



***THE WORK PRO®***

PARTS LIST FOR  
AIR COMPRESSOR  
***AM2-PH09-08WP***  
***AM2-PM09-08WP***

ENGINE OIL GRADE:	SAE 10W-30
ENGINE OIL CAPACITY	
HONDA/Mi-T-M:	37 oz.
MAXIMUM PRESSURE:	175 PSI
COMPRESSOR OIL GRADE:	SAE30W NON-DETERGENT
COMPRESSOR OIL CAPACITY:	40.5 oz. / 1.2 L

This Parts Listing has been compiled for your benefit. You can be assured your Mi-T-M Gasoline Air Compressor was constructed and designed with quality and performance in mind. Each component has been rigorously tested to insure the highest level of acceptance.

The contents of this Parts Listing are based on the latest product information available at the time of publication. Mi-T-M reserves the right to make changes in price, color, materials, equipment, specifications or models at any time without notice.

### **WARNING**

**THIS IS A PROFESSIONAL GASOLINE AIR COMPRESSOR. CAUTION SHOULD BE OBSERVED WHEN USING OR REPAIRING THIS UNIT! READ AND FOLLOW THE SAFETY WARNINGS LISTED BELOW BEFORE ATTEMPTING ANY REPAIRS ON THIS GASOLINE AIR COMPRESSOR!**

### **SAFETY WARNINGS**

1. NEVER alter or modify the equipment. Be sure any accessory items and system components being used will withstand the pressure developed. Serious injury may occur from an air compressor malfunction or exploding accessories if incorrect system components, attachments or accessories are used. NEVER exceed manufactures maximum allowable pressure rating of attachments. Use only genuine Mi-T-M parts for repair of your air compressor. Failure to do so can cause hazardous operating conditions and will VOID warranty.
2. NEVER make adjustments on machinery while the unit is connected to the engine without first removing the ignition cable from the spark plug. Turning over the machinery by hand during adjustment or cleaning might start the engine and machinery with it, causing serious injury to the operator.
3. Know how to stop and bleed pressures quickly. Be thoroughly familiar with controls. Do not operate without protective covers/ guards.
4. Before servicing the unit, turn unit off, relieve the pressure and allow the unit to cool down. Service in a clean, dry, flat area. Block the wheels to prevent the unit from moving. Be especially careful to properly dispose of any flammable materials.
5. After testing the machine, DO NOT leave the pressurized unit unattended. Shut off the unit and release pressure before leaving.

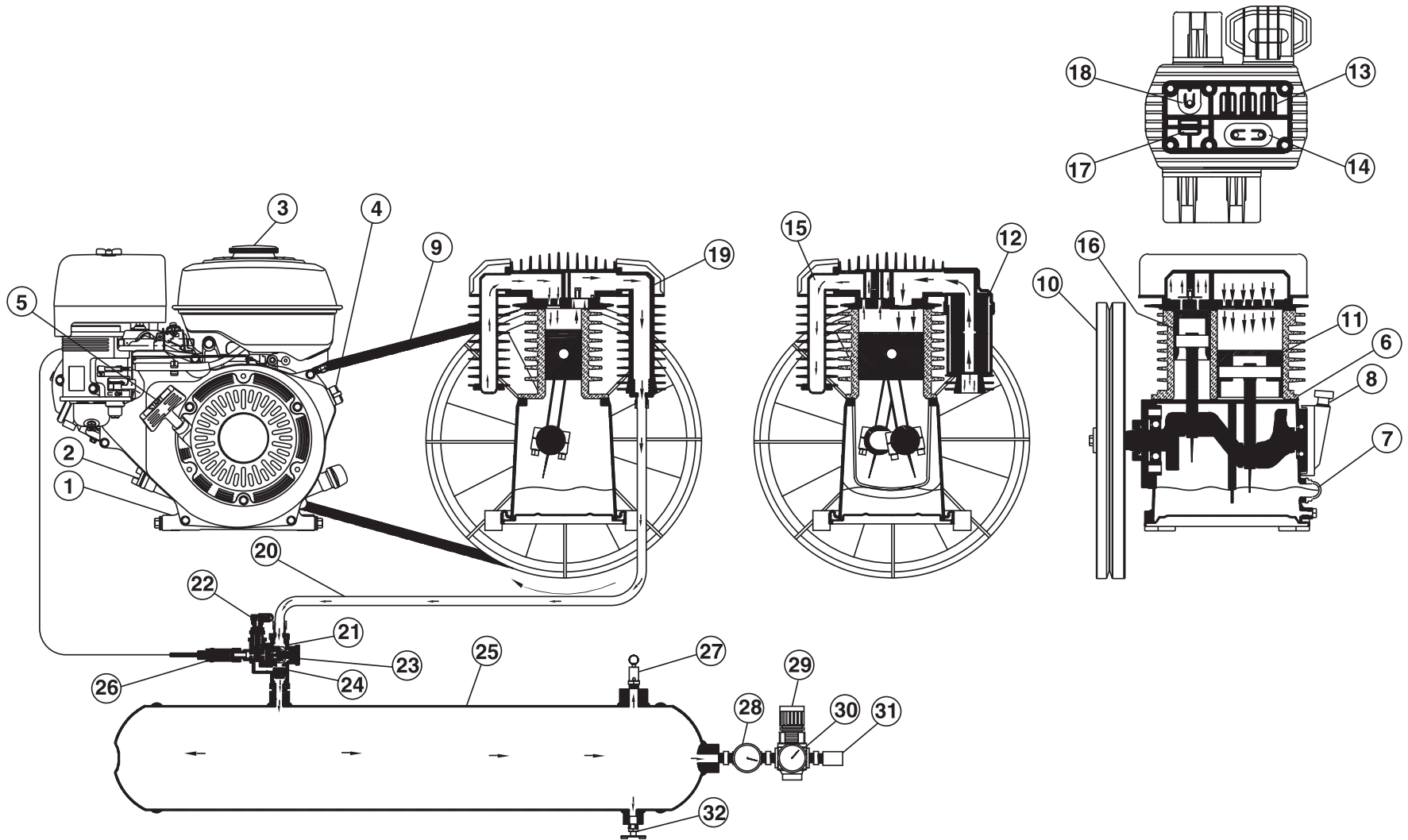
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## SPECIFICATIONS

MODEL NUMBER	AM2-PH09-08WP	AM2-PM09-08WP
Engine:	HONDA	MI-T-M
Model	GX270	300CC
Engine Type	4 stroke, overhead valve, single cylinder	
Oil Type	SAE 10W-30	
Oil Capacity (oz.)	37	
Low Oil Protection	Oil Alert™	
Fuel Type	Unleaded Gasoline 86 Octane Minimum	
Fuel Capacity (Gal/L)	1.4 / 5.3	
Starting	Recoil	
Engine RPM	3500	
Idle RPM	2200-2400	
Compressor Pump:		
Number of Cylinders	2	
Compression Stages	2	
First Stage Bore (in/mm)	3.94 / 100	
Second Stage Bore (in/mm)	2.05 / 52	
Stroke	2.37"	
RPM	1250	
Flywheel	15 11/16"	
Lubrication	Splash	
Oil Quantity (oz./L)	40.5 / 1.2	
Oil Type	30 W Non Detergent	
Crankcase	Aluminum	
Bearings	Ball	
Cylinder	Cast Iron	
Valves	Reed	
Head	Aluminum	
Filter	Foam Filter	
Pilot Valve Setting:		
Cut-out	175 PSI	
Cut-in	145 PSI	
AIR TANK:		
Capacity	8 gallons	
PERFORMANCE:		
CFM Air Displacement	28.7	
CFM @ 40 PSI	16.8	
CFM @ 100 PSI	16.6	
CFM @ 175 PSI	16	
Maximum Pressure	175 PSI	
Pump-up Time: 0-175 PSI	47 seconds	
Recovery Time: 145-175 PSI	6 seconds	
WEIGHT:		
Net	175 lbs	
Shipping	200 lbs	
DIMENSIONS:		
Basic L x W x H	44" x 26" x 33"	
Shipping L x W x H	48.5" x 30.5" x 40"	

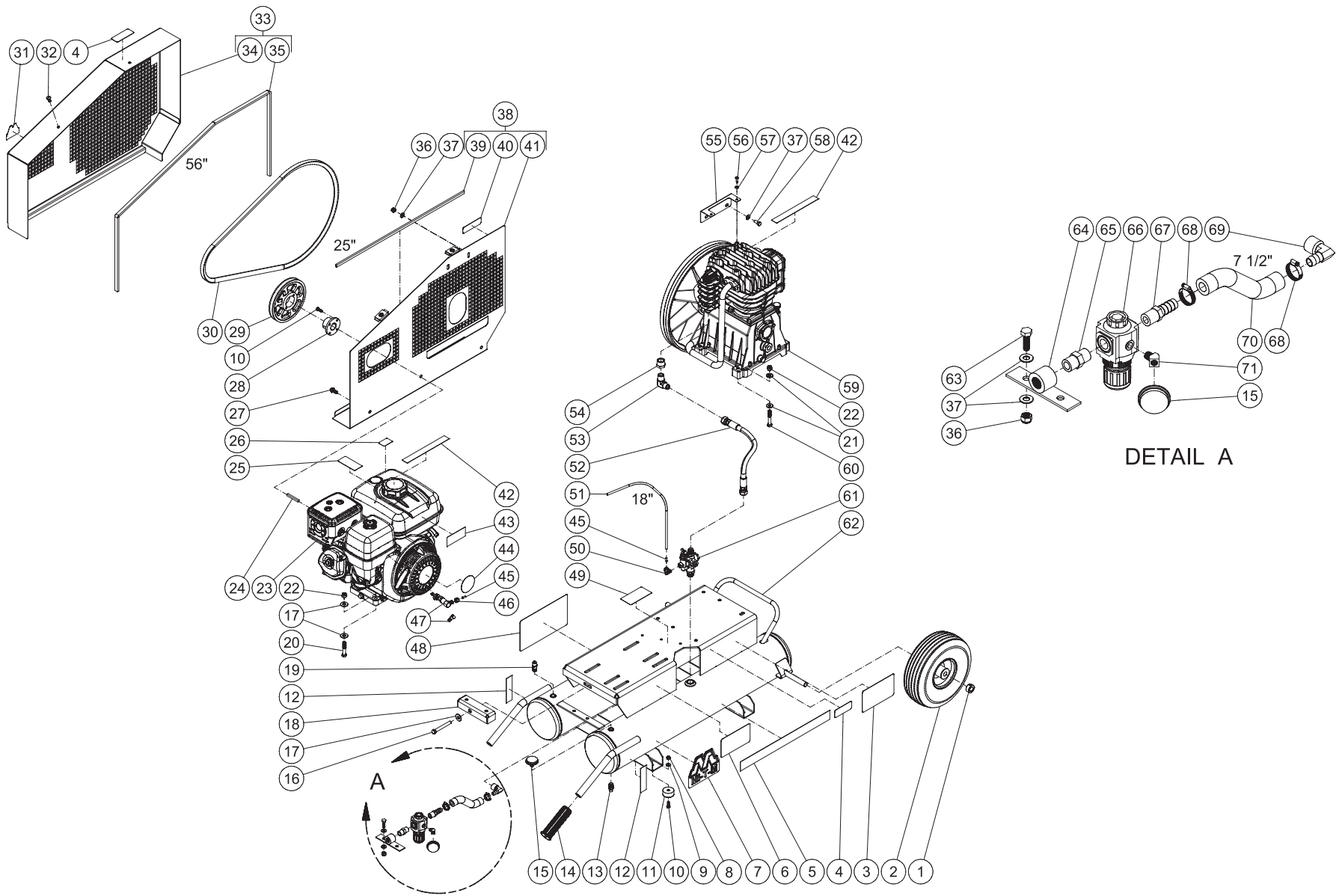
# FLOW CHART



## GENERAL THEORY OF OPERATION

1. The **ENGINE (1)** supplies power to the air compressor.
  - a. The **ENGINE (1)** is lubricated by oil. The oil level should be checked before each use by removing the **ENGINE OIL DIPSTICK (2)**.
  - b. The **ENGINE (1)** runs on gasoline. The **FUEL TANK (3)** level should be checked before each use.
  - c. The **ENGINE ON/OFF SWITCH (4)** and **STARTER ROPE (5)** are used to start the engine.
  - d. Refer to engine owner's manual for appropriate starting procedures and requirements of the **ENGINE (1)**.
2. The **COMPRESSOR PUMP (6)** is lubricated by oil. The oil level should be checked before each use by viewing the **COMPRESSOR PUMP OIL SIGHTGLASS (7)**. If the oil level is low, add SAE-30W non-detergent oil to the **COMPRESSOR PUMP OIL FILL PORT (8)**.
3. When the unit is operating, the **V-BELT (9)** turns the **COMPRESSOR PUMP FLYWHEEL (10)** which rotates the crankshaft and moves the pistons.
4. As the **FIRST STAGE PISTON (11)** moves down, air is drawn in through the **INLET AIR FILTER (12)**. Then through the **FIRST STAGE INLET REED VALVES (13)** and into the first stage piston chamber. At the same time, the **FIRST STAGE OUTLET REED VALVES (14)** is closed. This allows air to fill the first stage piston chamber.
5. As the **FIRST STAGE PISTON (11)** moves upward, the **FIRST STAGE INLET REED VALVE (13)** closes. The **FIRST STAGE OUTLET REED VALVE (14)** opens allowing the compressed air to flow into the **INTERCOOLER (15)** and into the second stage.
6. As the **SECOND STAGE PISTON (16)** moves down, the first stage compressed air is drawn in through the **SECOND STAGE INLET REED VALVES (17)** and into the second stage piston chamber. At the same time, the **SECOND STAGE OUTLET REED VALVES (18)** is closed.
7. As the **SECOND STAGE PISTON (16)** moves upward, the **SECOND STAGE INLET REED VALVES (17)** closes. The **SECOND STAGE OUTLET REED VALVES (18)** opens allowing the compressed air to flow into the **AFTERCOOLER (19)** and **DISCHARGE LINE (20)**.
8. The compressed air then enters the **PILOT CONTROL VALVE (21)** which has an **TOGGLE KNOB (22)** with two positions.
  - a. **Easy Start Position:** When the **TOGGLE KNOB (22)** is in the *open* position (*vertical*) air moves out the **PILOT VALVE MUFFLER (23)** allowing the **ENGINE (1)** to start under no-load conditions .
  - b. **Constant Run Position:** When the **TOGGLE KNOB (22)** is in the *closed* position (*horizontal*) the compressed air opens the **CHECK VALVE (24)** and moves into the **AIR TANK (25)**. When the pressure in the **AIR TANK (25)** reaches the maximum pressure setting of the **PILOT CONTROL VALVE (21)**, the excess air exits the **PILOT VALVE MUFFLER (23)** and the **CHECK VALVE (24)** will close. At the same time the **THROTTLE CONTROL (26)** allows the **ENGINE (1)** to idle down.
9. The **SAFETY RELIEF VALVE (27)** protects the system from any overpressure conditions.
10. The **TANK PRESSURE GAUGE (28)** indicates tank pressure. The **AIR PRESSURE REGULATOR (29)** can be adjusted to the desired operating pressure which is indicated on the **OUTLET PRESSURE GAUGE (30)**. The air exits through the **OUTLET FITTING (31)**.
11. The **ENGINE ON/OFF SWITCH (4)** stops the **ENGINE (1)** when moved to the "OFF" position.
12. When the **ENGINE (1)** is off, compressed air should be released from the **AIR TANK (25)** by opening the attached air tool or by pulling on the **SAFETY RELIEF VALVE (27)**. When the **TANK PRESSURE GAUGE (28)** registers less than 10 PSI, drain the condensation from the **AIR TANK (25)** by opening the **TANK DRAIN (32)**.

# TANK ASSEMBLY FOR AM2-PH09-08M AND AM2-PM09-08WP

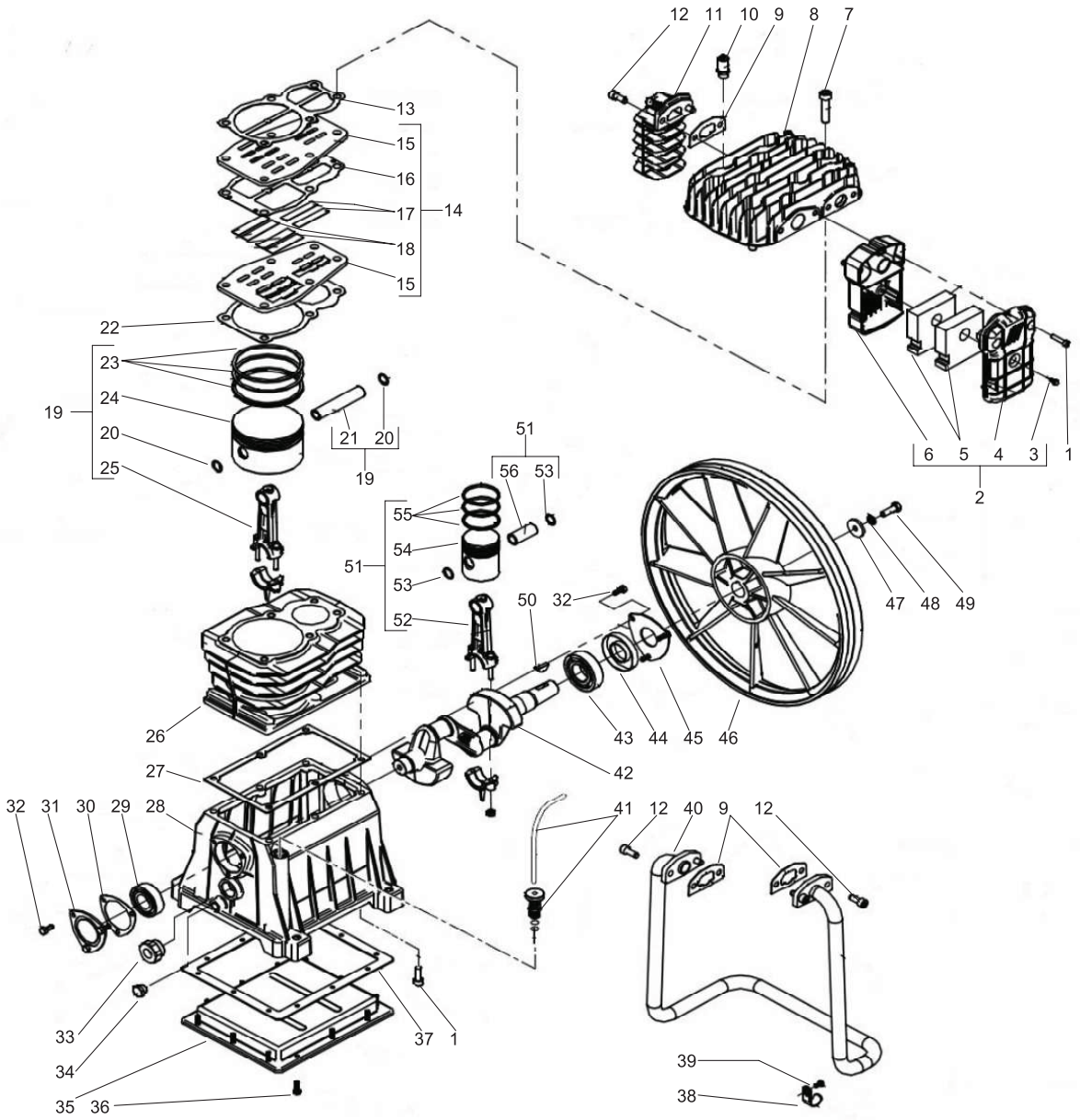


AM2-PH09 & PM09-08WP 113016 ALC

## TANK ASSEMBLY FOR AM2-PH09-08M AND AM2-PM09-08WP

ITEM	DESCRIPTION	PART #	QTY	ITEM	DESCRIPTION	PART #	QTY
1	COLLAR	33-0351	2	37	WASHER	28-0003	8
2	WHEEL	14-0130	2	38	BELTGUARD BACK ASSEMBLY	854-0154	1
3	DECAL - MAINTENANCE INSTRUCTIONS (SEE 71-2005)	N/A	1	39	EDGING *(THREE FEET REQUIRED)	33-0020	1
4	DECAL - RISK OF BURNS (SEE 71-2005)	N/A	2	40	DECAL - WARNING (SEE 71-2005)	N/A	1
5	DECAL - 17" STRIPE	34-2188	1	41	BELTGUARD BACK	N/A	1
6	DECAL - OPERATING INSTRUCTIONS (SEE 71-2005)	N/A	1	42	DECAL - CHECK OIL	N/A	2
7	DECAL - Mi-T-M	34-2169	1	43	DECAL (SEE KIT 71-2005)	34-2774	1
8	LOCKNUT	30-0155	2	44	DECAL - REWIND 300CC (PM09)	34-3181	1
9	WASHER	28-0002	2	45	TUBE SUPPORT	23-0486	2
10	BOLT	27-0015	4	46	NUT	23-0315	1
11	ISOLATOR	14-0a069	2	47	THROTTLE CONTROL/HONDA	854-0092	1
12	DECAL - TANK DRAIN (SEE 71-2005)	N/A	2	48	DECAL - CAUTION/WARNING/DANGER (SEE 71-2005)	N/A	1
13	PETCOCK	23-0312	2	49	DECAL - SILVER STICKER	N/A	1
14	HANDLE GRIP	7-0059	2	50	ELBOW	23-0316	1
15	PRESSURE GAUGE	22-0271	2	51	HOSE *(TWO FEET REQUIRED)	15-0238	1
16	BOLT	27-0576	1	52	HOSE	15-0334	1
17	WASHER	28-0023	9	53	90° ELBOW FITTING	24-0074	1
18	TIGHTENER BRACKET	20-0650A01	1	54	BUSHING	23-0023	1
19	PRESSURE RELIEF VALVE	22-0267	1	55	BRACKET	13-0235A01	1
20	BOLT	27-0121	4	56	BOLT	27-3064	2
21	WASHER	28-0022	8	57	WASHER	28-0001	2
22	LOCKNUT	30-0159	8	58	BOLT	27-0066	2
23	ENGINE - HONDA (PH09)	1-0065	1	59	PUMP	3-0427	1
-	ENGINE - MITM (PM09)	1-0231	1	60	BOLT	27-0122	4
24	KEY	43-0078	1	61	PILOT VALVE	22-0270	1
25	DECAL - MUFFLER HOT (SEE 71-2005)	N/A	1	62	AIR TANK ASSEMBLY	N/A	1
26	DECAL - ENGINE FUEL (SEE 71-2005)	N/A	1	63	BOLT	27-0067	2
27	BOLT	27-9524	3	64	REGULATOR MOUNTING BRACKET	20-0421A01	1
28	BUSHING	9-0005	1	65	NIPPLE	24-0010	1
29	SHEAVE	10-0103	1	66	REGULATOR	22-0231	1
30	BELT	11-0058	1	67	HOSE BARB	23-0105	1
31	DECAL - Mi-T-M	34-2167	1	68	HOSE CLAMP	42-0011	2
32	FASTENER	33-0197	2	69	HOSE BARB	23-0418	1
33	BELTGUARD COVER ASSEMBLY	854-0067	1	70	HOSE *(ONE FOOT REQUIRED)	15-0007	1
34	BELTGUARD FRONT	N/A	1	71	ELBOW	23-0133	1
35	EDGING *(FIVE FEET REQUIRED)	33-0020	1	-	DECAL SET - AM2-PH09 & PM09-08WP	71-2005	1
36	LOCKNUT	30-0157	4		*MUST ORDER IN ONE FOOT LENGTHS		

# PUMP ASSEMBLY (3-0427)



TORQUE SPECS		
POSITION	FT LBS	NM
7	18	25
12	18	25
32	7.5	10
36	18	25
49	18	25

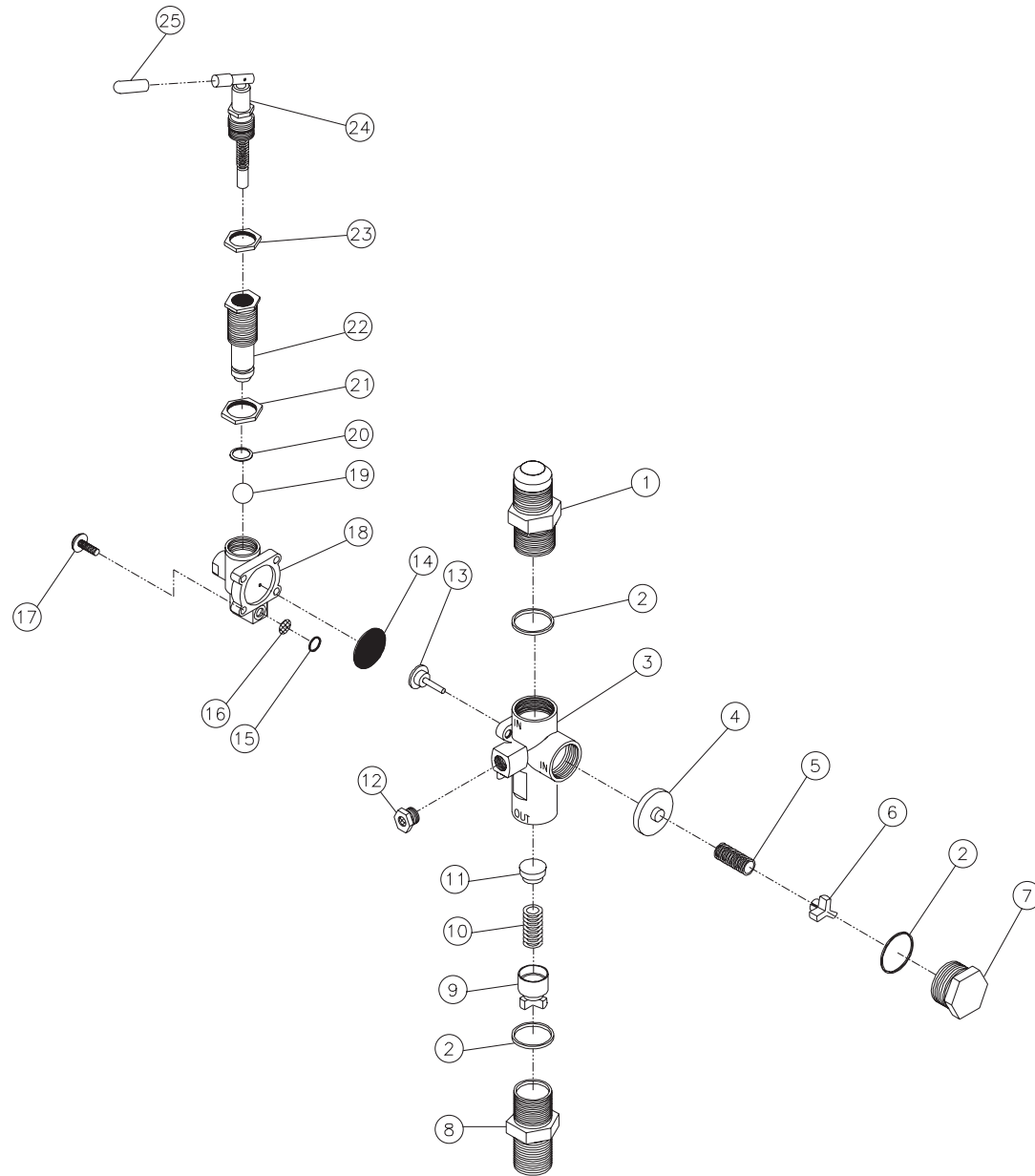
3-0427 030716 ALC



## PUMP ASSEMBLY

ITEM	DESCRIPTION	PART #	QTY	ITEM	DESCRIPTION	PART #	QTY
1	SCREW	27-8433	8	30	REAR COVER GASKET (SEE KIT 70-0687)	SEE KIT	1
2	AIR FILTER ASSY KIT (INC. 3-6)	70-0683	1	31	REAR CRANKCASE COVER	46-1675	1
3	SCREW (SEE KIT 70-0683)	27-8901	1	32	BOLT	27-8906	6
4	AIR FILTER COVER (SEE KIT 70-0683)	SEE KIT	1	33	OIL SIGHT GLASS	46-1657	1
5	AIR FILTER (SEE KIT 70-0683)	19-0285	2	34	PLUG	39-0368	1
6	AIR FILTER HOUSING (SEE KIT 70-0683)	SEE KIT	1	35	CRANKCASE BOTTOM PAN	46-1676	1
7	BOLT	27-8466	6	36	BOLT	27-8878	12
8	PUMP HEAD	46-1671	1	37	CRANKCASE BOTTOM GASKET (SEE KIT 70-0687)	SEE KIT	1
9	AFTERCOOLER GASKET (SEE KIT 70-0687)	SEE KIT	3	38	AFTERCOOLER BRACKET	13-0242	1
10	SAFETY VALVE	22-0505	1	39	SCREW	27-8189	1
11	AFTERCOOLER	46-1672	1	40	INTERCOOLER HOSE	46-1677	1
12	BOLT	27-8432	6	41	OIL DIPSTICK ASSY	39-0385	1
13	PUMP HEAD GASKET (SEE KIT 70-0687)	SEE KIT	1	42	CRANKSHAFT	46-1678	1
14	REED VALVE ASSY KIT (INC. 15-18)	70-0684	1	43	BALL BEARING	48-0106	1
15	REED VALVE PLATE (SEE KIT 70-0684)	SEE KIT	2	44	OIL SEAL (SEE KIT 70-0687)	SEE KIT	1
16	VALVE PLATE MIDDLE GASKET (SEE KIT 70-0684)	SEE KIT	1	45	FRONT CRANKCASE COVER	46-1679	1
17	HP REED VALVE (SEE KIT 70-0684)	SEE KIT	2	46	FLYWHEEL	10-0166	1
18	LP REED VALVE (SEE KIT 70-0684)	SEE KIT	4	47	WASHER	28-0022	1
19	PISTON ASSY KIT (INC. 20, 21, 23, 24, 25)	70-0685	1	48	LOCKWASHER	28-1009	1
20	LP SNAP RING (SEE KIT 70-0685)	SEE KIT	2	49	BOLT	27-8062	1
21	LP PISTON PIN (SEE KIT 70-0685)	SEE KIT	1	50	KEY	43-0149	1
22	CYLINDER GASKET (SEE KIT 70-0687)	SEE KIT	1	51	HIGH PRESSURE ASSY KIT (INC. 52-56)	70-0686	1
23	LP PISTON RING ASSY (SEE KIT 70-0685)	46-1673	1	52	HP CONNECTING ROD (SEE KIT 70-0686)	SEE KIT	1
24	LP PISTON (SEE KIT 70-0685)	SEE KIT	1	53	HP SNAP RING (SEE KIT 70-0686)	SEE KIT	2
25	LP CONNECTING ROD (SEE KIT 70-0685)	SEE KIT	1	54	HP PISTON (SEE KIT 70-0686)	SEE KIT	1
26	CYLINDER	46-1681	1	55	HP PISTON RING ASSY (SEE KIT 70-0686)	46-1680	1
27	CRANKCASE TOP GASKET (SEE KIT 70-0687)	SEE KIT	1	56	HP PISTON PIN (SEE KIT 70-0686)	SEE KIT	1
28	CRANKCASE	46-1674	1	-	SET OF GASKETS KIT (INC. 9, 13, 22, 27, 30, 37, 44)	70-0687	1
29	BALL BEARING	48-0097	1				

# PILOT VALVE (22-0270)



22-0270-062905-DLG

PILOT VALVE (22-0270)			
REF #	DESCRIPTION	PART #	QTY
1	Inlet Port Fitting	N/A	1
2	O-ring (See 70-0241)	N/A Sep.	3
3	Main Body	N/A	1
4	Piston Assembly-Unloader Valve (See 70-0241)	N/A Sep.	1
5	Spring-Unloader Valve (See 70-0241)	N/A Sep.	1
6	Spring Seat-Unloader Valve	N/A	1
7	Cap	N/A	1
8	Discharge Port Fitting	N/A	1
9	Spring Seat Assembly-Check Valve	N/A	1
10	Spring-Check Valve (See 70-0241)	N/A Sep.	1
11	Piston-Check Valve (See 70-0241)	N/A Sep.	1
12	Muffler	23-0419	1
13	Stem Unloader (See 70-0241)	N/A Sep.	1
14	Diaphragm (See 70-0241)	N/A Sep.	1
15	O-ring (See 70-0241)	N/A Sep.	1
16	Screen (See 70-0241)	N/A Sep.	1
17	Screw w/Washer	N/A	4
18	Pilot Body	N/A	1
19	Ball (See 70-0241)	N/A Sep.	1
20	O-ring (See 70-0241)	N/A Sep.	1
21	Differential Adjusting Locknut	N/A	1
22	Differential Adjusting Nut	N/A	1
23	Pressure Adjusting Locknut	N/A	1
24	Pressure Adjusting Toggle Assembly (See 70-0241)	N/A Sep.	1
25	Red Toggle Cover	N/A	1
	Repair Kit (Includes 4-5, 10-11, 13-16, 19-20, 24 and 3 each 2)	70-0241	

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