



Data, Ratings & Clearances for Ajax Engines

UNIT SPECIFICATIONS

A. GENERAL

<u>Description</u>	<u>C-30</u>	<u>C-42</u>	<u>DPC-60</u>	<u>DPC-81</u>
Engine Bore & Stroke	7-1/2" X 10"	8-1/2" X 10"	9-1/2" X 12"	10-1/2" X 12"
Compressor Stroke	8"	8"	8"	8"
Horsepower @ Max Speed	30	42	60	81
Max RPM	525	525	475	475
Rod Load Rating	11,000	11,000	11,000	11,000
Fuel Injection System Specifications:				
Volume Tank	2 cu. ft.	2 cu. ft.	3 cu. ft.	3 cu. ft.
Hose or Pipe Size (tank to unit)	1-1/2"	1-1/2"	1-1/2"	1-1/2"
Regulator (Fisher size & model)	1" 620	1" 620	1" 620	1" 620
Regulator Spring No.	1D-8923	1D-8923	1D-8923	1D-8923
Max Inlet Pressure	500 psi	500 psi	500 psi	500 psi
Regulator Orifice Size:				
10-30 Inlet Pressure	1/2"	1/2"	1/2"	1/2"
31-50 Inlet Pressure	3/8"	3/8"	3/8"	3/8"
51-75 Inlet Pressure	1/4"	1/4"	1/4"	1/4"
76-500 Inlet Pressure	1/4"	1/4"	1/4"	1/4"
Tank Pressure Req'd	5-20 psi	5-20 psi	5-20 psi	5-20 psi
Air/Gas Starting System:				
Air Pressure, Max.	150 psi	250 psi	250 psi	250 psi
Volume Required (per minute)	5 cu. ft.	7-10 cu. ft.	10-15 cu. ft.	10-15 cu. ft.
Exhaust System:				
Exhaust Pipe Size	4"	4"	6"	6"
Muffler Outlet Size	6"	6"	8"	8"
Exhaust Pipe Length	6475/RPM	5000/RPM	6175/RPM	6400/RPM
Capacities:				
Crankcase Oil (approx.)	5 Gal.	8 Gal.	17 Gal.	17 Gal.
Oil Level – Dist from Top	19-7/8"	19-7/8"	22-1/2"	22-1/2"
Power Cyl. Lube Rate (pints/day)	1.2	1.7	2.4	3.2
Radiator Cooling System	7 Gal.	7 Gal.	12.5 Gal.	12.5 Gal.
Cooler Cooling System				
Engine Jacket Water	6.5 Gal.	7 Gal.	13 Gal.	12.5 Gal.
Compressor Jacket Water	10 Gal.	11 Gal.	11 Gal.	24 Gal.

UNIT SPECIFICATIONS (cont'd)

A. GENERAL (cont'd)

<u>Description</u>	<u>DPC-80-A</u>	<u>DPC-105</u>	<u>DPC-115</u>	<u>DPC-120</u>
Engine Bore & Stroke	11" X 14"	8-1/2" X 10"	9-1/2" X 12"	(2)10-1/2" X 12"
Compressor Stroke	11"	11"	11"	8"
Horsepower @ Max Speed	80	105	115	120
Max RPM	400	425	360	475
Rod Load Rating	17,600	17,600	22,000	11,000
Fuel Injection System Specifications:				
Volume Tank	3 cu. ft.	4 cu. ft.	4 cu. ft.	3 cu. ft.
Hose or Pipe Size (tank to unit)	1-1/2"	1-1/2"	1-1/2"	1-1/2"
Regulator (Fisher size & model)	1" 620	1" 620	1" 620	1" 620
Regulator Spring No.	1D-8923	1D-8923	1D-8923	1D-8923
Max Inlet Pressure	500 psi	500 psi	500 psi	500 psi
Regulator Orifice Size:				
10-30 Inlet Pressure				
31-50 Inlet Pressure	1/2"	1/2"	1/2"	1/2"
51-75 Inlet Pressure	3/8"	3/8"	3/8"	3/8"
76-500 Inlet Pressure	1/4"	1/4"	1/4"	1/4"
OR				
Regulator (Fisher size & model)	2" 630	2" 630	2" 630	2" 630
Regulator Spring No.	W-192	W-192	W-192	W-192
Max Inlet Pressure	1500 psi	1500 psi	1500 psi	1500 psi
Regulator Orifice Size:				
10-50 Inlet Pressure	3/8"	3/8"	3/8"	3/8"
Tank Pressure Req'd	5-20 psi	5-20 psi	5-20 psi	5-20 psi
Air/Gas Starting System:				
Air Pressure, Max.	250 psi	250 psi	250 psi	250 psi
Volume Required (per minute)	10-15 cu. ft.	15-20 cu. ft.	13-20 cu. ft.	20-30 cu. ft.
Exhaust System:				
Exhaust Pipe Size	6"	8"	8"	(2) 6"
Muffler Outlet Size	8"	10"	12"	12"
Exhaust Pipe Length	5600/RPM	6375/RPM	6000/RPM	6175/RPM
Capacities:				
Crankcase Oil (approx.)	23 Gal.	23 Gal.	25 Gal.	25 Gal.
Oil Level – Dist from Top	26-7/8"	26-7/8"	28"	22-1/2"
Power Cyl. Lube Rate (pints/day)	3.2	4.2	4.6	2.4 (per cyl)
Radiator Cooling System	14 Gal.	14 Gal.	26 Gal.	
Cooler Cooling System				
Engine Jacket Water	14 Gal.		26 Gal.	
Compressor Jacket Water	13 Gal.		13 Gal.	
Combined Systems		27 Gal.		65 Gal.

UNIT SPECIFICATIONS (cont'd)

A. GENERAL (cont'd)

<u>Description</u>	<u>DPC-140</u>	<u>DPC-162</u>	<u>DPC-180</u>	<u>DPC-230</u>
Engine Bore & Stroke	13-1/4" X 16"	(2) 10-1/2" X 12"	15" X 16"	(2) 13-1/4" X 16"
Compressor Stroke	11"	8"	11"	11"
Horsepower @ Max Speed	140	162	180	230
Max RPM	400	475	400	360
Rod Load Rating	25,000	11,000	30,000	22,000
Fuel Injection System Specifications:				
Volume Tank	4 cu. ft.	3 cu. ft.	5 cu. ft.	43 cu. ft.
Hose or Pipe Size (tank to unit)	1-1/2"	1-1/2"	1-1/2"	2"
Regulator (Fisher size & model)	1" 620	1" 620	1" 620	1" 620
Regulator Spring No.	1D-8923	1D-8923	1D-8923	1D-8923
Max Inlet Pressure	500 psi	500 psi	500 psi	500 psi
Regulator Orifice Size:				
10-30 Inlet Pressure				
31-50 Inlet Pressure	1/2"	1/2"	1/2"	1/2"
51-75 Inlet Pressure	3/8"	1/2"	3/8"	3/8"
76-500 Inlet Pressure	1/4"	1/4"	1/4"	1/4"
OR				
Regulator (Fisher size & model)	2" 630	2" 630	2" 630	2" 630
Regulator Spring No.	W-192	W-192	W-192	W-192
Max Inlet Pressure	1500 psi	1500 psi	1500 psi	1500 psi
Regulator Orifice Size:				
10-50 Inlet Pressure	1/2"	1/2"	1/2"	1/2"
Tank Pressure Req'd	5-20 psi	5-20 psi	5-20 psi	5-20 psi
Air/Gas Starting System:				
Air Pressure, Max.	250 psi	250 psi	250 psi	250 psi
Volume Required (per minute)	13-20 cu. ft.	20-30 cu. ft.	20-30 cu. ft.	20-30 cu. ft.
Exhaust System:				
Exhaust Pipe Size	8"	(2) 6"	10"	(2) 8"
Muffler Outlet Size	12"		14"	12"
Exhaust Pipe Length	6000/RPM	6400/RPM	6400/RPM	6000/RPM
Capacities:				
Crankcase Oil (approx.)	25 Gal.	25 Gal.	25 Gal.	30 Gal.
Oil Level – Dist from Top	28"	22-1/2"	28"	28"
Power Cyl. Lube Rate (pints/day)	5.6	3.2 (per cyl)	7.2	4.6 (per cyl)
Radiator Cooling System	39 Gal.		48 Gal.	
Cooler Cooling System				
Combined Systems		80 Gal.		92 Gal.

UNIT SPECIFICATIONS (cont'd)

A. GENERAL (cont'd)

<u>Description</u>	<u>DPC-280</u>	<u>DPC-300</u>	<u>DPC-360</u>
Engine Bore & Stroke	(2)13-1/4" X 16"	(2) 15" X 16"	(2) 15" X 16"
Compressor Stroke	11"	11"	11"
Horsepower @ Max Speed	280	300	360
Max RPM	400	360	400
Rod Load Rating	25,000	25,000	30,000
Fuel Injection System Specifications:			
Volume Tank	4 cu. ft.	5 cu. ft.	5 cu. ft.
Hose or Pipe Size (tank to unit)	2"	2"	2"
Regulator (Fisher size & model)	1" 620	1" 620	1" 620
Regulator Spring No.	1D-8923	1D-8923	1D-8923
Max. Inlet Pressure	500 psi	500 psi	500 psi
Regulator Orifice Size:			
51-150 Inlet Pressure	1/2"	1/2"	1/2"
150-500 Inlet Pressure	3/8"	3/8"	3/8"
OR			
Regulator (Fisher size & model)	2" 630	2" 630	2" 630
Regulator Spring No.	W-192	W-192	W-192
Max Inlet Pressure	1500 psi	1500 psi	1500 psi
Regulator Orifice Size:			
10-50 Inlet Pressure	1/2"	1/2"	1/2"
Tank Pressure Req'd	5-20 psi	5-20 psi	5-20 psi
Air/Gas Starting System:			
Air Pressure, Max.	250 psi	250 psi	250 psi
Volume Required (per minute)	20-30 cu. ft.	35-45 cu. ft.	35-45 cu. ft.
Exhaust System:			
Exhaust Pipe Size	(2) 8"	(2) 10"	(2)10"
Muffler Outlet Size	12"	14"	14"
Exhaust Pipe Length	6000/RPM	6400/RPM	6400/RPM
Capacities:			
Crankcase Oil (approx.)	30 Gal.	30 Gal.	30 Gal.
Oil Level – Dist from Top	28"	28"	28"
Power Cyl. Lube Rate (pints/day)	5.6 (per cyl)	3.2 (per cyl)	7.2 (per cyl)
Cooler Cooling System			
Combined Systems	95 Gal.	100 Gal.	125 Gal.

UNIT SPECIFICATIONS (cont'd)

A. GENERAL (cont'd)

<u>Description</u>	<u>DPC-600</u>	<u>DPC-800</u>
Engine Bore & Stroke	(3)15" X 16"	(4) 15" X 16"
Compressor Stroke	11"	11"
Horsepower @ Max Speed	600	800
Max RPM	400	400
Rod Load Rating	40,000	40,000
Fuel Injection System Specifications:		
Hose or Pipe Size (tank to unit)	2"	2"
Volume Tank	10-1/2 cu. ft.	14 cu. ft.
Regulator (Fisher size & model)	2" 630	2" 630
Regulator Spring No.	W-191	W-191
Max Inlet Pressure	260 psi	260 psi
Regulator Orifice Size:		
10-50 Inlet Pressure	1/2"	1/2"
Tank Pressure Req'd	5-20 psi	5-20 psi
Air/Gas Starting System:		
Air Pressure, Max.	250 psi	250 psi
Volume Required (per minute)	50-65 cu. ft.	65-85 cu. ft.
Exhaust System:		
Exhaust Pipe Size	(3) 10"	(2) 10"
Muffler Outlet Size	18"	18"
Exhaust Pipe Length	6400/RPM	6400/RPM
Capacities:		
Crankcase Oil (approx.)	58 Gal.	95 Gal.
Oil Level – Dist from Top	28"	28"
Power Cyl. Lube Rate (pints/day)	8 (per cyl)	8 (per cyl)
Cooler Cooling System		
Combined Systems	150 Gal.	200 Gal.

UNIT SPECIFICATIONS (cont'd)

A. GENERAL (cont'd)

<u>Description</u>	<u>DPC-2201&LE</u>	<u>DPC-2202&LE</u>	<u>DPC-2801&LE</u>	<u>DPC-2802&LE</u>
Engine Bore & Stroke	13-1/4" X 16"	(2) 13-1/4" X 16"	15" X 16"	(2) 15" X 16"
Compressor Stroke	11"	11"	11"	11"
Horsepower @ Max Speed	148	296	192	384
Max RPM	440	440	440	440
Rod Load Rating	30,000	30,000	30,000	30,000
Fuel Injection System Specifications:				
Volume Tank	4 cu. ft.	4 cu. ft.	5 cu. ft.	5 cu. ft.
Hose or Pipe Size (tank to unit)	2"	2"	2"	2"
Regulator (Fisher size & model)	1" 620	1" 620	1" 620	1" 620
Regulator Spring No.	1D-8923	1D-8923	1D-8923	1D-8923
Max Inlet Pressure	500 psi	500 psi	500 psi	500 psi
Regulator Orifice Size:				
31-50 Inlet Pressure	1/2"	1/2"	1/2"	
51-75 Inlet Pressure	3/8"	3/8"	3/8"	1/2"
76-500 Inlet Pressure	1/4"	1/4"	1/4"	3/8"
OR				
Regulator (Fisher size & model)	2" 630	2" 630	2" 630	2" 630
Regulator Spring No.	W-192	W-192	W-192	W-192
Max Inlet Pressure	1500 psi	1500 psi	1500 psi	1500 psi
Regulator Orifice Size:				
10-50 Inlet Pressure	3/8"	1/2"	1/2"	1/2"
Tank Pressure Req'd	5-20 psi	5-20 psi	5-20 psi	5-20 psi
Air/Gas Starting System:				
Air Pressure, Max.	250 psi	250 psi	250 psi	250 psi
Volume Required (per minute)	13-20 cu. ft.	20-30 cu. ft.	20-30 cu. ft.	35-45 cu. ft.
Exhaust System:				
Exhaust Pipe Size	(1) 8"	(2) 8"	10"	(2) 10"
Muffler Outlet Size	12"	12"	14"	14"
Exhaust Pipe Length	6000/RPM	6000/RPM	6400/RPM	6400/RPM
Capacities:				
Crankcase Oil (approx.)	30 Gal.	30 Gal.	25 Gal.	30 Gal.
Oil Level – Dist from Top	28"	28"	28"	28"
Power Cyl. Lube Rate (pints/day)	4.9 (per cyl)	4.9 (per cyl)	6.4 (per cyl)	6.4 (per cyl)
Radiator Cooling System			48 Gal.	
Cooler Cooling System				
Engine Jacket Water	26 Gal.			
Compressor Jacket Water	13 Gal.			
Combined Systems		92 Gal.		125 Gal.

UNIT SPECIFICATIONS (cont'd)

A. GENERAL (cont'd)

<u>Description</u>	<u>DPC-2803</u>	<u>DPC-2804</u>	<u>DPC-2803LE</u>	<u>DPC-2804LE</u>
Engine Bore & Stroke	(3) 15" X 16"	(3) 15" X 16"	(4) 15" X 16"	(4) 15" X 16"
Compressor Stroke	11"	11"	11"	11"
Horsepower @ Max Speed	634	845	600	800
Max RPM	440	440	440	440
Rod Load Rating	40,000	40,000	40,000	40,000
Fuel Injection System Specifications:				
Volume Tank	10-1/2 cu. ft.	14 cu. ft.	10/1/2 cu. ft.	14 cu. ft.
Hose or Pipe Size (tank to unit)	2"	2"	2"	2"
Regulator (Fisher size & model)	2" 630	2" 630	2" 630	2" 630
Regulator Spring No.	W-191	W-191	W-191	W-191
Max Inlet Pressure	260 psi	260 psi	260 psi	260 psi
Regulator Orifice Size:				
10-50 Inlet Pressure	1/2"	1/2"	1/2"	1/2"
Tank Pressure Req'd	5-20 psi	5-20 psi	5-20 psi	5-20 psi
Air/Gas Starting System:				
Air Pressure, Max.	250 psi	250 psi	250 psi	250 psi
Volume Required (per minute)	50-65 cu. ft.	65-85 cu. ft.	50-65 cu. ft.	65-85 cu. ft.
Exhaust System:				
Exhaust Pipe Size	(3) 10"	(2) 10"	(3) 10"	(2) 10"
Muffler Outlet Size	18"	18"	18"	18"
Exhaust Pipe Length	6400/RPM	6400/RPM	6400/RPM	6400/RPM
Capacities:				
Crankcase Oil (approx.)	58 Gal.	95 Gal.	58 Gal.	95 Gal.
Oil Level – Dist from Top	28"	28"	28"	28"
Power Cyl. Lube Rate (pints/day)	7 (per cyl)	7 (per cyl)	6.7 (per cyl)	6.7 (per cyl)
Cooler Cooling System				
Combined Systems	150 Gal.	200 Gal.	150 Gal.	200 Gal.

UNIT SPERCIFICATIONS (cont'd)

B. CLEARANCE AND TORQUE VALUES

<u>Description</u>	<u>C-30</u>	<u>C-42</u>	<u>DPC-60</u>	<u>DPC-81</u>
Clearances:				
Roller Main Bearing:				
- Fit to Shaft (tight)	.001-.003	.001-.003	.001.003	.001-.003
- Bench Lateral (installed loose)	.0009-.0083	.002-.013	.006-.010	.0006-.0110
Crankpin Bearing-Power	.002-.0064	.002-.0064	.002-.006	.002-.006
- Side Clearance			.023-.035	.023-.035
- Compressor	.002-.0064	.002-.0064	.002-.006	.002-.006
- Side Clearance			.023-.035	.023-.035
Crosshead Pin Bearing-Power	.002-.0035	.002-.0035	.003-.0055	.003-.0055
- Compressor	.002-.0035	.002-.0035	.002-.0035	.002-.0035
Crosshead to Guide-Power	.007-.009	.007-.009	.009-.013	.009-.013
- Compressor	.007-.009	.012-.016	.012-.016	.012-.016
Piston to Power Cylinder:				
- Skirt	.012-.017	.012-.017	.016-.021	.018-.022
- Below 3 rd Comp. Ring	.020-.028	.020-.028	.027-.032	.053-.058
- 3 rd Ring Land	.030-.038	.030-.038	.042-.047	.053-.058
- 2 nd Ring Land	.040-.048	.040-.048	.062-.067	.076-.081
- 1 st Ring Land	.063-.071	.063-.071	.077-.082	.079-.084
Piston Ring End Gap	.070-.085	.080-.100	.075-.095	.082-.102
Piston Ring to Side of:				
- 1 st & 2 nd Groove	.006-.0085	.006-.0085	.0075-.010	.0075-.010
- All Other Grooves	.004-.0065	.004-.0065	.0055-.008	.005-.008
Piston Crown to Head				
Gasket Surface (distance)			1.1875"	1.1875"
Layshaft Drive Gear Backlash	.003-.005	.003-.005	.003-.005	.003-.005
Layshaft End Play	.005	.005	.005	.005
Mag Drive Shaft End Play	.003-.014	.003-.014	.003-.014	.003-.014
Governor Drive Shaft End Play	.003-.006	.003-.006	.003-.006	.003-.006
Flywheel Rim Runout (external start)			.020	.020
Mixer Manifold (min. thickness after regrind)				
- Old Style			3.55"	4.425"
- New Plate Style (square)			.562"	.562"
- New Style Plate (round)				.937"
Torque Values (ft. lbs. for lubricated threads):				
Connecting Rod Bolts	325-360	325-360	325-360	325-360
Cylinder Heads Stud Nuts	200	200	320	320
Piston Rod to Crosshead Nuts	1000	1000	3200	3200
Crosshead Pin Lock Screws	20	20	20	20
Piston Rod Lock Screws	25	25	25	25
Flywheel Bolt and Nuts	520	520	520	520
Cooler Drive Sheave Bolt/Nuts	225	225	225	225
Power Cyl. to Frame Studs	200	200	320	320
Main Bearing Support to Frame	50	50	95	95
Compressor Guide to Frame Studs		280-300	280-300	180-200

UNIT SPERCIFICATIONS (cont'd)

B. CLEARANCE AND TORQUE VALUES (cont'd)

<u>Description</u>	<u>DPC-80-A</u>	<u>DPC-105</u>	<u>DPC-115</u>	<u>DPC-140&2201</u>
Clearances:				
Roller Main Bearing:				
- Fit to Shaft (tight)	.0015-.003	.0015-.003	.002-.004	.002-.004
- Bench Lateral (installed loose)	.015-.006	.015-.006	.0003-.0074	.0003-.0074
Crankpin Bearing-Power	.003-.007	.003-.007	.003-.006	.003-.006
- Side Clearance			.010-.026	.010-.026
- Compressor	.002-.006	.002-.006	.003-.006	.003-.006
- Side Clearance			.010-.026	.010-.026
Crosshead Pin Bearing-Power	.002-.0035	.002-.0035	.0044-.0074	.0044-.0074
- Compressor	.003-.0055	.002-.0055	.003-.0055	.003-.0055
Crosshead to Guide-Power	.009-.012	.009-.012	.009-.013	.009-.013
- Compressor	.012-.015	.012-.015	.012-.015	.012-.015
Piston to Power Cylinder:				
- Skirt	.017-.023	.022-.028	.025-.031	.025-.031
- Below 3 rd Comp. Ring	.037-.043	.042-.048	.070-.079	.070-.079
- 3 rd Ring Land	.057-.063	.062-.068	.127-.136	.127-.136
- 2 nd Ring Land	.077-.083	.082-.088	.127-.136	.127-.136
- 1 st Ring Land	.092-.098	.097-.103	.137-.146	.137-.146
Piston Ring End Gap	.085-.105	.095-.115	.100-.120	.100-.120
Piston Ring to Side of:				
- 1 st & 2 nd Groove	.0075-.010	.0075-.010	.010-.0125	.010-.0125
- All Other Grooves	.0055-.008	.0055-.008	.008-.0105	.008-.0105
Piston Crown to Head				
Gasket Surface (distance)	1.250"	1.250"	2.250"	2.250"
Layshaft Drive Gear Backlash	.003-.005	.003-.005	.003-.005	.003-.005
Layshaft End Play	.005	.005	.005	.005
Mag Drive Shaft End Play	.003-.014	.003-.014	.003-.014	.003-.014
Governor Drive Shaft End Play	.003-.006	.003-.006	.003-.006	.003-.006
Flywheel Rim Runout (external start)			.020	.020
Mixer Manifold (min. thickness after regrind)				
- Old Style	4.425"	4.425"	4.425"	4.425"
- New Plate Style (square)	.562"	.562"	.562"	.562"
Torque Values (ft. lbs. for lubricated threads):				
Connecting Rod Bolts				
- Power-End	650-700	650-700	650-700	650-700
- Compressor-End	325-360	325-360	650-700	650-700
Cylinder Heads Stud Nuts	320	550	490	490
Piston Rod to Crosshead Nuts	2000	3200	3200	3200
Crosshead Pin Lock Screws	50	50	50	50
Piston Rod Lock Screws	50	50	50	50
Flywheel Bolt and Nuts	520	520	520	520
Cooler Drive Sheave Bolt/Nuts	225	225	225	225
Power Cyl. to Frame Studs	320	320	490	490
Main Bearing Support to Frame	95	95	150	150
Compressor Guide to Frame Studs	180-200	180-200	180-200	180-200

UNIT SPERCIFICATIONS (cont'd)

B. CLEARANCE AND TORQUE VALUES (cont'd)

<u>Description</u>	<u>DPC-162</u>	<u>DPC-180&2801</u>	<u>DPC-230</u>	<u>DPC-280&2202</u>
Clearances				
Roller Main Bearing:				
- Fit to Shaft (tight)	.001-.003	.002-.004	.002.004	.002-.004
- Bench Lateral (installed loose)	.006-.011	.0003-.0074	.0003-.0074	.0003-.0074
Center Main Bearing:	.004-.007		.004-.007	.004-.007
Crankpin Bearing-Power	.002-.006	.003-.007	.003-.006	.003-.006
- Side Clearance	.023-.035		.010-.026	.010-.026
- Compressor	.002-.006	.002-.006	.003-.006	.003-.006
- Side Clearance	.023-.035		.010-.026	.010-.026
Crosshead Pin Bearing-Power	.003-.0055	.002-.0035	.0044-.0074	.0044-.0074
- Compressor	.002-.0035	.002-.0055	.003-.0055	.003-.0055
Crosshead to Guide-Power	.009-.013	.009-.012	.009-.013	.009-.013
- Compressor	.012-.016	.012-.015	.012-.015	.012-.015
Piston to Power Cylinder:				
- Skirt	.018-.022	.022-.028	.025-.031	.025-.031
- Below 3 rd Comp. Ring	.053-.058	.042-.048	.070-.079	.070-.079
- 3 rd Ring Land	.053-.058	.062-.068	.127-.136	.127-.136
- 2 nd Ring Land	.076-.081	.082-.088	.127-.136	.127-.136
- 1 st Ring Land	.079-.084	.097-.103	.137-.146	.137-.146
Piston Ring End Gap	.082-.102	.095-.115	.100-.120	.100-.120
Piston Ring to Side of:				
- 1 st & 2 nd Groove	.0075-.010	.0075-.010	.010-.0125	.010-.0125
- All Other Grooves	.0055-.008	.0055-.008	.008-.0105	.008-.0105
Piston Crown to Head				
Gasket Surface (distance)	1.1875"	1.250"	2.250"	2.250"
Layshaft Drive Gear Backlash	.003-.005	.003-.005	.003-.005	.003-.005
Layshaft End Play	.005	.005	.005	.005
Mag Drive Shaft End Play	.003-.014	.003-.014	.003-.014	.003-.014
Governor Drive Shaft End Play	.003-.006	.003-.006	.003-.006	.003-.006
Flywheel Rim Runout (external start)			.020	.020
Mixer Manifold (min. thickness after regrind)				
- Old Style		4.425"	4.425"	4.425"
- New Plate Style (square)		.562"	.562"	.562"
- New Style Plate (round)	.937			
Torque Values (ft. lbs. for lubricated threads):				
Connecting Rod Bolts				
- Power-End	325-360	650-700	650-700	650-700
- Compressor-End	325-360	325-360	650-700	650-700
Cylinder Heads Stud Nuts	320	600	490	490
Piston Rod to Crosshead Nuts	3200	3200	3200	3200
Crosshead Pin Lock Screws	20	50	50	50
Piston Rod Lock Screws	20	50	50	50
Flywheel Bolt and Nuts	520	520	520	520
Cooler Drive Sheave Bolt/Nuts	225	225	225	225
Power Cyl. to Frame Studs	320	490	490	490
Main Bearing Support to Frame	150	150	150	150
Center Main Cap Bolts	250-265		250-265	250-265
Center Main Carrier to Frame Bolts	95		95	95
Compressor Guide to Frame Studs	180-200	180-200	280-300	280-300

UNIT SPERCIFICATIONS (cont'd)

B. CLEARANCE AND TORQUE VALUES (cont'd)

<u>Description</u>	<u>DPC-300</u>	<u>DPC-360&2802</u>
Clearances:		
Roller Main Bearing:		
- Fit to Shaft (tight)	.002-.004	.002-.004
- Bench Lateral (installed loose)	.0003-.0074	.0021-.0085
Center Main Bearing:	.004-.007	.004-.007
Crankpin Bearing-Power	.003-.006	.003-.006
- Side Clearance	.010-.026	.010-.026
- Compressor	.003-.006	.003-.006
- Side Clearance	.010-.026	.010-.026
Crosshead Pin Bearing-Power	.0044-.0074	.0044-.0074
- Compressor	.003-.006	.0035-.0055
Crosshead to Guide-Power	.008-.012	.009-.015
- Compressor	.012-.015	.012-.015
Piston to Power Cylinder:		
- Skirt	.027-.033	.027-.033
- Below 3 rd Comp. Ring	.067-.076	.067-.076
- 3 rd Ring Land	.142-.151	.142-.151
- 2 nd Ring Land	.142-.151	.142-.151
- 1 st Ring Land	.152-.161	.152-.161
Piston Ring End Gap	.115-.135	.115-.135
Piston Ring to Side of:		
- 1 st & 2 nd Groove	.010-.0125	.010-.0125
- All Other Grooves	.008-.0105	.008-.0105
Piston Crown to Head		
Gasket Surface (distance)	2.250"	2.250"
Layshaft Drive Gear Backlash	.003-.005	.003-.005
Layshaft End Play	.005	.005
Mag Drive Shaft End Play	.003-.014	.003-.014
Governor Drive Shaft End Play	.003-.006	.003-.006
Flywheel Rim Runout (external start)	.020	.020
Mixer Manifold (min. thickness after regrind)		
- Old Style	4.425"	4.425"
- New Plate Style (square)	.562"	.562"
Torque Values (ft. lbs. for lubricated threads):		
Connecting Rod Bolts		
- Power-End	650-700	650-700
- Compressor-End	650-700	650-700
Cylinder Heads Stud Nuts	600	600
Piston Rod to Crosshead Nuts	3200	3200
Crosshead Pin Lock Screws	50	50
Piston Rod Lock Screws	50	50
Flywheel Bolt and Nuts	520	520
Cooler Drive Sheave Bolt/Nuts	225	225
Power Cyl. to Frame Studs	490	490
Main Bearing Support to Frame	150	150
Center Main Cap Bolts	250-265	250-265
Center Main Carrier to Frame Bolts	95	95
Compressor Guide to Frame Studs	280-300	280-300

UNIT SPECIFICATIONS (cont'd)

B. CLEARANCE AND TORQUE VALUES (cont'd)

<u>Description</u>	<u>DPC-600&2803</u>	<u>DPC-800&2804</u>
Clearances:		
Main Bearing:	.0046-.0076	.0046-.0076
Thrust Bearing Side Clearance	.008-.018	.008-.018
Crankpin Bearing-Power	.003-.006	.003-.006
- Side Clearance	.010-.026	.010-.026
- Compressor	.003-.006	.003-.006
- Side Clearance	.022-.036	.022-.036
Crosshead Pin Bearing-Power	.0044-.0074	.0044-.0074
- Compressor	.0035-.0055	.0035-.0055
Crosshead to Guide-Power	.009-.013	.009-.015
- Compressor	.012-.015	.012-.015
Piston to Power Cylinder:		
- Skirt	.027-.033	.027-.033
- Below 3 rd Comp. Ring	.077-.086	.077-.086
- 3 rd Ring Land	.142-.151	.142-.151
- 2 nd Ring Land	.142-.151	.142-.151
- 1 st Ring Land	.152-.161	.152-.161
Piston Ring End Gap	.115-.135	.115-.135
Piston Ring to Side of:		
- 1 st & 2 nd Groove	.010-.0125	.010-.0125
- All Other Grooves	.008-.0105	.008-.0105
Piston Crown to Head		
Gasket Surface (distance)	2.250"	2.250"
Layshaft Drive Gear Backlash	.003-.005	.003-.005
Layshaft End Play	.005	.005
Mag Drive Shaft End Play	.003-.014	.003-.014
Governor Drive Shaft End Play	.003-.006	.003-.006
Flywheel Rim Runout (external start)	.020	.020
Mixer Manifold (min. thickness after regrind):		
- New Plate Style (square)	.562"	.562"
Torque Values (ft. lbs. for lubricated threads):		
Connecting Rod Bolts		
- Power-End	650-700	650-700
- Compressor-End	650-700	650-700
Frame Tie-Bar Bolts	260	260
Main Cap Studs (in frame)	250	250
Main Cap Nuts	360	360
Cylinder Heads Stud Nuts	600	600
Piston Rod to Crosshead Nuts	3200	3200
Crosshead Pin Lock Screws	50	50
Piston Rod Lock Screws	50	50
Flywheel Bolt and Nuts (split style)	520	
Flywheel Bolts (Ringfeder)		185
Cooler Drive Sheave Bolt/Nuts	225	
Cooler Drive Sheave (Ringfeder)		185
Vibration Damper Bolts		225
Power Cyl. to Frame Studs	490	490
Compressor Guide to Frame Studs	280-300	280-300

UNIT SPECIFICATIONS (cont'd)

C. Wear Limits 13-1/4" and 15" Bore Units ONLY

<u>Description</u>	<u>As New Limits</u>	<u>Max. Acceptable</u>
<u>Power-End</u>		
13-1/4" Cylinder Bore	13.247-13.251	13.263, Max of .002 TIR
13-1/4" Piston Skirt Diameter	13.220-13.222	13.213
13-1/4" Piston-to-Cylinder Clearance	.025-.031	.045
13-1/4" Piston Ring 1 & 2 Side Clearance	.010-.0125	.015
13-1/4" Piston Ring 3 & 4 Side Clearance	.008-.0105	.013
13-1/4" Piston Ring End Gap	.100-.126	.145
15" Cylinder Bore	14.997-15.001	15.013, Max of .002 TIR
15" Piston Skirt Diameter	14.968-14.970	14.961
15" Piston-to-Cylinder Clearance	.027-.033	.045
15" Piston Ring 1 & 2 Side Clearance	.010-.0125	.015
15" Piston Ring 3 & 4 Side Clearance	.008-.0105	.013
15" Piston Ring End Gap	.115-.135	.145
Piston Rod O.D.	2.497-2.500	2.495
Crosshead Guide	12.000-12.002	12.004
Crosshead O.D.	11.987-11.989	11.985
Crosshead-to-Guide Clearance	.009-.013	.016
Connecting Rod Pin Bushing I.D.	5.5044-5.5069	5.509
Connecting Rod Side Clearance	.010-.026	.029
Crosshead Pin O.D.	5.4995-5.500	5.4985, Max .001 TIR
Crosshead-to-Pin Clearance	.0044-.0074	.0085
Connecting Rod Bearing Bore	7.503-7.505	7.507, Max .001 TIR
Crank Pin O.D.	7.499-7.500	7.4975, Max .0015 TIR
Crank Pin-to-Bearing I.D. Clearance	.0044-.006	.0075
Main Bearing Journal O.D.	8.374-8.375	8.3725
Main Bearing I.D.	8.3796-8.3816	8.3831, Max .002 TIR
Main Journal-to-Bearing I.D. Clearance	.0046-.0076	.0091
Main Bearing Thrust (600, 800, 2803 & 2804 only)	.010-.020	.022
Layshaft Bearing Bore	1.502-1.503	1.504
Layshaft O.D.	1.498-1.500	1.497
Layshaft O.D.-to-Bearing Clearance	.002-.005	.007
Center Main Bearing I.D. (2 cyl units only)	7.754-7.756	7.757
Crankshaft Journal O.D. (2 cyl units only)	7.749-7.750	7.748
Center Main-to-Journal Clearance (2 cyl only)	.004-.007	.0084

Note: Specific Unit Performance and Maintenance Requirements May Vary Based on Application Conditions and Maintenance Practices.

These Component Dimensional Specifications and Wear Limits Should Be Used as a Guide for Maintenance Programs for Ajax Equipment.

UNIT SPECIFICATIONS (cont'd)

C. Wear Limits 13-1/4" and 15" Bore Units ONLY

<u>Description</u>	<u>As New Limits</u>	<u>Max. Acceptable</u>
<u>Compressor-End</u>		
Piston Rod, 2-1/2"	2.497-2.500	2.495
Piston Rod, 2-1/4"	2.249-2.250	2.2455
Crosshead Guide	11.999-12.001	12.008
Crosshead O.D.	11.984-11.986	11.982
Crosshead-to-Guide Clearance	.011-.015	.018
Connecting Rod Pin Bushing I.D.	4.5035-4.5062	4.507
Crosshead Pin O.D.	4.4995-4.500	4.4985
Crosshead-to-Pin Clearance	.0044-.006	.0066
Connecting Rod Bearing I.D.	7.503-7.505	7.506
Crank Pin O.D.	7.499-7.500	7.498
Crank Pin-to-Bearing Clearance	.0042-.0066	.008

Note: Specific Unit Performance and Maintenance Requirements May Vary Based on Application Conditions and Maintenance Practices.

These Component Dimensional Specifications and Wear Limits Should Be Used as a Guide for Maintenance Programs for Ajax Equipment.