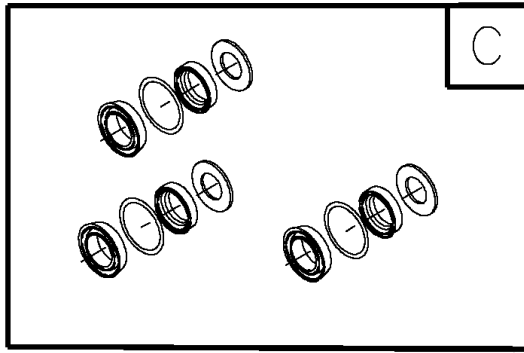
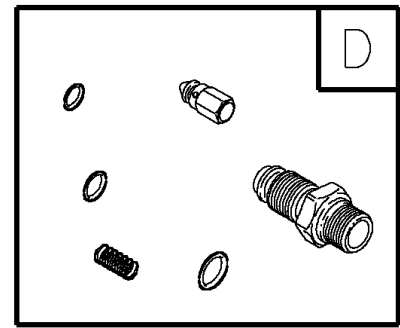
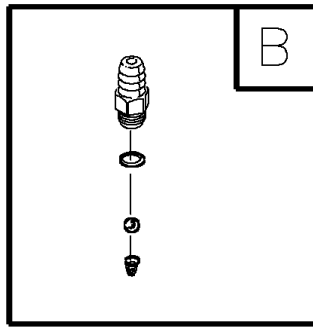
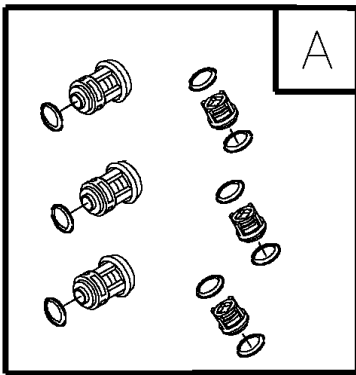
## Main Unit

REF NO	PART NO	QTY	DESCRIPTION
	7175187GS		Garden Hose Quick Connect -Optional Accessories, Not Illustrated
	7175197GS		Accessory Quick Connect -Optional Accessories, Not Illustrated
	7175124GS		Rotating Brush Kit -Optional Accessories, Not Illustrated
	7175122GS		30' Replacement Hose -Optional Accessories, Not Illustrated
	7175116GS		O Ring Repair Kit -Optional Accessories, Not Illustrated
	7175129GS		Turbo Nozzle -Optional Accessories, Not Illustrated
	7175121GS		25' Extension Hose -Optional Accessories, Not Illustrated
	7174402GS		Hose Reel -Optional Accessories, Not Illustrated
	6039		Pump Saver -Optional Accessories, Not Illustrated
	6092		WASH, Hydro Foam(TM) -Optional Accessories, Not Illustrated
	6135		KIT, Hydro Foam(TM) Launcher & Wash -Optional Accessories, Not Illustrated
	7174300GS		House Wash Concentrate (makes 4 gallons) -Optional Accessories, Not Illustrated
	7174301GS		Deck Wash Concentrate (makes 2 gallons) -Optional Accessories, Not Illustrated
	7174302GS		Vehicle/Boat Wash Concentrate (makes 4 gallons) -Optional Accessories, Not Illustrated
	7174303GS		Degreaser Concentrate (makes 4 gallons) -Optional Accessories, Not Illustrated
	7174307GS		Mold/Mildew Concentrate (makes 2 gallons) -Optional Accessories, Not Illustrated

# Pump

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 020299-0





## Pump

REF NO	PART NO	QTY	DESCRIPTION
21	194434GS		O-RING
22	190639GS		SPACER
24	190640GS		WASHER
42	190646GS		PISTON, Guide
50	198160GS		VENT CAP, with O-Ring
63	194435GS		O-RING
70	190654GS		PUMP HEAD
71	190655GS		GRUB SCREW & WASHER
A	190657GS		KIT, CHECK VALVE -Service kits and include all parts shown within the box.
B	192914GS		KIT, CHEMICAL INJECT -Service kits and include all parts shown within the box.
C	190660GS		KIT, SEAL WATER -Service kits and include all parts shown within the box.
D	194426GS		KIT, INJECTOR -Service kits and include all parts shown within the box.
E	194427GS		KIT, BALL & SPRING -Service kits and include all parts shown within the box.
F	193126GS		KIT, UNLOADER -Service kits and include all parts shown within the box.
G	194425GS		KIT, SEAL OIL -Service kits and include all parts shown within the box.
	B2384GS		FILTER, INLET -Not Illustrated
	190656GS		OIL BOTTLE -Optional Accessories, Not Illustrated
	186452GS		FILTER, INLET, BAG OF 10 -Optional Accessories, Not Illustrated

# Hardware Identification & Torque Specifications

Torque Specification Chart								
FOR STANDARD METRIC MACHINE HARDWARE (Tolerance ± 20%)								
Property Class	5.6		8.8		10.9		12.9	
	Class 5.6		Class 8.8		Class 10.9		Class 12.9	
Size Of Hardware	in/lbs	Nm.	in/lbs	Nm.	in/lbs	Nm.	in/lbs	Nm.
	ft/lbs		ft/lbs		ft/lbs		ft/lbs	
M3	5.88	.56	13.44	1.28	19.2	1.80	22.92	2.15
M4	13.44	1.28	30.72	2.90	43.44	4.10	52.56	4.95
M5	26.4	2.50	60.96	5.75	5.97	8.10	7.15	9.7
M6	44.64	4.3	7.3	9.9	10.3	14	12.1	16.5
M7	5.2	7.1	12.1	16.5	16.9	23	19.9	27
M8	7.7	10.5	17.7	24	25	34	29	40
M10	15	21	35	48	50	67	59	81
M12	26	36	61	83	86.2	117	103	140
M14	42	58	101	132	136	185	162	220
M16	64	88	147	200	210	285	250	340
M18	89	121	202	275	287	390	346	470
M20	126	171	290	390	405	550	486	660
M22	169	230	390	530	559	745	656	890
M24	217	295	497	375	708	960	840	1140
M27	320	435	733	995	1032	1400	1239	1680
M30	435	590	995	1350	1401	1900	1681	2280
M33	590	800	1349	1830	1902	2580	2278	3090
M36	759	1030	1740	2360	2441	3310	2935	3980
M39	988	1340	2249	3050	3163	4290	3798	5150

Torque Specification Chart						
FOR STANDARD MACHINE HARDWARE (Tolerance ± 20%)						
Hardware Grade	No Marks		SAE Grade 5		SAE Grade 8	
	SAE Grade 2		SAE Grade 5		SAE Grade 8	
Size Of Hardware	in/lbs	Nm.	in/lbs	Nm.	in/lbs	Nm.
	ft/lbs		ft/lbs		ft/lbs	
8-32	19	2.1	30	3.4	41	4.6
8-36	20	2.3	31	3.5	43	4.9
10-24	27	3.1	43	4.9	60	6.8
10-32	31	3.5	49	5.5	68	7.7
1/4-20	66	7.6	8	10.9	12	16.3
1/4-28	76	8.6	10	13.6	14	19.0
5/16-18	11	15.0	17	23.1	25	34.0
5/16-24	12	16.3	19	25.8	29	34.0
3/8-16	20	27.2	30	40.8	45	61.2
3/8-24	23	31.3	35	47.6	50	68.0
7/16-14	30	40.8	50	68.0	70	95.2
7/16-20	35	47.6	55	74.8	80	108.8
1/2-13	50	68.0	75	102.0	110	149.6
1/2-20	55	74.8	90	122.4	120	163.2
9/16-12	65	88.4	110	149.6	150	204.0
9/16-18	75	102.0	120	163.2	170	231.2
5/8-11	90	122.4	150	204.0	220	299.2
5/8-18	100	136	180	244.8	240	326.4
3/4-10	160	217.6	260	353.6	386	525.0
3/4-16	180	244.8	300	408.0	420	571.2
7/8-9	140	190.4	400	544.0	600	816.0
7/8-14	155	210.8	440	598.4	660	897.6
1-8	220	299.2	580	788.8	900	1,244.0
1-12	240	326.4	640	870.4	1,000	1,360.0

The guides and ruler furnished below are designed to help you select the appropriate hardware.



Nut, M8

Thread Diameter (mm)

Inside Diameter (in)      Threads per inch

Nut, 1/2-16



Screw, M8- 1.25 x 25

Thread Diameter (mm)      Distance between threads (mm)      Body Length (mm)

Body Diameter      Threads per inch      Body Length (in)

Screw, 1/2- 16 x 2



## Standard Hardware Sizing

When a washer or nut is identified as 1/2" (M8), this is the *Nominal size*, meaning the *inside diameter* is 1/2 inch (8mm metric thread diameter); if a second number is present it represents the *threads per inch* (distance between threads).

When bolt or capscrew is identified as 1/2 - 16 x 2" (M8 - 1.25 x 50), this means the *Nominal size*, or body diameter is 1/2 inch (8mm metric thread diameter), the second number, 16, represents the *threads per inch*, (*distance between threads*). The final number is the body length of the bolt or screw, 2 inches (50mm).

## NOTES

- These torque values are to be used for all hardware excluding: locknuts, self-tapping screws, thread forming screws, sheet metal screws and socket head setscrews.
- Recommended seating torque values for locknuts:
  - for prevailing torque locknuts - use 65% of grade 5 torques.
  - for flange whizlock nuts and screws - use 135% of grade 5 torques.
- Unless otherwise noted on assembly drawings, all torque values must meet this specification.

## Common Hardware Types

Hex Head Capscrew



Washer



Carriage Bolt



Hex Nut

## Wrench & Fastener Size Guide

1/4" Bolt or Nut Wrench—7/16"	5/16" Bolt or Nut Wrench—1/2"	3/8" Bolt or Nut Wrench—9/16"	7/16" Bolt or Nut Wrench (Bolt)—5/8" Wrench (Nut)—11/16"	1/2" Bolt or Nut Wrench—3/4"
M6 Bolt or Nut Wrench—10mm	M8 Bolt or Nut Wrench—13mm	M10 Bolt or Nut Wrench—17mm	M12 Bolt or Nut Wrench—19mm	M14 Bolt or Nut Wrench—22mm

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