

## 3-Cylinder, High-Pressure Diaphragm Pumps



**OMEGA 140** 3-cylinder, high pressure, high volume diaphragm pumps are constructed of anodized aluminum, brass and stainless steel and have anodized aluminum, brass and stainless steel liquid handling parts. Includes mounting rails and 6005.05 control unit with pressure gauge. Simplicity of design and common parts allow for easy and economical maintenance.

**OMEGA 140** pumps are excellent choices for various horticultural and agricultural spraying applications.

Pumps are available with a 1-3/8" Male PTO thru-shaft.

| Model          | GPM  | l/min | PSI | bar | RPM | Drive Configuration                 | Weight  |
|----------------|------|-------|-----|-----|-----|-------------------------------------|---------|
| OMEGA 140 TS2C | 39.0 | 140   | 725 | 50  | 550 | 1-3/8" 6-Spline Male PTO Thru-Shaft | 100 LBS |

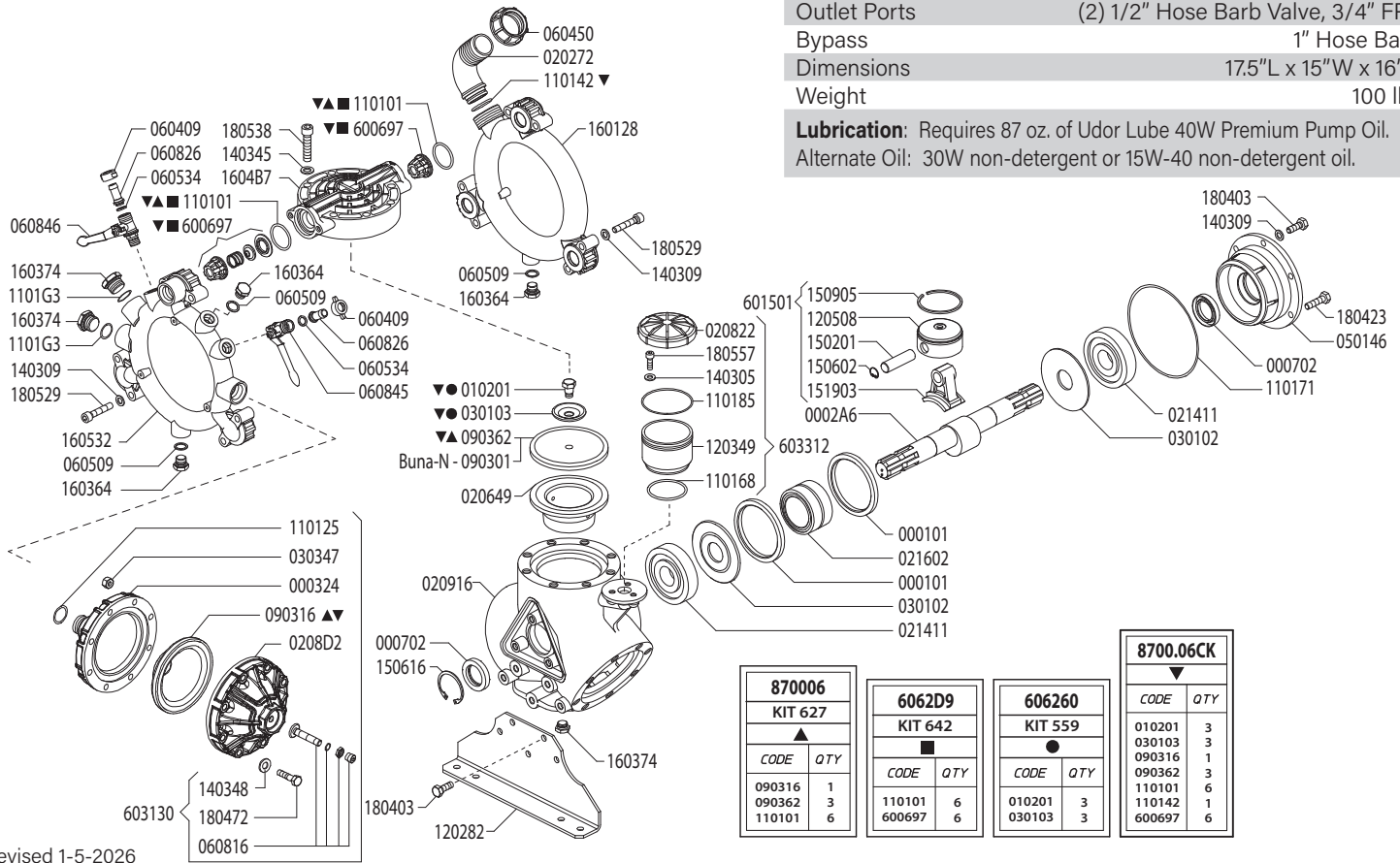
| Specifications         | OMEGA 140                | Description                 | Part #    |
|------------------------|--------------------------|-----------------------------|-----------|
| Inlet Port             | 1-1/2" Hose Barb         | Diaphragm Kit (GREENTECH)   | 8700.06   |
| Outlet Ports           | (2) 3/4" Hose Barb       | Diaphragm Bolt / Washer Kit | 6062.60   |
| Bypass                 | 1" Hose Barb             | Valve Kit                   | 6062.D9   |
| Piston Diameter        | 75mm                     | Complete Repair Kit         | 8700.06CK |
| Crankshaft Stroke/Code | 19.0mm / U               |                             |           |
| Dimensions             | 17.5"L x 14.9"W x 16.0"H |                             |           |

**Lubrication:** Requires 87 oz. of Udor Lube 40W Premium Pump Oil.  
Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.



|                  |                                    |
|------------------|------------------------------------|
| Maximum Flow     | 39.0 GPM / 148 lpm                 |
| Maximum Pressure | 725 PSI / 50 bar                   |
| Maximum RPM      | 550 RPM                            |
| Inlet Port       | 1-1/2" Hose Barb                   |
| Outlet Ports     | (2) 1/2" Hose Barb Valve, 3/4" FPT |
| Bypass           | 1" Hose Barb                       |
| Dimensions       | 17.5"L x 15"W x 16"H               |
| Weight           | 100 lbs                            |

**Lubrication:** Requires 87 oz. of Udor Lube 40W Premium Pump Oil.  
Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.



| 870006   | 6062D9   | 606260   | 8700.06CK |
|----------|----------|----------|-----------|
| KIT 627  | KIT 642  | KIT 559  |           |
| CODE     | CODE     | CODE     | CODE      |
| QTY      | QTY      | QTY      | QTY       |
| 090316 1 | 110101 6 | 010201 3 | 010201 3  |
| 090362 3 | 600697 6 | 030103 3 | 030103 3  |
| 110101 6 |          |          | 090316 1  |
|          |          |          | 090362 3  |
|          |          |          | 110101 6  |
|          |          |          | 110142 1  |
|          |          |          | 600697 6  |

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| Part #  | Description                         | Qty |
|---------|-------------------------------------|-----|
| 0001.01 | RETAINER RING                       | 2   |
| 0002.A6 | SHAFT "ZETA 350/OMEGA" TS 2C        | 1   |
| 0003.24 | PRESSURE ACCUMULATOR BASE           | 1   |
| 0007.02 | SEAL                                | 2   |
| 0102.01 | DIAPHRAGM BOLT ●▼                   | 3   |
| 0202.72 | HOSE BARB D40                       | 1   |
| 0206.49 | PISTON SLEEVE                       | 3   |
| 0208.22 | OIL RESERVOIR COVER "BETA"          | 1   |
| 0208.D2 | ACCUMULATOR COVER "BETA"            | 1   |
| 0209.16 | PUMP BODY                           | 1   |
| 0214.11 | BALL BEARING                        | 2   |
| 0216.02 | NEEDLE BEARING                      | 1   |
| 0301.02 | SPACER                              | 2   |
| 0301.03 | DIAPHRAGM WASHER ●                  | 3   |
| 0303.47 | HEX NUT M8X8                        | 8   |
| 0501.46 | BEARING FLANGE                      | 1   |
| 0604.09 | BRASS NUT G1/2                      | 2   |
| 0604.50 | BARB NUT                            | 1   |
| 0605.09 | ALUMINUM GASKET                     | 2   |
| 0605.34 | GASKET                              | 2   |
| 0608.16 | AIR VALVE ASSEMBLY                  | 1   |
| 0608.26 | 1/2" BARB                           | 2   |
| 0608.45 | BALL VALVE RIGHT                    | 1   |
| 0608.46 | BALL VALVE LEFT                     | 1   |
| 0903.01 | PISTON DIAPHRAGM 130MM BUNA-N       | 3   |
| 0903.16 | ACCUMULATOR DIAPHRAGM ▲▼            | 1   |
| 0903.62 | PISTON DIAPHRAGM 130MM GREENTECH ▲▼ | 3   |
| 1101.01 | O-RING - VALVE ■▲▼                  | 6   |
| 1101.25 | O-RING - ACCUMULATOR                | 1   |
| 1101.42 | O-RING - INLET HOSE BARB▼           | 1   |
| 1101.68 | O-RING - OIL RESERVOIR              | 1   |
| 1101.71 | O-RING - BEARING FLANGE             | 1   |
| 1101.85 | O-RING - OIL RESERVOIR              | 1   |
| 1101.G3 | O-RING - PLUG                       | 2   |
| 1202.82 | MOUNTING RAIL                       | 2   |
| 1203.49 | OIL RESERVOIR "BETA"                | 1   |

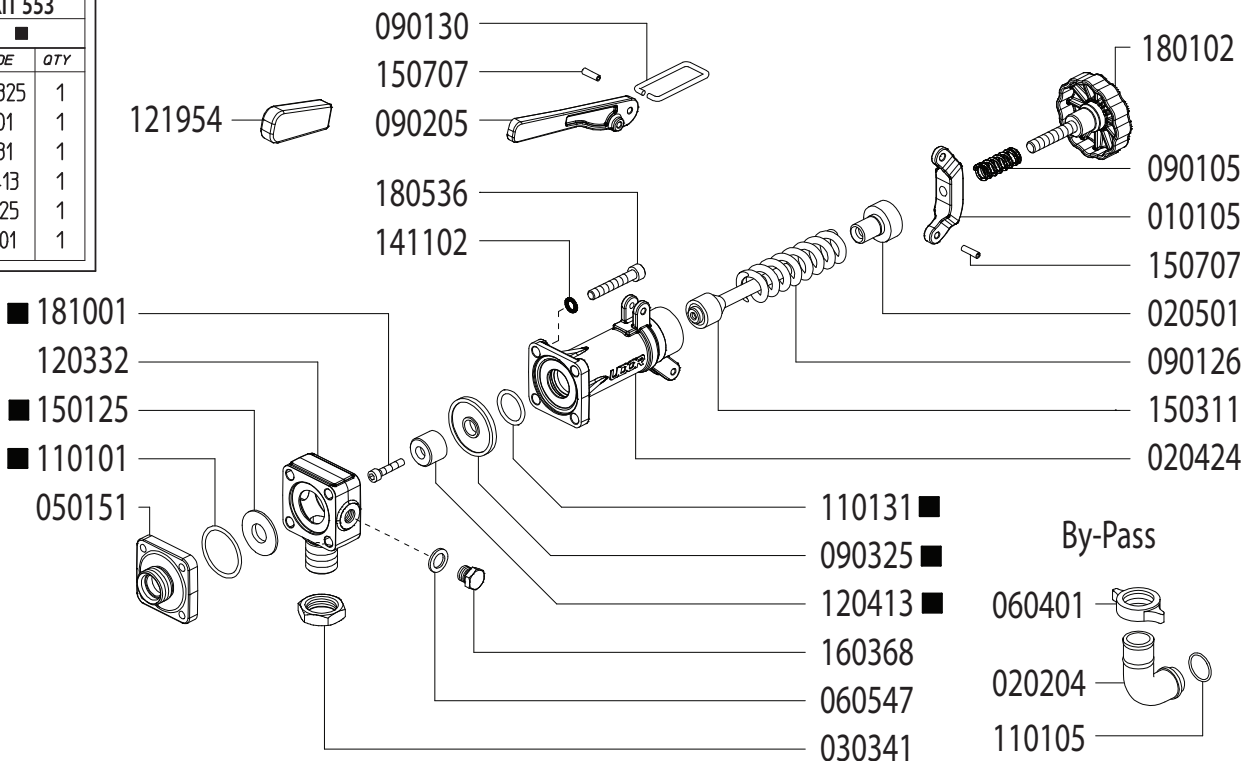
| Part #    | Description                            | Qty |
|-----------|----------------------------------------|-----|
| 1205.08   | ALUMINIUM PISTON D75 "BETA/OMEGA/ZETA" | 3   |
| 1403.05   | WASHER D8.4                            | 3   |
| 1403.09   | WASHER                                 | 16  |
| 1403.45   | WASHER                                 | 24  |
| 1403.48   | WASHER D8.4                            | 8   |
| 1502.01   | PIN D18X64                             | 3   |
| 1506.02   | SNAP RING D18                          | 6   |
| 1506.16   | SNAP RING D55                          | 1   |
| 1509.05   | PISTON RING D75                        | 3   |
| 1519.03   | CONNECTING ROD                         | 3   |
| 1601.28   | SUCTION MANIFOLD                       | 1   |
| 1603.64   | PLUG G3/8                              | 3   |
| 1603.74   | PLUG G3/4                              | 3   |
| 1604.B7   | PUMP HEAD                              | 3   |
| 1605.32   | DISCHARGE MANIFOLD                     | 1   |
| 1804.03   | HEX BOLT                               | 8   |
| 1804.23   | HEX BOLT                               | 2   |
| 1804.72   | HEX SCREW M8X50                        | 8   |
| 1805.29   | ALLEN BOLT M10X55                      | 2   |
| 1805.38   | ALLEN BOLT                             | 24  |
| 1805.57   | ALLEN BOLT M8X22                       | 3   |
| 6006.97   | IN/OUT VALVE W/O O-RING ■▼             | 6   |
| 6015.01   | PISTON ROD ASSEMBLY                    | 3   |
| 6031.30   | PRESSURE ACCUMULATOR ASSEMBLY          | 1   |
| 6033.12   | OIL RESERVOIR ASSEMBLY                 | 1   |
| 6015.01   | PISTON/ROD ASSEMBLY                    | 3   |
| 6031.30   | ACCUMULATOR ASSEMBLY                   | 1   |
| 6033.02   | OIL RESERVOIR ASSEMBLY                 | 1   |
| 6062.60   | DIAPHRAGM BOLT/WASHER KIT (KIT 559)    | 1   |
| 6062.D9   | IN/OUT VALVE KIT (KIT 642)             | 1   |
| 8700.06   | DIAPHRAGM KIT - GREENTECH (KIT 627)    | 1   |
| 8700.06CK | COMPLETE REPAIR KIT                    | 1   |

- Parts in 6062.60 (Kit 559)
- Parts in 6062.D9 (Kit 642)
- ▲ Parts in 8700.06 (Kit 627)
- ▼ Parts in 8700.06CK (Complete Repair Kit)

## Adjustable Pressure Regulator

|                    |                      |
|--------------------|----------------------|
| Maximum Flow       | 47.3 GPM / 179.2 lpm |
| Maximum Pressure   | 1200 PSI / 81 bar    |
| Inlet Port         | 3/4" Male BSP        |
| Outlet Ports       | -                    |
| Bypass - Hose Barb | 1" HB                |

| 606254  |     |
|---------|-----|
| KIT 553 |     |
| CODE    | QTY |
| 090325  | 1   |
| 110101  | 1   |
| 110131  | 1   |
| 120413  | 1   |
| 150125  | 1   |
| 181001  | 1   |



Revised 7-15-2024

| Part #    | Description               | Qty |
|-----------|---------------------------|-----|
| 0101.05   | LEVER GUIDE               | 1   |
| 0202.04   | 1" BRASS ELBOW HOSE BARB  | 1   |
| 0204.24   | VALVE BODY                | 1   |
| 0205.01   | VALVE CYLINDER            | 1   |
| 0303.41   | NUT                       | 1   |
| 0501.51   | FLANGE                    | 1   |
| 0604.01   | BARB NUT                  | 1   |
| 0605.47   | GASKET D8                 | 1   |
| 0901.05   | SPRING                    | 1   |
| 0901.30   | PRESSURE BAIL             | 1   |
| 0901.26   | SPRING                    | 1   |
| 0902.05   | HANDLE                    | 1   |
| 0903.25 ■ | DIAPHRAGM                 | 1   |
| 1101.01 ■ | O-RING - BYPASS FLANGE    | 1   |
| 1101.05   | O-RING - BYPASS HOSE BARB | 1   |

| Part #    | Description                    | Qty |
|-----------|--------------------------------|-----|
| 1101.31 ■ | O-RING - VALVE BODY            | 1   |
| 1203.32   | INLET ELBOW - 3/4" MALE BSP    | 1   |
| 1204.13   | POPPET ■                       | 1   |
| 1219.54   | HANDLE COVER - RUBBER          | 1   |
| 1501.25   | SEAT ■                         | 1   |
| 1503.11   | REGULATOR STEM                 | 1   |
| 1507.07   | PIN                            | 2   |
| 1603.68   | PLUG - 1/4" BRASS              | 1   |
| 1801.02   | ADJUSTMENT KNOB                | 1   |
| 1805.36   | BOLT                           | 4   |
| 1810.01   | BOLT - STAINLESS STEEL ■       | 1   |
| GG1500    | HIGH PRESSURE GAUGE (OPTIONAL) | 1   |
| 6062.54   | REPAIR KIT (KIT 553)           |     |

■ Parts Included in Repair Kit #6062.54 (KIT 553)

### OPERATING INSTRUCTIONS

- Before operating or re-operating pump, lift R.V. Handle (0902.05) so pump will start at zero pressure.  
**FAILURE TO DO SO WILL VOID PUMP WARRANTY.**
- Turn Pressure Adjustment Knob (1801.02) counter-clockwise to relieve spring tension. (Step 2 is only necessary on initial start-up and is not necessary for daily operation.)
- Start unit and let run until air is evacuated from system, when only liquid is expelled from the bypass line.
- Return R.V. Handle (0902.05) to down position. Open spray gun or spray boom and turn adjustment knob (1801.02) clockwise until desired operating pressure is achieved.

*All Dimensions are WITHOUT  
Control Unit or Regulator*

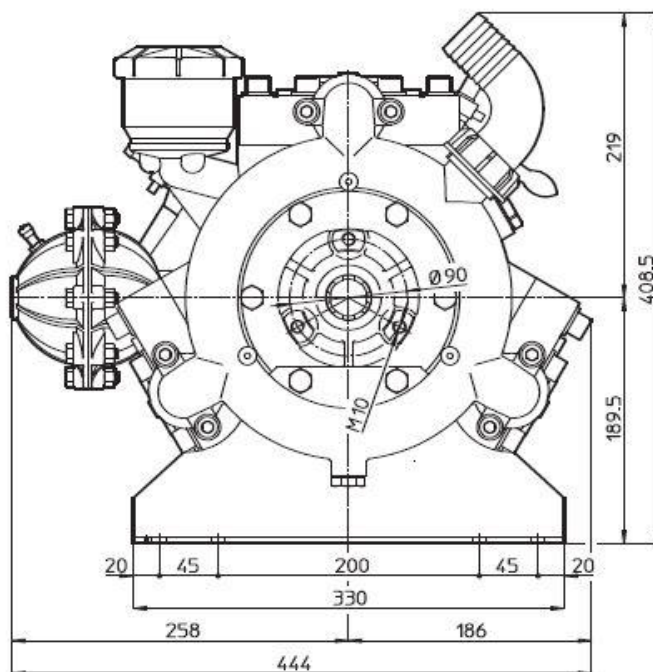
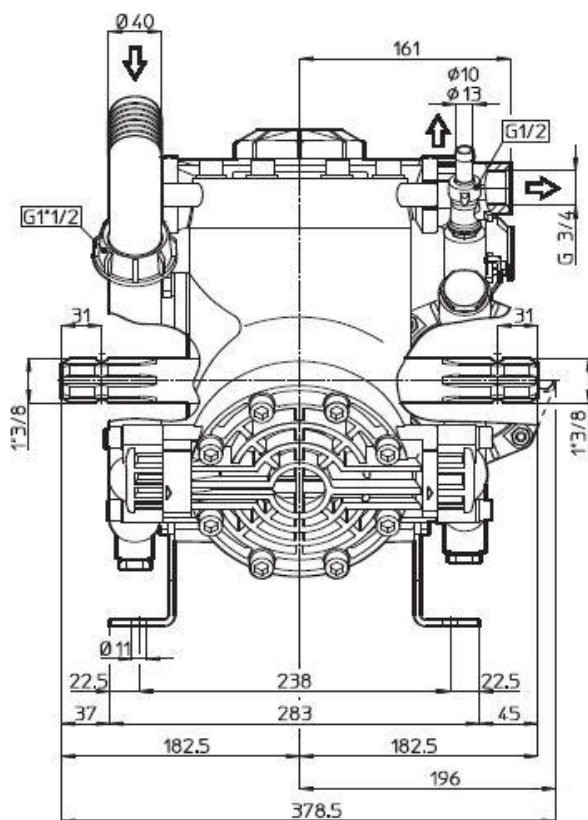
*Dimensional Drawings are  
Shown in Millimeters.  
To Convert to Inches,  
Multiply Dimension x 0.03937*

## Specifications

## OMEGA 140

|                          |                              |
|--------------------------|------------------------------|
| Inlet Port - Hose Barb   | 1-1/2" HB                    |
| Outlet Ports - Hose Barb | (2) 3/4" FPT                 |
| Bypass - Hose Barb       | 1" HB                        |
| Dimensions               | 17.5" L x 15" W x 16" H      |
| Diaphragm Material       | GREENTECH (Std) Buna-N (Opt) |

**Lubrication:** Requires 87 oz. of Udor Lube 40W Premium Pump Oil.  
Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.



## TORQUE SPECS

| Ref. | Description                       | Ft./lb. | Nm |
|------|-----------------------------------|---------|----|
| 1    | Diaphragm Bolts (Use Loctite 243) | 22      | 30 |
| 2    | Head Bolts                        | 37      | 50 |
| 3    | Pulsation Dampener Bolts          | 20      | 28 |
| 4    | Bearing Flange Bolts              | 25      | 34 |
| 5    | Oil Cup Bolts                     | 7       | 10 |
| 6    | Manifold Bolts - Aluminum/Brass   | 22      | 30 |

