

## FEATURES

- The preferred pump frame in the pressure cleaning industry
- Forged brass manifold with an exclusive lifetime warranty
- Large-capacity, die-cast, anodized aluminum oil-bath crankcase
- Over-sized connecting rods for maximum life
- Heavy-duty tapered roller bearing.
- Solid ceramic plungers with continuously lubricated packings
- Unitized stainless steel inlet and discharge valves
- Available in left-handed "L" version

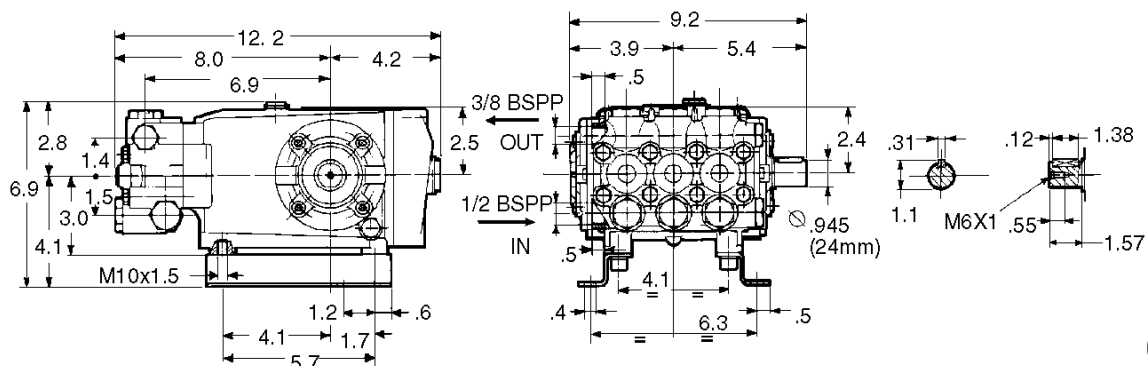


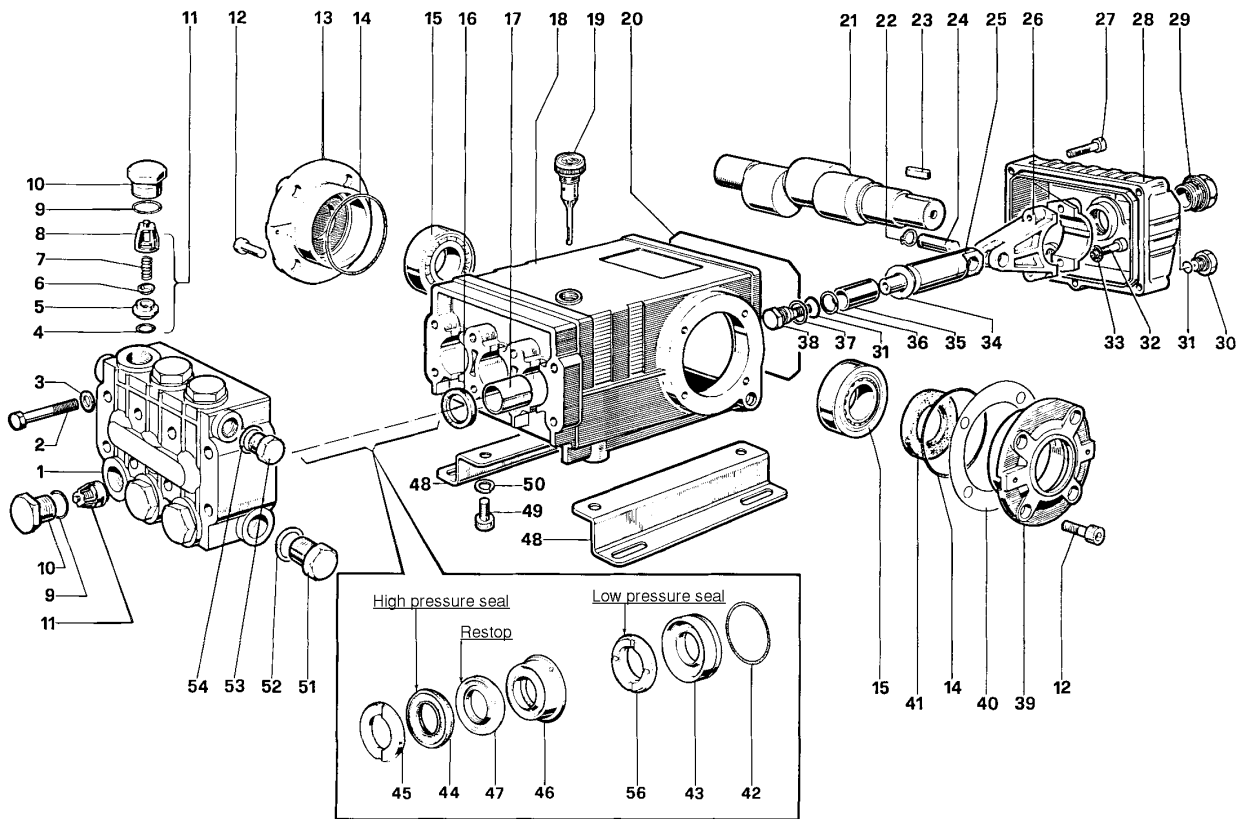
## SPECIFICATIONS

| Pump Model                    | TS1011                   |      | TS1511    | TS2011-N |      |
|-------------------------------|--------------------------|------|-----------|----------|------|
| Maximum Volume (GPM)          | 4.0                      | 4.75 | 4.0 GPM   | 4.0      | 4.75 |
| Max. Discharge Pressure (PSI) | 2000                     | 1500 | 3500 PSI  | 3500     | 2300 |
| Maximum Pump Speed (RPM)      | 1450                     | 1750 | 1450 RPM  | 1450     | 1750 |
| Maximum Inlet Pressure        | 125 PSI                  |      |           |          |      |
| Maximum Inlet Vacuum          | 9 ft. water (7.9 in. Hg) |      |           |          |      |
| Bore                          | .787 in. / 20 mm         |      |           |          |      |
| Stroke                        | .472 in. / 12 mm         |      |           |          |      |
| Crankcase Oil Capacity        | 33.8 oz                  |      | 40.6 oz.. |          |      |
| Maximum Fluid Temperature     | 165°F                    |      |           |          |      |
| Inlet Port Thread             | 1/2-14 BSPP-F            |      |           |          |      |
| Discharge Port Thread         | 3/8-19 BSPP-F            |      |           |          |      |
| Shaft Diameter.               | .945 in. / 24 mm         |      |           |          |      |
| Weight                        | 32 lbs.                  |      |           |          |      |
| Dimensions                    | 12.2 x 9.2 x 6.9 in.     |      |           |          |      |

*N=Nickel-plated manifold*

## DIMENSIONAL DRAWING





## PARTS LIST

| ITEM PART NO. | DESCRIPTION                        | KIT NO. | QTY. | ITEM PART NO. | DESCRIPTION               | KIT NO. | QTY. | ITEM PART NO. | DESCRIPTION            | KIT NO.    | QTY. |
|---------------|------------------------------------|---------|------|---------------|---------------------------|---------|------|---------------|------------------------|------------|------|
| 1. 47120841   | Manifold                           |         | 1    | 19. 98210600  | Oil Dip Stick             |         | 1    | 37. 96728000  | Washer                 | 6          | 3    |
| 47120941      | Manifold, Nickel-Plated (TS2011-N) |         |      | 20. 90392200  | O-Ring, Cover             |         | 1    | 38. 47219566  | Screw, Plunger         | 6          | 3    |
| 2. 99320600   | Screw, M8 x 70                     |         | 8    | 21. 47021835  | Crankshaft                |         | 1    | 39. 47150022  | Cover, Crankcase       | 10, 28     | 3    |
| 3. 96702000   | Washer, M8.4                       |         | 8    | 22. 90055700  | Ring, Snap                |         | 6    | 40. 97567800  | Shim                   |            | 2    |
| 4. 90384100   | O-Ring, .674 x .103                | 1       | 6    | 23. 91489000  | Key                       |         | 1    | 41. 90164800  | Seal, Oil              | 3          | 1    |
| 5. 36200366   | Seat, Valve                        | 1       | 6    | 24. 97738000  | Pin, Wrist                |         | 3    | 42. 90361600  | O-Ring, 1.364 x .070   | 10, 28     | 3    |
| 6. 36200176   | Plate, Valve                       | 1       | 6    | 25. 47050554  | Guide, Plunger            |         | 3    | 43. 47080570  | Retainer, Packing      | 10, 28     | 3    |
| 7. 94737600   | Spring                             | 1       | 6    | 26. 47030001  | Rod, Connecting           |         | 3    | 44. 90270500  | Packing                | 28, 69     | 3    |
| 8. 36200251   | Guide, Valve                       | 1       | 6    | 27. 99191200  | Screw, M6 x 30            |         | 5    | 45. 47100051  | Ring, Head, M20        | 7, 28      | 3    |
| 9. 90384700   | O-Ring, .797 x .103                | 4, 5    | 6    | 99183700      | Screw, M6 x 14 (TS1011)   |         | 5    | 46. 47216970  | Intermed. Ring         | 28, 71     | 3    |
| 10. 98222000  | Cap                                | 4       | 6    | 28. 47160122  | Cover, Crankcase          |         | 1    | 47. 90270400  | Restop Ring            | 28, 69, 71 | 3    |
| 98222200      | Cap, Ni-Plated (TS2011-N)          | 5       | 6    | 47160022      | Cover, Crankcase (TS1011) |         |      | 48. 47200074  | Pump Feet              |            | 2    |
| 11. 36703201  | Valve Assembly                     | 1       | 6    | 29. 97596800  | Oil Indicator             |         | 1    | 49. 99364400  | Screw, M10 x 18        |            | 4    |
| 12. 99303900  | Screw, M8 x 16                     |         | 8    | 30. 98204100  | Cap                       |         | 1    | 50. 96710600  | Washer, M10.2          |            | 4    |
| 13. 47150122  | Cover, Crankcase                   |         | 1    | 31. 90358500  | O-Ring, .426 x .070       | 6       | 4    | 51. 98217600  | Cap                    |            | 1    |
| 14. 90391300  | O-Ring, 2.675 x .103               |         | 2    | 32. 99309900  | Screw, M8 x 35            |         | 6    | 52. 96751400  | Washer, M21.5          |            | 1    |
| 15. 640047    | Bearing, Roller                    |         | 2    | 33. 96701400  | Washer, M8.4              |         | 6    | 53. 98210000  | Cap                    |            | 1    |
| 16. 90162500  | Seal, Oil                          | 2       | 3    | 34. 96728600  | Washer, M14               | 6       | 3    | 54. 96738000  | Washer, M17.5          |            | 1    |
| 17. 90912600  | Bushing                            |         | 3    | 35. 47040409  | Plunger, (20 mm)          |         | 3    | 56. 90271000  | Seal, Low Press., 20mm | 28, 69     | 3    |
| 18. 47010522  | Crankcase                          |         | 1    | 36. 90506700  | Ring, Back-up             |         | 6    |               |                        |            |      |

## REPAIR KITS

| KIT NO.                              | 1                       | 2  | 3  | 4     | 5     | 6                        | 7  | 10     | 28                               | 69            | 71     |
|--------------------------------------|-------------------------|----|----|-------|-------|--------------------------|----|--------|----------------------------------|---------------|--------|
| ITEM NO.s INCLUDED IN KIT            | 4, 5<br>6, 7,<br>8 (11) | 16 | 41 | 9, 10 | 9, 10 | 31, 34,<br>36, 37,<br>38 | 45 | 42, 43 | 42, 43,<br>44, 45,<br>46, 47, 56 | 44, 47,<br>56 | 46, 47 |
| NUMBER OF ASSEMBLIES IN KIT          | 6                       | 3  | 2  | 6     | 6     | 3                        | 6  | 3      | 1                                | 3             | 3      |
| NUMBER OF CYLINDERS KIT WILL SERVICE | 3                       | 3  | -  | 3     | 3     | 3                        | 3  | 3      | 1                                | 3             | 3      |

## TORQUE SPECS\*

| Position | Ft.-lbs. |
|----------|----------|
| 2        | 22.1     |
| 10       | 73.7     |
| 12       | 14.7     |
| 27       | 7.3      |
| 29       | 13.2     |
| 30       | 14.7     |
| 32       | 14.7     |
| 38       | 14.7     |
| 49       | 29.4     |
| 51       | 29.4     |
| 53       | 29.4     |

\*Decrease torque by 20% if threads are lubricated.