

PRODUCT WARRANTY

TeeJet Technologies Illinois LLC warrants to the original purchaser that the product purchased shall be free of defect in material or workmanship. If the product proves to be defective within the warranty period the purchaser must return, freight prepaid, said product to TeeJet Technologies within thirty (30) days after such defect is discovered. Upon inspection and examination by TeeJet Technologies, and at its option, the product shall be repaired or replaced with a new or comparable product. No product will be considered defective if it substantially fulfills the performance specifications. Purchaser shall be responsible for all required maintenance service in accordance with procedures outlined in TeeJet Technologies' product operator manual or service bulletins.

All product(s) replaced or repaired under warranty shall carry the remainder of the warranty left on the original purchase. All out of warranty product(s) serviced for fee or goodwill will have ninety (90) days of warranty. The ninety (90) days shall begin on the date serviced by TeeJet Technologies.

Warranty periods for TeeJet Technologies products shall be:

- TeeJet and Mid-Tech Control Consoles - 2 1/2 years
- TeeJet and Mid-Tech Switch boxes - 2 1/2 years (3, 5, 9 booms)
- All other products - 12 months unless otherwise noted

WARRANTY LIMITATIONS AND EXCLUSIONS

TeeJet Technologies will have no warranty obligations hereunder if the product is subjected to abuse, misuse, improper or abnormal usage, acts of God, faulty installation, or improper maintenance as outlined in TeeJet Technologies' product operator manual or service bulletins. Consumable items (items that are used during normal operations) such as light bulbs, batteries, etc., and expendable items (items that wear out in normal use) such as injection pump tubes, flow meter bearings, etc., will not be covered by warranty. For products that come in direct contact with chemical, the specific recommendations contained in TeeJet Technologies product bulletins must be adhered to, or this warranty is void. Any repairs or alternations, other than those provided by TeeJet Technologies and/or its authorized representatives, will void the warranty. TeeJet Technologies neither assumes nor authorizes anyone to assume for it any other obligation or liability in connection with said product.

DISCLAIMER OF UNSTATED WARRANTY

The warranty printed above is the only warranty applicable to this purchase. TeeJet Technologies' warranty cannot be modified by any person or entity, including without limitation, any distributor or retailer of TeeJet Technologies. All other warranties, express or implied, including but not limited to, the implied warranties of merchantability and fitness for a particular purpose, are disclaimed.

LIMITATION OF LIABILITY

It is understood and agreed that TeeJet Technologies' liability, whether in contract, in tort, under any warranty, in negligence or otherwise, shall not exceed the return of the amount of purchase price paid by purchaser and under no circumstances shall TeeJet Technologies be liable for special, indirect, or consequential damages. In particular, TeeJet Technologies shall not be liable for damage to crops as the result of misuse or negligence in the application of chemicals or operation of TeeJet Technologies products. The price stated for the equipment is a consideration in limiting TeeJet Technologies' liability. No action, regardless of form, arising out of the transactions under this agreement may be brought by purchaser more than one year after the cause of action has occurred.



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MT600 Piston Injection Pump Installation and Setup Guide



Mounting

The MT600 injection pump is recommended to be located as close as possible to the point where chemicals are injected into the main boom supply line (as close to the delivery point as possible is the preferred injection point). A consideration should be made to use check valves between the injection pump and injection point as well as ahead of the injection point in the main flow line (refer to the plumbing diagram on Page 7). The location of the chemical container and the MT600 must also be considered and hose lengths kept to a minimum.

Once the location for the injection pump is selected, orient the assembly so that the pump cover is easily opened to allow access for service. All sides of the pump may need to be accessible for service purposes. The pump must be mounted in an upright position.

Five (5) US fluid ounces (150 ml) of SAE 10w30 oil must be added to each pump head via the red cap port prior to operation. The top of the oil level should always be visible somewhere in the viewing window. Avoid overfilling.

Figures 1 and 2 provide measurements and mounting holes for the pumps.

Figure 1 - Bottom View

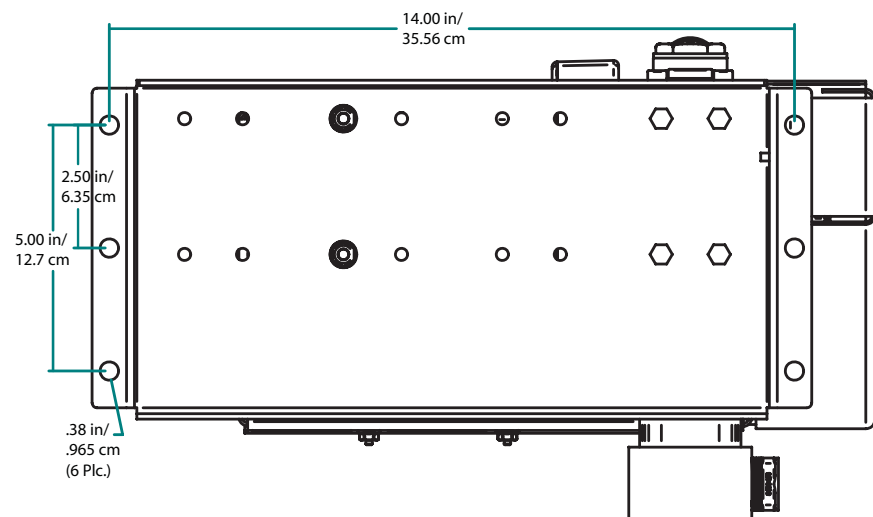
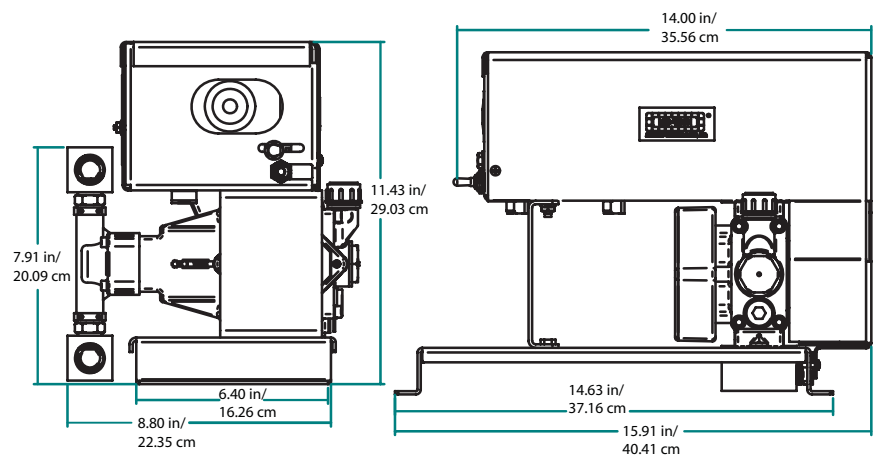


Figure 2 - Side and End Views



NOTE: Secure each pump firmly to eliminate vibration and possible damage to the connecting hoses and cables.

Calibration Numbers

Pumps:

1. _____ 2. _____ 3. _____ 4. _____ 5. _____

This space is reserved for recording pump calibration numbers:

Piston Pump General Specifications

Product Description

Pump Type: Positive Displacement Piston Pump
 Versatility: Can inject into pressure side of carrier pump, wide operating range, scalable to fit most applications, modular, serviceable, and compatible with various TeeJet controllers

Performance Characteristics

Response: Chemical moves immediately when motor is driven
 Motor Speed: 0 to 225 rpm at 12.5 VDC

Pumped Media

Fluids: Liquid chemicals only

Electrical

Power: 30 to 250 watts typical (30 amp fused)
 Voltage: 12 volt DC vehicle
 Power Connection: 2 pin MetriPak 480 Tower-sealed

Physical Properties

Dimensions: 11.5"H x 10"D x 16"W
 29 cm x 25.4 cm x 40.4 cm
 Plumbing: 3/4" NPT Manifold
 Weight 1 head: 26lbs/11.8kg
 Weight 4 heads: 46lbs/20.9 kg

Environmental

Temperature: 34 degrees F to 140 degrees F
 1 degree C to 60 degrees C
 Humidity: Weatherproof (high humidity)
 Vibration: n/a
 Dust: n/a

Pressure

Max Operating Pressure 100 psi (6.9 bar)

Plumbing

Refer to the sample plumbing diagram on Page 7 for suggestions on how to connect the system.

Cabling

Each MT600 injection pump is equipped with two cables:

- a pump control cable
- a pump power cable.

Refer to the sample system diagrams on Pages 8 and 9 for suggestions on how to connect the system.

Route all cables carefully. Avoid moving parts, excessive heat, and exposure to tree limbs, stubble, and other debris. Allow enough slack at all pivot points to prevent pinching or stretching the cables.

Secure the cables with cable fasteners and/or cable clamps.

Pump Control Cables

When the injection pumps have been designated #1, #2, etc., it is suggested that cable tags be used to mark them accordingly (use permanent ink and a waterproof marker). Carefully route the cable to the console (TASC system) or Product Control Module or DCM (Legacy system).

Pump Power Cable

Route each power cable to the vehicle battery (12 VDC only). Attach the red lead (fused) to the positive post and the black lead to the negative post of the battery.

Proper Pump Size Selection

Use the following formula to determine your flow capacity requirements. Check the Pump Size Selection Chart (Figure 3) to select the proper pump size.

US Measurements:

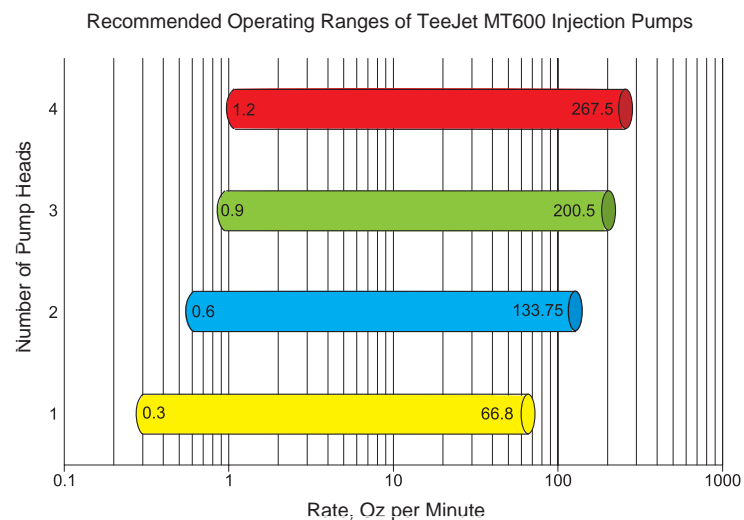
$$\text{Pump Capacity (Oz./Min)} = \text{Max. Boom Width (feet)} \times \text{Max. Speed (mph)} \times \text{Chemical Rate (oz/acre)} \times (.00202)$$

Metric Measurements:

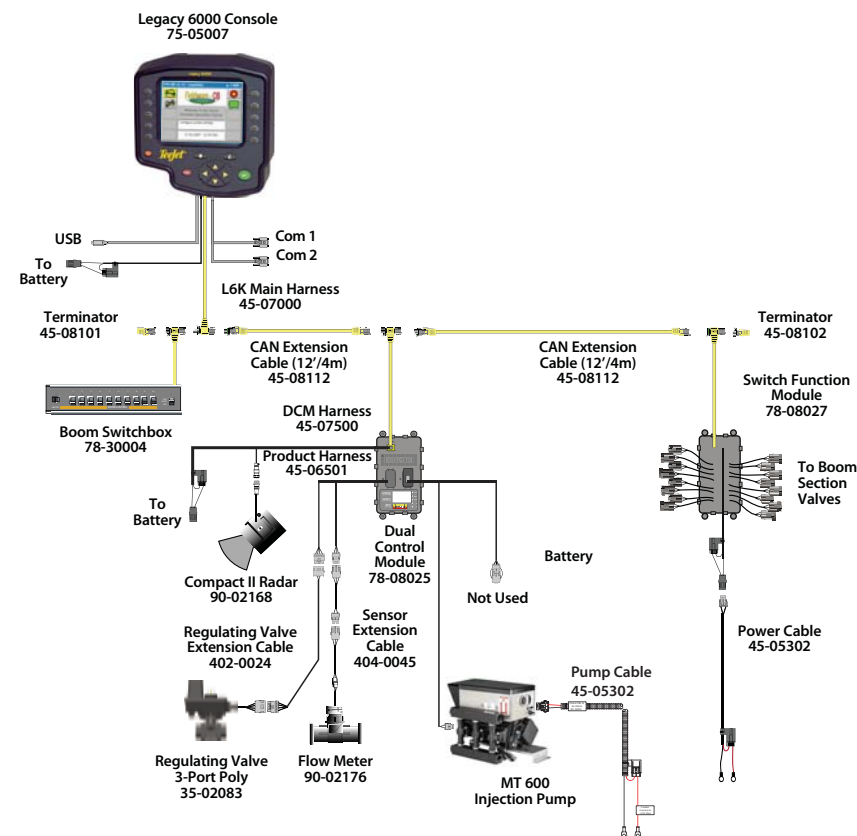
$$\text{Pump Capacity (l/Min.)} = \text{Max. Boom Width (meters)} \times \text{Max. Speed (kph)} \times \text{Chemical Rate (l/ha)} \times (.00167)$$

US example: A sprayer with 35 feet booms traveling at a speed of 14 mph and applying 32 oz of chemicals per acre requires a maximum pump capacity of 31.67 oz/min. (35 feet x 14 mph x 32 oz/ac x .00202 = 31.67 oz/min.) Referring to the Pump Size Selection Chart, a 1 Pump Head pump is sufficient to accommodate this rate. If 96 oz/acre of chemical is required for application, a 2 Head pump is required (35 feet x 14 mph x 96 oz/acre x .00202 = 95.02 oz/min) which exceeds the recommended range of the smaller 1 Head Pump.

Figure 3 - US Pump Selection Chart



Typical Legacy System Wiring Diagram



Typical TASC System Wiring Diagram

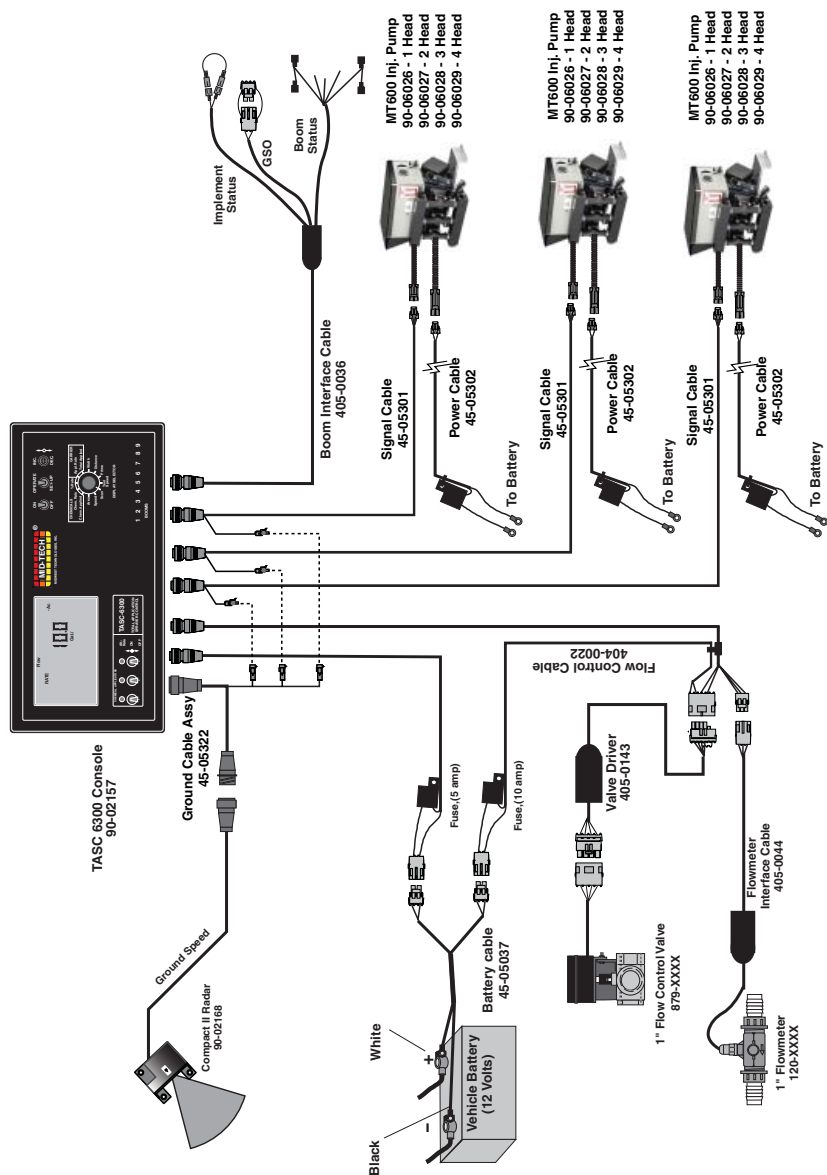
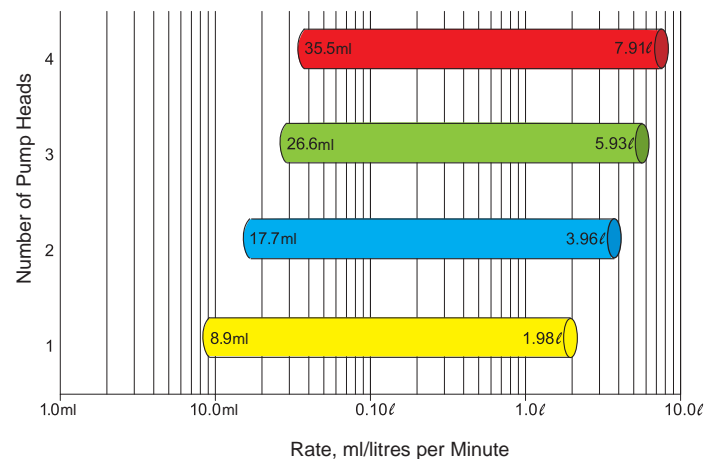


Figure 3 - Metric Pump Selection Chart

Recommended Operating Ranges of TeeJet MT600 Injection Pumps



Typical Calibration Numbers

Typical calibration numbers for the pump heads listed above include:

	TASC	Legacy US	Legacy Metric
- 1 Pump Head	102	9.7	330
- 2 Pump Head	204	4.9	165
- 3 Pump Head	306	3.25	110
- 4 Pump Head	408	2.4	82.5

Note: It is critical to the accuracy of the pump calibration that back-pressure of at least 10 psi (70 kPa) be applied against the discharge of the pump while calibrating. A diaphragm check valve or similar serves this purpose well. Failure to follow this instruction will result in inaccurate calibration numbers.

The accuracy of product delivery by the MT600 pump is dependent on the pump being accurately calibrated. It is recommended that the pump be calibrated any time the following occurs:

- The first time the pump is installed and used
- Any time the pump configuration or plumbing to/from the pump is changed
- Any time a new chemical is used in the pump
- Any time the operator feels that the pump discharge may not be accurate

If the calibration procedure ever results in a calibration number that does not fall within a range of +/- 10% of the above stated default calibration numbers, the user must stop using the pump immediately, and contact their TeeJet Technologies supplier for assistance.

Calibration

Refer to the TASC 6300/6600, TASC 6500, or Legacy 6000 User Guide for calibration instructions related to your specific console. When a reference is indicated to place a magnet on the motor control module or Product Control Module (PCM), press and hold the Calibration switch on the MT 600 pump instead. Calibration numbers can be recorded on page 11 of this user guide.

Figure 4 - Pump Calibration Switch

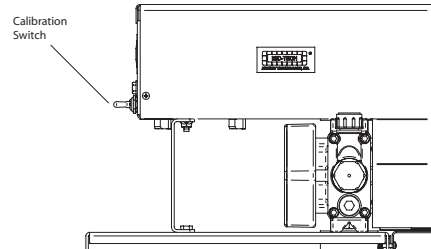
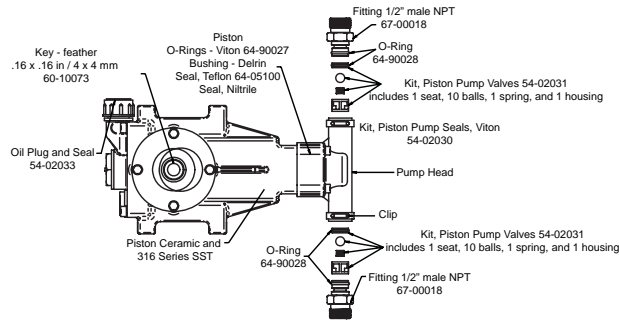


Figure 5 - Pump Diagram



Maintenance

TeeJet Technologies recommends the following maintenance to keep the MT600 operating at peak efficiency:

Flushing and Cleaning/Daily Pump Maintenance

Always refer to the chemical manufacturer's directions regarding cleaning and flushing. Check the pump head oil level. The top of the oil level should always be visible somewhere in the viewing window. Do not leave chemical in the pump or application lines overnight. The system should be flushed and cleaned out thoroughly at the end of each day's operation.

Weekly and Seasonal Pump Maintenance

Check the pump carefully for wear each week during frequent operations. Check for cracking, belt wear, or other signs of material fatigue. If any signs of deterioration are visible, replace the part immediately. Contact your TeeJet dealer for assistance.

Install the ball and seat repair kit (Part number 54-02031) as illustrated in Figure 5. The pump calibration must be checked at the beginning of each season and periodically throughout the year.

Typical Injection System Pumping Diagram

