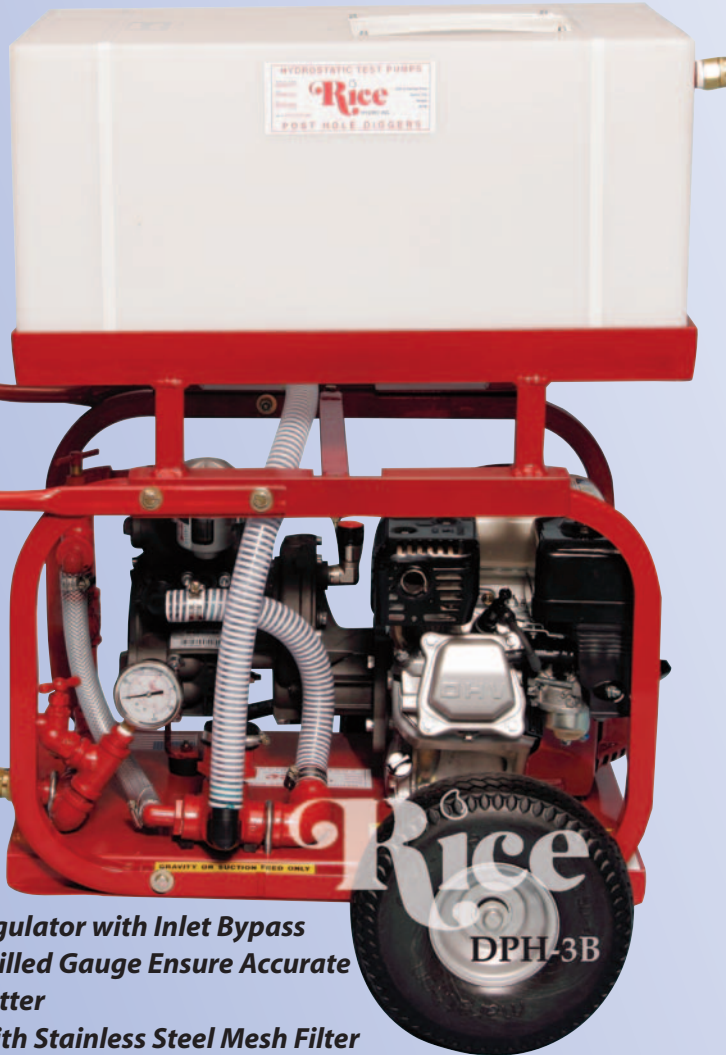


## HYDROSTATIC TEST PUMPS

## Model DPH-3B • 11GPM • 550PSI

\* Shown with optional  
Wheel and Handle Kit.



- Automatic Pressure Regulator with Inlet Bypass
- Stainless Steel Liquid-Filled Gauge Ensure Accurate Readings, with Less Flutter
- Inlet Hose Assembly, with Stainless Steel Mesh Filter
- Rugged Roll-Cage Construction Protects Pump from Damage

The DP-3, a triple diaphragm pump, recognized as the most versatile sought after hydrostatic test pump on the market. Exceptionally smooth and quiet operation in comparison to the twin diaphragm, the triple diaphragm requires no pressure accumulator. EXCLUSIVE, to the RICE Hydro triple diaphragm pump is the "DURAphragm technology", where pressure is spread across the entire face of the diaphragm virtually eliminating torn, damaged diaphragms. Another design upgrade is the inlet suction diaphragm assembly, eliminating the concern for ruptured diaphragms caused by pressure feeding, is now a separate assembly from the pump, which can be added at any time. The diaphragm design allows for the handling of up to a 10% chlorine solution, and the ability to be run dry without damaging the pump. A large volume, medium pressure test pump, this unit is recommended for testing up to 24" diameter lines. The DP-3 is available with Briggs & Stratton, Robin or Honda engine options.

**Rice**  
HYDRO INC.

3500 Arrowhead Drive  
Carson City  
Nevada  
89706

web site:  
[www.ricehydro.com](http://www.ricehydro.com)

e-mail:  
[ricehydro@aol.com](mailto:ricehydro@aol.com)

Phone:  
(775) 885-1280

Fax:  
(800) 998-7423

## S P E C I F I C A T I O N S

- INLET: 1" hosebarb, with 9ft. hose and strainer  
Inlet hose assembly included on units not purchased with tank accessory
- OUTLET: 1/2" with Quick Connect Couplings  
High pressure 8ft. hose  
Pressure regulator adjusting to 550 PSI
- PUMP: Triple Diaphragm, inner oil bath protection, innovative "DURAphragm technology", and helical gear reduction.
- OUTPUT FLOW: 11 GPM
- MAX. OUTPUT PRESSURE: 550 PSI
- ENGINE: 163 CC, air-cooled, 4-cycle, Briggs or Honda engine option available
- SHIPPING DIMENSIONS: 25" x 21" x 17"
- SHIPPING WEIGHT: 106#, Weight: 91#

Hydrostatic Test Pumps • Post Hole Diggers

## HYDROSTATIC TEST PUMPS

## Model DP-Series • 56 GPM • 600 PSI



\*DPH-8 Shown with optional wheel and handle kit.

The DP Series hydrostatic test pumps are large volume, medium pressure units, with flow rates up to 56 GPM and pressures up to 600 PSI. Designed to quickly fill and test lines up to 96" in diameter. Unique to the diaphragm pumps are their ability to handle up to a 10% chlorine solution, and can be run dry without damage to the pump.

## MODELS:

**DPH-8** 32 GPM 300 PSI  
Triple diaphragm, 270 CC engine

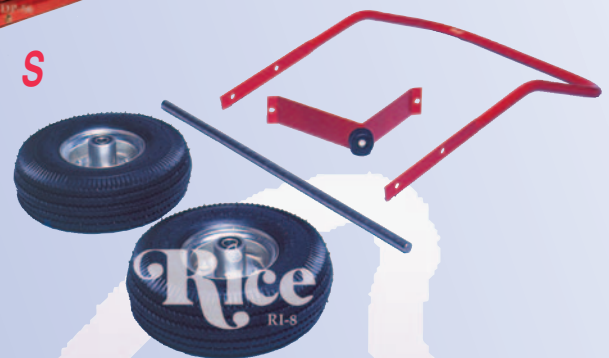
**DPH-56/250** 56 GPM 250 PSI  
Six diaphragm, 389 CC engine

## A C C E S S O R I E S

## Pressure Feed Tanks

The pressure feed tank accessory allows the inlet pressure feeding of the diaphragm series test pumps.

Saving time, labor, repair and maintenance costs, by virtually eliminating the rupture/damage of diaphragms caused by excessive inlet pressure. The heavy duty polypropylene tank provides easy access for chemical treatment of water lines and test environment, eliminating the need for a 55 gallon water drum.




## Wheel &amp; Handle Kits

Rice Hydro offers a wheel kit accessory, making your hydrostatic test pump truly portable, with increased mobility. Saving time and labor, while minimizing cost and liability.

RICE HYDRO, INC.  
MANUFACTURER'S OPERATING INSTRUCTIONS  
TEST PUMP MODEL DP-Series (3/6/8/56-250)  
**FOR WARRANTY REGISTRATION CALL: 1-800-245-4777**

TO ATTACH FLOW METER - CALL FACTORY FOR INSTRUCTIONS

 **WARNING:** Operating, servicing and maintaining this equipment can expose you to chemicals including engine exhaust, carbon monoxide and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, operate and service your equipment in a well-ventilated area and wear gloves or wash your hands frequently when servicing your equipment. For more information go to: [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

**CAUTIONS:**

1. Check **ALL** fluid levels prior to operating the unit.
2. Use the inlet hose that was supplied, or a similar type suction hose the same size as the inlet piping.
3. NEVER connect the inlet of the pump directly to a pressurized water source.
4. Protect the pump from freezing, FLUSH with anti-freeze after each use.

**CONNECTING THE PUMP:**

1. Check pump oil thru reservoir sight glass, half-way to the top is full. Use 30w non-detergent oil.
2. Check oil level in engine crankcase, use (10W30) as needed.
3. Check oil level in the gear reduction, use (90W) as needed. Oil should be level with the side plugs.
4. On units 6/8 accumulator head is equipped with a valve stem to adjust air pressure of the accumulator diaphragm. Set between 90-120 psi. This is a small cavity and will take very little air to do so.
5. Connect inlet hose assembly provided. The pump MUST be either suction fed (such as out of a barrel), or gravity fed (from a water truck).

**A PRESSURIZED LINE CANNOT BE USED TO SUPPLY WATER TO THE PUMP.**

Never connect the unit to a water source such as a standpipe, hose bib tap water faucet, etc. ... **unless a PRESSURED FEED Tank accessory is added.** The source of water should be within 8-10 ft. maximum.

6. Connect high pressure outlet hose supplied by manufacturer with quick connects or direct fitting as provided. If using a hose other than that supplied by manufacturer, PSI and burst rate must meet or exceed manufacturer's requirements.

### OPERATING THE PUMP:

1. Turn the outlet ballvalve to the open position, and start the engine. The engine RPM is preset at the factory, **DO NOT ADJUST!**
2. The pressure regulator has been preset at the factory. ***To change this setting you must make this adjustment while the water is flowing freely, and under NO pressure.*** To adjust the pressure, first loosen the locknut. Turn the T-handle/Knob clockwise to increase and counterclockwise to decrease the pressure. Place a ballvalve or similar open and close valve at the end of the outlet hose, open and close this valve multiple times as needed, to check pressure setting and re-adjust as necessary. It is also recommended that you open and close the hosebib located under the gauge to bleed excess air from piping and ensure accurate pressure gauge readings. Upon reaching desired pressure setting, tighten locknut and prepare to begin test.
3. With the ballvalve open begin building pressure in the test environment. Be sure to bleed the air from hosebib under gauge at least once during this process. Once test pressure has been reached, **close the ballvalve and shut-off engine.** An inlet checkvalve prevents water pressure from bleeding back into the pump.
4. Once the outlet ballvalve is closed and your test begins, you have now isolated the test pump from the test environment, any loss of pressure is due to leaks or trapped air being compressed in the test environment.

### REMEMBER THESE CAUTIONS:

1. Check all fluid levels prior to operating pump.
2. Use the inlet hose that was supplied, or use a suction hose the same size as the inlet piping.
3. NEVER connect the inlet of the pump directly to a pressurized source.
4. Protect the pump from freezing, FLUSH with anti-freeze

### RECOMMENDED PERIODIC MAINTENANCE PROCEDURE

1. Change engine oil after the first 80 hours of operation thereafter every 250 hours of use or every season.
2. Change the oil in the pump body after the first 50 hours of operation thereafter every 250 hours.

## ***TROUBLE SHOOTING FOR DP-SERIES HYDROSTATIC TEST PUMP***

### **IF PUMP FAILS TO BUILD PRESSURE:**

1. Look for leaks in water supply hose and connections.
2. Supply hose is too small. Filter may be clogged.
3. Supply hose may be kinked or collapsed. Maximum of 9 feet.
4. The Pump may be sucking air. Small holes in the supply hose are hard to find since the air is drawn inward, therefore no bubbles would be present. Replace the supply hose. Possible loose piping or connections.
5. T-handle/Knob on pressure regulator may be set incorrectly.
6. Faulty pressure gauge, replace.
7. Pump is running too slow. Advance throttle on engine to between 3400-3600 RPM, but no higher.
8. Pipeline being tested may have leaks, or an open valve. Isolate the pump and do a self-test, by placing a ballvalve at the end of the outlet hose.
9. Foreign material may be lodged in a valve, preventing the valve from seating properly. Remove cylinder head. Remove valve assemblies, clean and replace.
10. Airlock. With pump running, open and close bleed valves several times to remove the air that may be trapped in the piping.
11. Diaphragms may be ruptured, oil in crankcase will be milky white. Drain oil from pump and install new diaphragms.
12. No air in accumulator head on models 6/8, reset between 90-120 psi.

PARTS BREAKDOWN FOR MODEL DP(H)-3B w/COMET  
RICE HYDRO INC.

PUMP PARTS:

REF#	PART NUMBER..	DESCRIPTION..	QTY REQ'D
1	D3-3020-0002	RETAINING CLIP	1
2	D3-0019-0085	SEALING RING	1
3	D3-0001-0444	SHAFT	1
4	D3-0010-0026	CONNECTING ROD RING	2
5	D3-0438-0001	BEARING	1
6	D3-3019-0001	RETAINING CLIP	1
7	D3-0438-0066	BEARING	1
8	D3-0403-0147	CRANKCASE	1
12	D3-3200-0080	OIL PLUG	1
13	D3-3605-0027	BOLT	3
14	D3-0602-0008	DISC	3
15	D3-1800-0020	DIAPHRAGM (in KIT's RH1 & RH2)	3
16	D3-0400-0080	PISTON SLEEVE	3
17	D3-0020-0010	COMPRESSION RING	3
18	D3-2409-0097	PISTON	3
19	D3-0205-0069	CONNECTING ROD (SET OF 3)	1
20	D3-3011-0024	PIN	3
21	D3-3020-0029	RETAINING CLIP	6
22B	D3-3609-0006	ONLY AVAILABLE IN KIT RH5	2
25B	D3-1210-0390	O-RING	1
26A	D3-2803-0662	OUTLET ADAPTER KIT - after S/N 40908	1
26A	D3-2803-0474	OUTLET ADAPTER KIT - before S/N 40908	1
27	D3-0402-0522	ONLY AVAILABLE IN KIT RH5	1
28	D3-1800-0001	ONLY AVAILABLE IN KIT RH5	1
29	D3-1809-0001	ONLY AVAILABLE IN KIT RH5	1
30	D3-1210-0030	ONLY AVAILABLE IN KIT RH5	1
31	D3-0421-0035	ONLY AVAILABLE IN KIT RH5	1
36	D3-3609-0014	SCREW	12
37	D3-2811-0004	WASHER	12
38	D3-3218-0537	HEAD (DX) located top and inlet side Ref #38A spacer included with 3218-0537	2
38A	D3-0601-0436	SPACER	2
44	D3-1220-0052	VALVE ASSY W/ORING (in KIT's RH1, RH3)	6
45	D3-1210-0015	O-RING FOR #46 PLUG (in KIT's RH1, RH3)	6
46	D3-3202-0259	PLUG	3
47	D3-3609-0032	SCREW	6
48	D3-1210-0145	O-RING	1
49	D3-2000-0100	NIPPLE	1
50	D3-1210-0048	O-RING	1
51	D3-2801-0075	HOSE BARB	1
52	D3-1200-0049	WING NUT	1
53	D3-1210-0048	O-RING #38/54 (in KIT's RH1, RH2, RH3)	6
54	D3-3218-0538	HEAD (SX) located pressure side Ref #54A spacer included with 3218-0538	1
54A	D3-0601-0436	SPACER	2
55	D3-1210-0101	O-RING	1
56	D3-1210-0225	O-RING	1
57	D3-1009-0181	FLANGE	1
58	D3-3609-0032	SCREW	3

PUMP OUTLET CONNECTIONS TO PIPING: (REF 26A "old style" CONNECTED TO PUMP)

D3-WING-NUT	SLIDE NIPPLE THRU WING NUT MALE	1	NLA
D3-NIPPLE-NPT-1/2	THREADED END TOWARD PIPING, CONNECT	1	NLA
D3-NIP-OUTLET-ORING	PLACE IN BETWEEN WING NUT / NIPPLE AND 26A OUTLET HOSEBARB, BEFORE CONNECTING THE TWO TOGETHER	1	NLA

USE NOW:

EL-BRASS-1/2	1/2" BRASS ELBOW	1
HOSE-1/2X2-RH	HOSE	1
D3-2803-0662	OUTLET ADAPTER ASSEMBLY	1



PARTS BREAKDOWN FOR MODEL DP(H)-3B w/COMET  
RICE HYDRO INC.

REF#	PART NUMBER..	DESCRIPTION..	QTY REQ'D
GEAR REDUCTION:			
1	D3-3200-0082	OIL VENT CAP	1
2	D3-1211-0023	ELBOW	1
3	D3-3609-0041	SCREW	7
4	D3-2811-0051	WASHER	1
5	D3-3607-0214	LEVEL INDICATOR PLUG	1
6	D3-3002-0559	BODY	1
7	D3-2811-0004	WASHER	4
8	D3-3607-0119	SCREW	4
9	D3-0019-0109	OIL SEAL	1
10	D3-0438-0068	BEARING	1
11	D3-3019-0004	RETAINING CLIP	1
12	D3-2402-0152	SHAFT	1
13	D3-0409-0014	GEAR	1
14	D3-2811-0098	WASHER	3
15	D3-3609-0022	SCREW	3
16	D3-3001-0151	BODY	1
17	D3-1210-0093	O-RING	4
18	D3-3621-0006	SCREW	4
19	D3-0438-0054	BEARING	1
20	D3-1210-0089	O-RING	1
21	D3-2811-0051	WASHER	1
22	D3-3607-0214	OIL PLUG	1
23	D3-2818-0005	STABILIZING PIN	2
25	D3-1201-0021	GASKET	1

MISCELLANEOUS PARTS:

NA	GAUGE-600	0-600 PSI LIQUID GAUGE	1
NA	BALLVALVE-1/2	1/2" F X F BALLVALVE	1
NA	CHECKVALVE-1/2F	1/2" F X F 1200PSI INLINE CHECKVALVE	1
NA	CHECKVALVE-1/2M	1/2" M X M INLINE CHECKVALVE	1
NA	SPRAY-6815-700-1/2	1/2" PRESSURE RELIEF VALVE	1
NA	BRIGG-130G32-0022-F1	206 CC FLANGE MOUNT BRIGGS ENGINE	1
NA	HONDA-GX200UT2-QX2	196 CC FLANGE MOUNT HONDA ENGINE	1
NA	KING-LARGE	SHIPPING BOX FOR DP(H)-3B	1
NA	INLET-HOSE-ASSEMBLY	1" X 9' FOOT CLEAR HOSE W/STRAINER	1
NA	FILTER-SUMP-INLET	1&1/4" 100 MESH INLET STRAINER	1
NA	PUMP-DIA-11/550PSI	REPLACE PUMP W/GEAR REDUCTION	1
NA	PUMP-DIA-11/550W/OGP	REPLACE PUMP W/O GEAR REDUCTION	1
***MUST ORDER D3-2803-0662 WHEN ORDERING REPLACEMENT PUMP***			

NA	D3-5005/216	GEAR REDUCTION	1
NA	DIAPHRAGM-SUCTION	1&1/2" BLACK INLET SUCTION DIAPHRAGM	1
NA	DIAPHRAGM-CLAMP	1&1/2" INLET SUCTION CLAMP	1
NA	LINESTRAINER-1"	1" INLINE STRAINER	1
NA	LABEL-KIT-DP	INSTRUCTION AND CAUTION STICKERS	1
NA	TANK-CAP-ASSY	LID, FLANGE, SCREWS AND CHAIN	1

OUTLET HOSE:

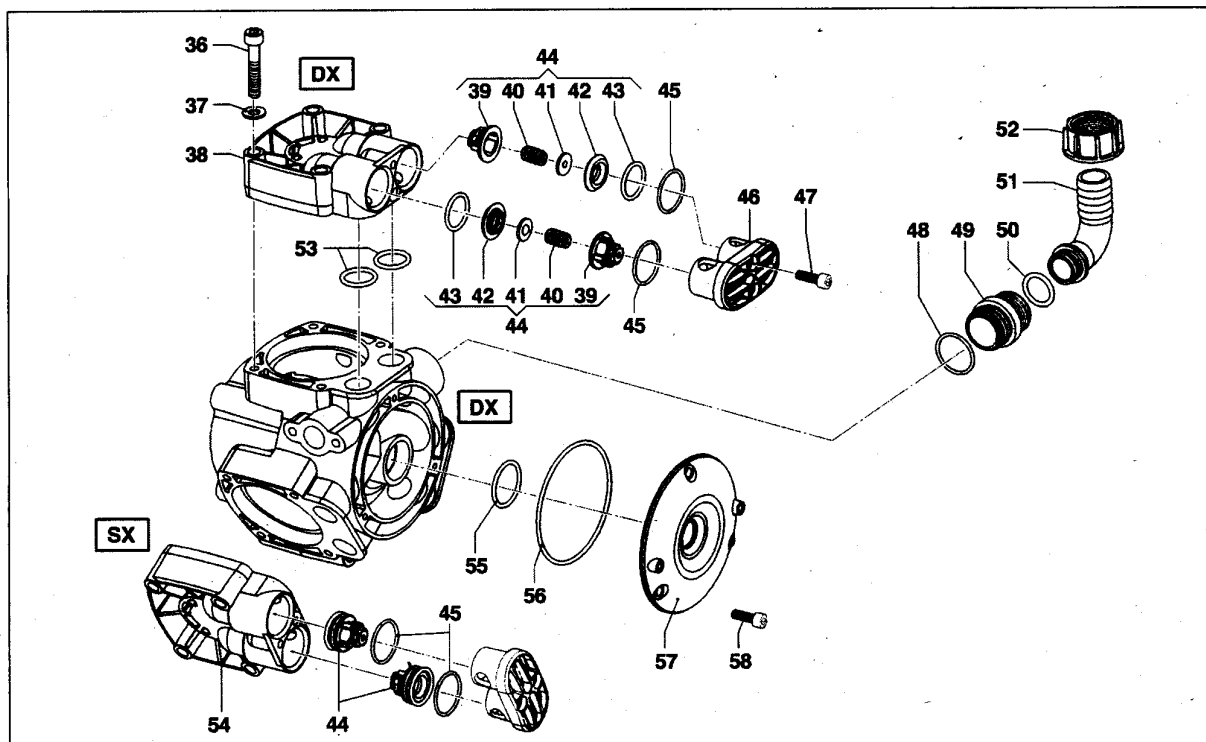
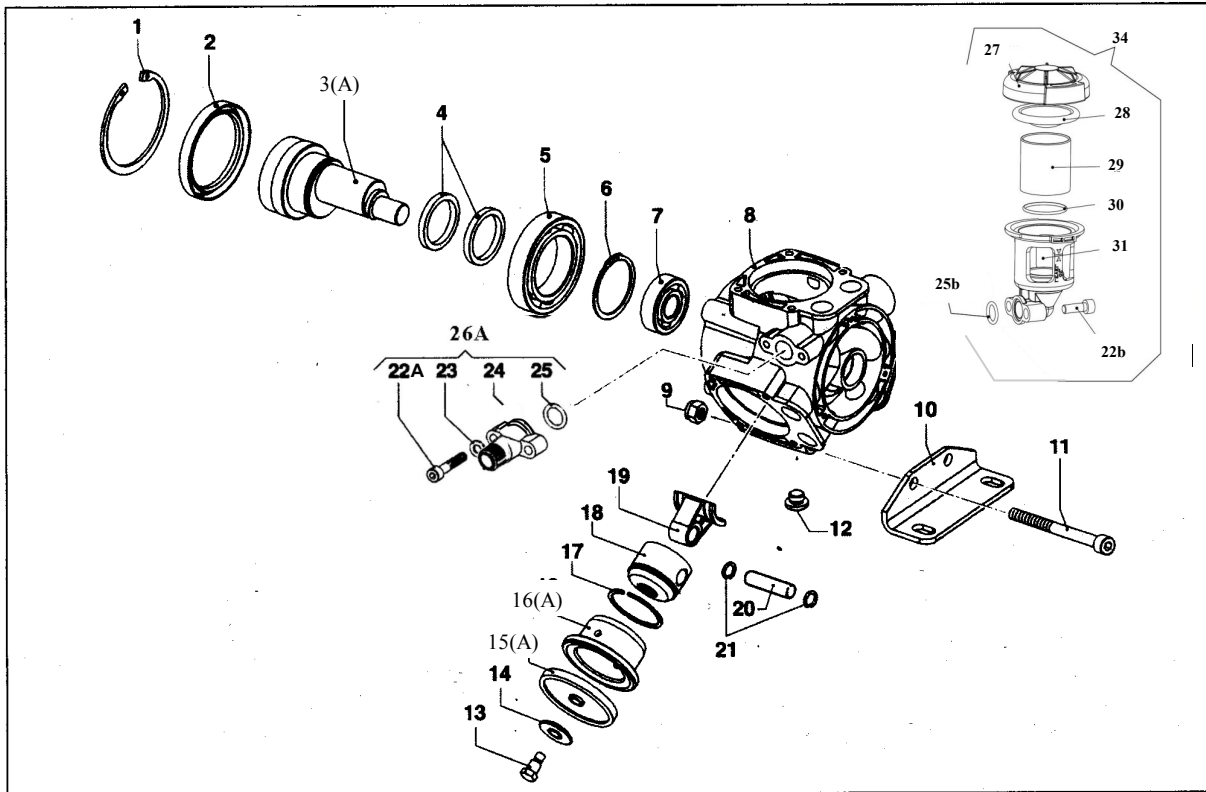
HOSE-1/2X8-RH	8' FOOT OUTLET HOSE - STANDARD	1
COUPLERBODY-1/2	FEMALE PUMP OUTLET - HOSE	1
COUPLERPLUG-1/2	MALE PUMP OUTLET - PIPING	1
FITTING-1/2MPIPE	FITTING FOR HOSE - RIGID	1
FITTING-1/2-MPX	FITTING FOR HOSE - SWIVEL	1
HOSE-1/2-2500XFT	SPECIFY LENGTH OF HOSE	

PARTS BREAKDOWN FOR MODEL DP(H)-3B w/COMET  
RICE HYDRO INC.

REF#	PART NUMBER..	DESCRIPTION..	QTY REQ'D
KITS:			
D3-KIT-RH1	DIAPHRAGM REBUILD KIT		
	REF. #15	DIAPHRAGM	QTY 3
	REF. #44	VALVE ASSY W/ORING	QTY 6
	REF. #45	ORING FOR #46 PLUG	QTY 6
	REF. #53	O-RING #38/54 HEAD	QTY 6
		DIAPHRAGM-SUCTION	QTY 1
D3-KIT-RH2	DIAPHRAGM REPAIR KIT		
	REF. #15	DIAPHRAGM	QTY 3
	REF. #53	O-RING #38/54 HEAD	QTY 6
D3-KIT-RH3	VALVE ASSEMBLY & O-RING KIT		
	REF. #44	VALVE ASSY W/ORING	QTY 6
	REF. #45	O-RING FOR #46 PLUG	QTY 6
	REF. #53	O-RING #38/54 HEAD	QTY 6
D3-KIT-RH5	NEW STYLE ALUMINUM SIGHT GLASS KIT		
	REF. #22B	SCREW 30MM	
	REF. #27	CAP	
	REF. #28	DIAPHRAGM	
	REF. #29	OIL CUP	
	REF. #30	O-RING	
	REF. #31	OIL CUP	

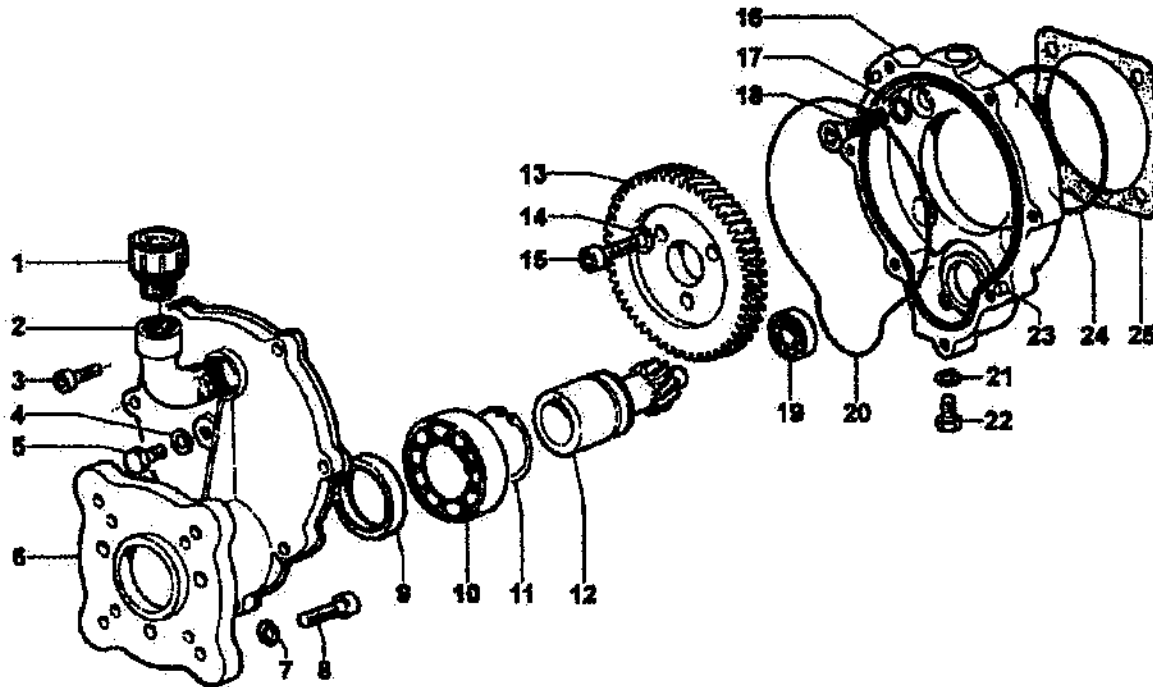


# APS31 / 41



# Gearbox Breakdown

Part #5005/216



Reference	Part Number	Description	Quantity
1	3200/82	oil vent cap	1
2	1211/23	elbow	1
3	3609/41	screw	7
4	2811/51	washer	1
5	3607/214	level indicator plug	1
6	3002/559	body	1
7	2811/4	washer	4
8	3607/119	screw	4
9	19/109	oil seal	1
10	438/68	bearing	1
11	3019/4	retaining clip	1
12	2402/152	shaft	1
13	409/14	gear	1
14	2811/98	washer	3
15	3609/22	screw	3
16	3001/151	body	1
17	1210/93	o-ring	4
18	3621/6	screw	4
19	438/54	bearing	1
20	1210/89	o-ring	1
21	2811/51	washer	1
22	3607/214	oil plug	1
23	2818/5	stabilizing pin	2
24	1210/50	o-ring	1
25	1201/21	gasket	1