

**BID DOCUMENTS**  
**FOR**  
**PURCHASE OF TRAILER MOUNTED**  
**PRESSURE WASHER UNIT** CONSISTING OF:

BIDDING

REQUIREMENTS  
CONDITIONS  
EQUIPMENT SPECIFICATIONS

ITB #:18-007

PREPARED BY:

THE CITY OF KEY WEST  
KEY WEST, FLORIDA

November  
2017

November 25, 2017

To: All Prospective Bidders

City of Key West Bid No 18-007 PURCHASE OF TRAILER MOUNTED PRESSURE WASHER UNIT contains the following documents:

- a. Cover letter one (1) page in length
- b. General Conditions of Invitation to Bid four (4) pages in length
- c. Statement of No Bid one (1) page in length
- d. Specifications two (2) pages in length
- e. Bid Response Form one (1) page in length
- f. Required permit/license one (1) page in length
- g. Anti-Kickback Affidavit one (1) page in length
- h. Public Entity Crimes Certification three (3) pages in length
- i. Local Preference Certification one (1) page in length
- j. Domestic Partners Compliance
- k. Cone of Silence
- l. Call for Bids one (1) page in length

Please review your bid package to ensure it contains all of these documents. If not, contact Dave Sermak, City of Key West Purchasing Agent at (305) 809-3819, immediately, to obtain copies of any missing document(s). Contact Richard Sarver at (305) 809-3757 for technical equipment questions.

If your firm determines that a "No Bid" response is required, please complete and return the "Statement of No Bid". Firms/corporations submitting to bid should ensure that the following documents are completed, certified, and returned as instructed: Bid Response Forms, Required Permit/License, Anti-Kickback Affidavit, Public Entity Crimes Certification, Local Preference, Domestic Partners Compliance, and copy of current Occupational License.

SUBJECT: BID NO. 18-007 PURCHASE OF TRAILER MOUNTED PRESSURE  
WASHER UNIT

ISSUE DATE: November 25, 20017

MAIL BIDS TO: CITY CLERK  
CITYOF KEY WEST  
1300 WHITE ST  
KEY WEST, FL 33040

DELIVER  
BIDS TO: SAME AS ABOVE

BIDS MUST BE  
RECEIVED:  
NOT LATER  
THAN: December 27 2017 at 3:00 P.M.

DAVE SERMAK  
PURCHASING AGENT  
CITY OF KEY WEST

ses

Enclosures

GENERAL CONDITIONS  
CITY OF KEY WEST

1. PREPARATION OF BIDS:

Bids will be prepared in accordance with the following:

- (a) The enclosed Bid Response Form is to be used, other forms may be rejected.
- (b) All information required by the BID form shall be furnished. The bidder shall print or type his/her name and manually sign the Bid Response Form plus each continuation sheet on which an entry is made.
- (c) Proposed delivery time must be shown and shall include Sundays and holidays.
- (d) Bidder shall thoroughly examine the specifications, drawings, schedule, instructions, and all other contract documents.
- (e) All proposals shall be submitted in original plus two (2) flash drives with bid in contained within one file of PDF format.
- (f) Bidders are advised that all City contracts are subject to all legal requirements provided for in City ordinances and/or State and Federal Statutes.

2. DESCRIPTION OF SUPPLIES:

- (a) Any manufacturer's name trade name, brand name, or catalog number used in the specifications is for the purpose of describing and establishing general quality levels. SUCH REFERENCES ARE NOT INTENDED TO BE RESTRICTIVE. Bids will be considered for any brand, which meets the quality of the specifications for any item.

3. SUBMISSION OF BIDS:

- (a) Bids and changes thereto shall be enclosed in sealed envelopes addressed to the City Clerk, City of Key West. The name and address of the bidder, the date and hour of the bid opening and the bid number shall be placed on the outside of the envelope.
- (b) Bids must be submitted on the form furnished. Telecopier bids will not be considered.
- (c) Unless otherwise indicated, all City of Key West Bids may be awarded on a line-item basis.

4. REJECTION OF BIDS:

- (a) The City may reject bids:
  - 1. For budgetary reasons, or
  - 2. The bidder misstates or conceals a material fact in its bid, or
  - 3. The bid does not strictly conform to the law or is non-responsive to proposal requirements, or
  - 4. The bid is conditional, or

5. A change of circumstances occurs making the purpose of the bid unnecessary to the City.

(b) The City may also waive any minor informalities or irregularities in any bid.

5. WITHDRAWAL OF BIDS:

(a) Bids may not be withdrawn after the time set for the bid opening for a period of time as specified in the Instruction to Bidders.

(b) Bids may be withdrawn prior to the time set for bid opening. Such request must be in writing.

6. LATE BIDS OR MODIFICATION:

(a) Bids and modifications received after the time set for the bid opening will not be considered.

(b) Modifications in writing received prior to the time set for the bid opening will be accepted.

7. LOCAL, STATE, AND FEDERAL COMPLIANCE REQUIREMENTS:

(a) Bidders shall comply with all local, state and federal directives, orders and laws as applicable to this bid and subsequent contract(s) including, but not limited to:

1. Equal Employment Opportunity (EEO), in compliance with Executive Order 11246, as applicable to this contract.
2. Minority Business Enterprises (MBE), as applicable to this contract.
3. Occupational Safety and Health Act (OSHA), as applicable to this contract.

8. COLLUSION:

(a) The bidder by affixing his signature to this Invitation to Bid, agrees to the following: "Bidder certifies that his/her bid is made without previous understanding, agreement, or connection with any person, firm, or corporation making a bid for the same items and is in all respects fair, without outside control, collusion, fraud, or otherwise illegal action.

9. VARIANCE IN CONDITIONS:

(a) Any and all special conditions and specifications attached hereto which vary from General Conditions shall have precedence.

10. APPROPRIATIONS CLAUSE:

(a) If the contract or delivery extends beyond the current fiscal year, which ends on September 30, the contract shall be contingent upon the availability of funds appropriated for such purposes in the City's annual budget for the next succeeding fiscal year.

11. CLARIFICATION OR OBJECTION TO BID SPECIFICATIONS:

- (a) If any person contemplating submitting a bid for this contract is in doubt as to the true meaning of the specifications or other bid documents or any part thereof, he may submit to the Finance Director on or before five (5) days prior to scheduled opening a request for clarification. All such requests for information shall be made in writing and the person submitting the request will be responsible for prompt delivery. Any interpretation of the bid, if made, will be made only by Addendum duly issued. A copy of such Addendum will be mailed or delivered to each person receiving an Invitation to Bid. The City will not be responsible for any other explanation or interpretation of the proposed bid made or given prior to the award of the contract. Any objection to the specification and requirements as set forth in the bid must be filed in writing with the Finance Director on or before five (5) days prior to the scheduled opening.

12. DISCOUNTS:

- (a) Bidders may offer a cash discount for prompt payment; however, such discount shall not be considered in determining the lowest net cost for bid evaluation proposed. Bidders are encouraged to reflect cash discounts in the unit price quoted.
- (b) In connection with any discount offered, time will be computed from the date of receipt of supplies or services or from the date a correct invoice is received, whichever is the later date. Payment is deemed to be made on the date of mailing of the check.

13. AWARD OF CONTRACT:

- (a) The contract will be awarded to the lowest responsive and responsible bidder whose bid, conforming to the Invitation to Bid, is most advantageous to the City, prices and other factors considered.
- (b) The City reserves the right to accept and award item by item, and/or by group or in the aggregate, unless the bidder qualifies his bid by specified limitations as provided in 4 (a) (3).
- (c) If two or more bids received are for the same total amount or unit price, quality and service being equal, the contract will be awarded to the bidder that maintains an office inside the city limits of Key West. Monroe County will be the determining factor. When neither of these conditions exists, bids for identical amounts will be determined by the drawing of lots in public by the Finance Director.
- (d) Prices quoted must be f.o.b. Key West, Florida, with all transportation charges prepaid unless otherwise specified in the Invitation to Bid.
- (e) Successful Bidder will enter into a contract in accordance with the bid document in a form sufficient to the City Attorney.

14. LOCAL PREFERENCE:

- (a) Under a competitive bid solicitation, when a responsive, responsible non-local business submits the lowest price bid, and the bid submitted by one or more responsive, responsible local businesses is within five percent (5%) of the price submitted by the non-local business, then the local business with the apparent lowest bid offer may have the opportunity to submit an offer to match the price(s) offered by the lowest, qualified and responsive non-local bidder within three working days of the notice of the intent to award. If the lowest local bidder submits a bid that fully matches the lowest bid from the lowest non-local bidder tendered previously, then the award shall be made to such local bidder. If the lowest local bidder declines or is unable to match the lowest non-local bid price(s), then the award shall be made to the non-local business.

15. DOMESTIC PARTNER BENEFITS

- (a) Except where otherwise exempt or prohibited by law, a contractor awarded a contract pursuant to a bid process shall provide benefits to domestic partners of its employees on the same basis as it provides benefits to employees spouses.

Such certification shall be in writing and shall be signed by an authorized officer of the contractor and delivered, along with a description of the contractor's employee benefits plan to the city's procurement director prior to entering a contract.

If the contractor fails to comply with this section, the City may terminate the contract and all monies due or to become due under the contract may be retained by the City.

16. CONE OF SILENCE – Successful bidder, duly sworn, depose and say that all owners(s) partners, officers, directors, employees and agents representing their firm have read and understand the limitations and procedures regarding communications concerning City of Key West issued competitive solicitations pursuant to City of Key West Ordinance Section 2-773 Cone of Silence.

17. DAMAGE:

- (a) Successful bidder(s) will be responsible for making any and all claims against carriers for missing or damaged items.

18. TRAVEL AND REIMBURSABLE OUT OF POCKET EXPENSE:

- (a) Should there be travel and/or reimbursable out of pocket expenses relevant to this contract, Florida Statute 112.061 (Per diem and travel expenses of public officers, employees, and authorized persons) will be followed.

19. INSURANCE/IMDEMNIFICATION-

Proposer is to secure, pay for, and file with the City of Key West, prior to commencing any work under the Contract, all certificates for workers' compensation, public liability, and property damage liability insurance, and such other insurance coverages as may be required by specifications and addenda thereto, in at least the following minimum amounts with specification amounts to prevail if greater than minimum amounts indicated. Notwithstanding any other

provision of the Contract, the Proposer shall provide the minimum limits of liability insurance coverage as follows:

Auto Liability	\$300,000	Combined Single Limit
General Liability	\$300,000	Aggregate (Per Project)
Professional Liability	\$1,000,000	Per Claim / Aggregate

Proposer shall furnish an original Certificate of Insurance indicating, and such policy providing coverage to, City of Key West named as an additional insured on all policies—excepting Professional Liability—on a PRIMARY and NON CONTRIBUTORY basis utilizing an ISO standard endorsement at least as broad as CG 2010 (11/85) or its equivalent, (combination of CG 20 10 07 04 and CG 20 37 07 04, providing coverage for completed operations, is acceptable) including a waiver of subrogation clause in favor of City of Key West on all policies. Proposer will maintain the Professional Liability, General Liability, and Umbrella Liability insurance coverages summarized above with coverage continuing in full force including the additional insured endorsement until at least 3 years beyond completion and delivery of the work contracted herein.

Notwithstanding any other provision of the Contract, the PROPOSER shall maintain complete workers' compensation coverage for each and every employee, principal, officer, representative, or agent of the PROPOSER who is performing any labor, services, or material under the Contract. Further, PROPOSER shall additionally maintain the following minimum limits of coverage:

Bodily Injury Each Accident	\$1,000,000
Bodily Injury by Disease Each Employee	\$1,000,000
Bodily Injury by Disease Policy Limit	\$1,000,000

If the work is being done on or near a navigable waterway, PROPOSER's workers compensation policy shall be endorsed to provide USL&H Act (WC 00 01 06 A) and Jones Act (WC 00 02 01 A) coverage if specified by the City of Key West. PROPOSER shall provide the City of Key West with a Certificate of Insurance verifying compliance with the workman's compensation coverage as set forth herein and shall provide as often as required by the City of Key West such certification which shall also show the insurance company, policy number, effective and expiration date, and the limits of workman's compensation coverage under each policy.



PROPOSER's insurance policies shall be endorsed to give 30 days written notice to the City of Key West in the event of cancellation or material change, using form CG 02 24, or its equivalent.

Certificates of Insurance submitted to the City of Key West will not be accepted without copies of the endorsements being requested. This includes additional insured endorsements, cancellation/material change notice endorsements, and waivers of subrogation. Copies of USL&H Act and Jones Act endorsements will also be required if necessary. PLEASE ADVISE YOUR INSURANCE AGENT ACCORDINGLY.

PROPOSER will comply with any and all safety regulations required by any agency or regulatory body including but not limited to OSHA.

### Indemnification

To the fullest extent permitted by law, the PROPOSER expressly agrees to indemnify and hold harmless the City of Key West, their officers, directors, agents, and employees (herein called the "indemnitees") from liabilities, damages, losses and costs, including, but not limited to, reasonable attorney's fees and court costs, such legal expenses to include costs incurred in establishing the indemnification and other rights agreed to in this Paragraph, to persons or property, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the PROPOSER, its Subcontractors or persons employed or utilized by them in the performance of the Contract. Claims by indemnitees for indemnification shall be limited to the amount of PROPOSER's insurance or \$1 million per occurrence, whichever is greater. The parties acknowledge that the amount of the indemnity required hereunder bears a reasonable commercial relationship to the Contract and it is part of the project specifications or the bid documents, if any.

The indemnification obligations under the Contract shall not be restricted in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the PROPOSER under workers' compensation acts, disability benefits acts, or other employee benefits acts, and shall extend to and include any actions brought by or in the name of any employee of the PROPOSER or of any third party to whom PROPOSER may subcontract a part or all of the Work. This indemnification shall continue beyond the date of completion of the work.

IF A TABULATION OF BIDS IS DESIRED, PLEASE ENCLOSE A SELF-ADDRESSED STAMPED ENVELOPE WHEN SUBMITTING YOUR PROPOSAL.

STATEMENT OF NO BID # 18-007 PURCHASE OF TRAILER MOUNTED  
PRESSURE WASHER UNIT

NOTE: IF YOU DO NOT INTEND TO BID, PLEASE RETURN THIS FORM ONLY

CITY OF KEY WEST  
FINANCE DEPARTMENT  
P.O. BOX 1409  
KEY WEST, FLORIDA 33040  
ATTN: D. SERMAK

We, the undersigned have declined to bid on the above-noted Invitation to Bid for the following reason(s)

- Insufficient time to respond to Invitation to Bid
- Do not offer this product
- Our schedule will not permit us to perform
- Unable to meet specifications
- Specifications unclear (please explain below)
- Remove us from your "Bidder Mailing List"
- Other (Please specify below)

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We understand that if a "No Bid" statement is not returned, our name may be removed from the Bidder's list of the City of Key West.

COMPANY NAME: \_\_\_\_\_

AUTHORIZED AGENT: \_\_\_\_\_

COMPANY  
ADDRESS: \_\_\_\_\_

DATE: \_\_\_\_\_ TELEPHONE: \_\_\_\_\_

# BID SPECIFICATIONS

A self-contained diesel powered hot water pressure washer unit mounted on a trailer (open or enclosed). Unit is to be completely assembled and tested prior to delivery to the City. Price should include One (1) day training for City staff on the operation of equipment and one (1) day training for mechanics on repair and maintenance of equipment when delivered.

Bidder is to provide the following documentation with their Bid:

Copy of State Business License

Copy of Product Liability Insurance

OEM Specifications and Manuals (Owner, Operational, Service, Technician, Diagrams and etc.) for all equipment used to assemble the unit.

Factory Warranty information from the Bidder for each piece of equipment used to assemble the unit.

Provide warranty information on the Materials and Workmanship to be turn in with the bid from the Bidder.

## **Minimum Specifications:**

Unless stated otherwise, all metals used for frames, hose reel mounts, tank bands or mounts etc are to be Aluminum, Hot Dipped Galvanized Steel or Stainless Steel.

Engine:

Industrial duty

Major brand (Kubota, Isuzu, John Deer, CAT, Detroit Diesel, Yanmar, or equal etc.)

Diesel power not less than 28 HP

Liquid cooled

Electric start

High temperature cut off safety

Low oil pressure cut off safety

Spin on style fuel filters with water separation in the Primary Filter

Automotive type muffler designed for maximum sound reduction to be less than 60dbs, insulated for safety and vented up and away from operator and customers

Engine monitors to include RPM, Coolant Temperature, Volt Meter, Fuel Gage, Oil Pressure and

Hour Meter. Oversized water proof Alternator or Generator to run 115v system for Hot Water Burner and aux outlet

Fuel tank sized to operate for minimum of 8 hours made of UV stable Polypropylene or equal.

Hot Water:

Industrial duty

Major brand burner and burner control system one unit only, no multiple burners

Complete diesel fired burner sized properly for the pressure rating and volume of water of the pump.

Over pressure safety relief and any other required safety apparatus

High and low pressure cut off safety switches

Fuel tank sized to operate for a minimum of 8 hours. May use same tank as engine fuel.

Spin on style Primary and Secondary fuel filter system.

Separate (from engine controls) burner control, temperature read out and thermostat for hot/cold water applications

Maximum output temperature at the wand tip 200 Degrees Fahrenheit @ 10Gallons Per Minute Guaranteed

# BID SPECIFICATIONS

Pump: Industrial  
duty Major brand  
pump Direct drive  
Minimum 3,000 PSI @ 10GPM  
Unit to be set up to run two wands at 3,000 PSI @ 5GPM  
Brass or Bronze forged pump body with oil bath crankcase and ceramic pistons  
Variable pressure adjustment with over-pressure safety  
Pressure gage mounted in easily accessible place to read output pressure

## Water System:

Minimum 600 gallons of UV stable Polypropylene or equal water storage tank(s) with removable in line filter on the suction side and convenient access to fill the tank(s)  
All water/chemical tank(s) to be made of UV stable Polypropylene or equivalent  
Minimum 25 gallon UV stable Polypropylene or equal Chemical tank for cleaning chemical injection with pump if needed  
Minimum Four hose reels mounted to unit large enough to hold 100' of 3/8" high-pressure hose each  
Provide eight 50' 3/8" 4,000 PSI hot water/high-pressure service (two connected for each reel) abrasion resistant hose  
Provide two wands plus their nozzle setups with 0, 15, 25, 45 degree nozzles and turbo nozzle.  
Provide one chemical wand and nozzle  
Provide one large surface cleaner, size correctly for the pressure and flow rate of equipment.

## Trailer:

Suspension, axles, tires, hitch and trailer rails should be load rated at a minimum of the Gross Weight of the entire Unit (all tanks filled and trailer weight included) plus 120%  
Trailer to be constructed of Aluminum or Hot Dipped Galvanized Steel. No wood is to be used on the deck or any other part of the Unit.  
Lights to meet FDOT regulations with rotating beacon at front or midpoint and flashing arrow mounted at the rear  
Hydraulic surge breaks on at least one axle  
Overall dimensions must meet FDOT regulations  
Trailer Jack load rated for a minimum of the Tongue Weight with trailer fully loaded plus 150%  
Manuals  
Provide all manuals (Owner, Operational, Service, Technician, Diagrams and Etc.) for all equipment or components on the unit ( Pump, engine, burner, trailer and etc.) a pond delivery of unit.

BID  
RESPONSE

PURCHASE OF TRAILER MOUNTED PRESSURE WASHER UNIT

Per Attached Specifications Total price \$ 34,079.00

Total price in words thirty four thousand seveny nine dollars and zero cents

PRICE FOB KEY WEST, FL

PAYMENT TERMS: 45 days after delivery

DELIVERY DATE 60 DAYS ARO

Contact Richard Sarver, (305) 809-3757 with questions.

BIDDER REPRESENTATION

The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this Proposal are those named herein, that this Proposal is, in all respects, fair and without fraud, that it is made without collusion with any official of the Owner, and that the Proposal is made without any connection or collusion with any person submitting another Proposal on this Contract.

I represent that this bid is submitted in compliance with all terms, conditions and specifications of the Call for Bid and that I am authorized by the owners/principals to execute and submit this proposal on behalf of the business identified below:

BUSINESS NAME: Faitella Enterprises, Inc.  
STREET ADDRESS: 706 South US1  
CITY/STATE/ZIP: Fort Pierce, FL 34950  
PRINT NAME OF AUTHORIZED REPRESENTATIVE: Joe Faitella  
TITLE/POSITION OF AUTHORIZED REPRESENTATIVE: President  
DATE SUBMITTED: 12/20/17 TELEPHONE: 772-465-5862

LICENSE REQUIRED  
& COSTS

Local Purchase of equipment would require a KeyWest, Business Tax Receipt: Fees not to exceed \$309.75

ANTI-KICKBACK AFFIDAVIT

STATE OF FLORIDA

SS:

COUNTY OF MONROE

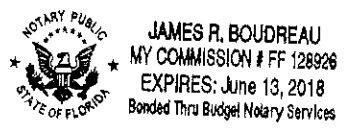
I the undersigned hereby duly sworn, depose and say that no portion of the sum herein bid will be paid to any employee of the City of Key West as a commission, kickback, reward or gift, directly or indirectly by me or any member of my firm or by an officer of the corporation.

BY: [Signature]

sworn and prescribed before me this Wednesday day of 12/20, 2017

[Signature]  
NOTARY PUBLIC, State of Florida

My commission expires: 6/13/18



SWORN STATEMENT PURSUANT TO SECTION 287.133(3)(A)  
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY  
PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS,

1. This sworn statement is submitted to City of Key West  
by Joe Faitella President  
(print individual's name and title)  
for Faitella Enterprises Inc.  
(print name of entity submitting sworn statement)

whose business address is 706 South US 1, Fort Pierce FL 34950

and (if applicable) its Federal Employer Identification Number (FEIN) is 59-2186877

(if the entity has no FEIN, include the Social Security Number of the individual signing this  
sworn statement): \_\_\_\_\_

2. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or of the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.
3. I understand that "conviction" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 01, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.
4. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means:
1. A predecessor or successor of a person convicted of a public entity crime: or
  2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members and agent who are active in the management of an affiliate. The ownership by one person of shares



constituting a controlling interest in another person, or a pooling of equipment of income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

5. I understand that a "person" as defined in Paragraph 287.133(1)(e), Florida Statute means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

6. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement (indicate which statement applies).

Neither the entity submitting this sworn statement, or any of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, nor any affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July, 1989.

The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 01, 1989.

The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 01, 1989. However, there has been a subsequent proceeding before a Hearing Officer of the State of Florida, Division of Administrative Hearings and the Final Order entered by the Hearing Officer determined that it was not in the public interest to place the entity submitting this sworn statement on the convicted vendor list. (attach a copy of the final order)

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH ONE (1) ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND, THAT THIS FORM IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT I AM REQUIRED TO INFORM THE PUBLIC ENTITY PRIOR TO ENTERING INTO A CONTRACT IN EXCESS OF THE THRESHOLD AMOUNT PROVIDED IN SECTION 287.017, FLORIDA STATUTES, FOR THE CATEGORY TWO OF ANY CHANGE IN THE INFORMATION CONTAINED IN THIS FORM.

[Signature]  
(SIGNATURE)  
12/20/17  
(DATE)

STATE OF Florida

COUNTY OF St. Lucie

PERSONALLY APPEARED BEFORE ME, the undersigned authority  
\_\_\_\_\_ who, after first being sworn by me,  
(name of individual)  
affixed his/her signature in the space provided above on this  
wednesday day of 12/20, 2017

James R. Boudreau  
NOTARY PUBLIC



JAMES R. BOUDREAU  
MY COMMISSION # FF 126926  
EXPIRES: June 13, 2018  
Bonded Thru Budget Notary Services

My commission expires: 6/13/18

*[Faint, illegible text]*

**LOCAL VENDOR CERTIFICATION PURSUANT TO CKW ORDINANCE 09-22 SECTION 2-798**

The undersigned, as a duly authorized representative of the vendor listed herein, certifies to the best of his/her knowledge and belief, that the vendor meets the definition of a "Local Business." For purposes of this section, "local business" shall mean a business which:

- a. *Principle address as registered with the FL Department of State located within 30 miles of the boundaries of the city, listed with the chief licensing official as having a business tax receipt with its principle address within 30 miles of the boundaries of the city for at least one year immediately prior to the issuance of the solicitation.*
- b. *Maintains a workforce of at least 50 percent of its employees from the city or within 30 miles of its boundaries.*
- c. Having paid all current license taxes and any other fees due the city at least 24 hours prior to the publication of the call for bids or request for proposals.

- Not a local vendor pursuant to Ordinance 09-22 Section 2-798
- Qualifies as a local vendor pursuant to Ordinance 09-22 Section 2-798

If you qualify, please complete the following in support of the self certification & submit copies of your County and City business licenses. Failure to provide the information requested will result in denial of certification as a local business.

Business Name \_\_\_\_\_

Phone: \_\_\_\_\_

Current Local Address: \_\_\_\_\_  
(P.O Box numbers may not be used to establish status)

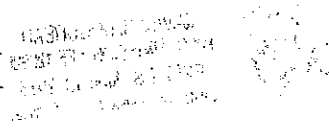
Fax: \_\_\_\_\_

Length of time at this address \_\_\_\_\_

\_\_\_\_\_  
Signature of Authorized Representative

\_\_\_\_\_  
Date

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_



The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

By \_\_\_\_\_, of \_\_\_\_\_  
(Name of officer or agent, title of officer or agent) Name of corporation acknowledging)  
or has produced \_\_\_\_\_ as identification  
(type of identification)

\_\_\_\_\_  
Signature of Notary

Return Completed form with  
Supporting documents to:  
City of Key West Purchasing

\_\_\_\_\_  
Print, Type or Stamp Name of Notary

\_\_\_\_\_  
Title or R

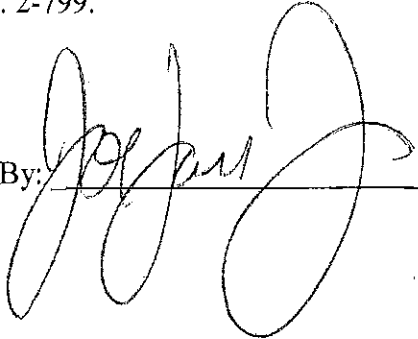
**EQUAL BENEFITS FOR DOMESTIC PARTNERS AFFIDAVIT**

PROJECT ITB #18-007: COMMUNITY POOL ELEVATOR/LIFT

REPLACEMENT STATE OF FL )

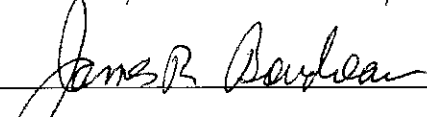
COUNTY OF St. Lucie ) : SS

I, the undersigned hereby duly sworn, depose and say that the firm of Faitella Enterprises provides benefits to domestic partners of its employees on the same basis as it provides benefits to employees' spouses per City of Key West Ordinance Sec. 2-799.

By: 

Sworn and subscribed before me this

NOTARY PUBLIC STATE OF FLORIDA  
QUALIFIED AND BONDED  
wednesday day of 12/20/17, 2018.

  
\_\_\_\_\_

NOTARY PUBLIC, State of Florida at Large

My Commission Expires: 6/13/18



**JAMES R. BOUDREAU**  
MY COMMISSION # FF 128926  
EXPIRES: June 13, 2018  
Bonded Thru Budget Notary Services

## City Ordinance Sec. 2-799

### Requirements for City Contractors to Provide Equal Benefits for Domestic Partners

- (a) Definitions. For purposes of this section only, the following definitions shall apply:
- (1) **Benefits** means the following plan, program or policy provided or offered by a contractor to its employees as part of the employer's total compensation package: sick leave, bereavement leave, family medical leave, and health benefits.
  - (2) **Bid** shall mean a competitive bid procedure established by the city through the issuance of an invitation to bid, request for proposals, request for qualifications, or request for letters of interest.
  - (3) **Cash equivalent** means the amount of money paid to an employee with a domestic partner in lieu of providing benefits to the employee's domestic partner. The cash equivalent is equal to the employer's direct expense of providing benefits to an employee for his or her spouse.

The cash equivalents of the following benefits apply:

- a. For bereavement leave, cash payment for the number of days that would be allowed as paid time off for the death of a spouse. Cash payment would be in the form of the wages of the domestic partner employee for the number of days allowed.
  - b. For health benefits, the cost to the contractor of the contractor's share of the single monthly premiums that are being paid for the domestic partner employee, to be paid on a regular basis while the domestic partner employee maintains such insurance in force for himself or herself.
  - c. For family medical leave, cash payment for the number of days that would be allowed as time off for an employee to care for a spouse who has a serious health condition. Cash payment would be in the form of the wages of the domestic partner employee for the number of days allowed.
- (4) **Contract** means any written agreement, purchase order, standing order or similar instrument entered into pursuant to the award of a bid whereby the city is committed to expend or does expend funds in return for work, labor, professional services, consulting services, supplies, equipment, materials, construction, construction related services or any combination of the foregoing.
  - (5) **Contractor** means any person or persons, sole proprietorship, partnership, joint venture, corporation, or other form of doing business, that is awarded a bid and enters into a covered contract with the city, and which maintains five (5) or more full-time employees.
  - (6) **Covered contract** means a contract between the city and a contractor awarded subsequent to the date when this section becomes effective valued at over twenty thousand dollars (\$20,000).
  - (7) **Domestic partner** shall mean any two adults of the same or different sex, who have registered as domestic partners with a governmental body pursuant to state or local law authorizing such registration, or with an internal registry maintained by the employer of at least one of the domestic partners. A contractor may institute an internal registry to allow for the provision of equal benefits to employees with domestic partner who do not register their partnerships pursuant to a governmental body authorizing such registration, or who are located in a

jurisdiction where no such governmental domestic partnership registry exists. A contractor that institutes such registry shall not impose criteria for registration that are more stringent than those required for domestic partnership registration by the City of Key West pursuant to Chapter 38, Article V of the Key West Code of Ordinances.

- (8) *Equal benefits* mean the equality of benefits between employees with spouses and employees with domestic partners, and/or between spouses of employees and domestic partners of employees.

(b) Equal benefits requirements.

- (1) Except where otherwise exempt or prohibited by law, a Contractor awarded a covered contract pursuant to a bid process shall provide benefits to domestic partners of its employees on the same basis as it provides benefits to employees' spouses.
- (2) All bid requests for covered contracts which are issued on or after the effective date of this section shall include the requirement to provide equal benefits in the procurement specifications in accordance with this section.
- (3) The city shall not enter into any covered contract unless the contractor certifies that such contractor does not discriminate in the provision of benefits between employees with domestic partners and employees with spouses and/or between the domestic partners and spouses of such employees.
- (4) Such certification shall be in writing and shall be signed by an authorized officer of the contractor and delivered, along with a description of the contractor's employee benefits plan, to the city's procurement director prior to entering into such covered contract.
- (5) The city manager or his/her designee shall reject a contractor's certification of compliance if he/she determines that such contractor discriminates in the provision of benefits or if the city manager or designee determines that the certification was created, or is being used for the purpose of evading the requirements of this section.
- (6) The contractor shall provide the city manager or his/her designee, access to its records for the purpose of audits and/or investigations to ascertain compliance with the provisions of this section, and upon request shall provide evidence that the contractor is in compliance with the provisions of this section upon each new bid, contract renewal, or when the city manager has received a complaint or has reason to believe the contractor may not be in compliance with the provisions of this section. This shall include but not be limited to providing the city manager or his/her designee with certified copies of all of the contractor's records pertaining to its benefits policies and its employment policies and practices.
- (7) The contractor may not set up or use its contracting entity for the purpose of evading the requirements imposed by this section.

(c) Mandatory contract provisions pertaining to equal benefits. Unless otherwise exempt, every covered contract shall contain language that obligates the contractor to comply with the applicable provisions of this section. The language shall include provisions for the following:

- (1) During the performance of the covered contract, the contractor certifies and represents that it will comply with this section.
  - (2) The failure of the contractor to comply with this section will be deemed to be a material breach of the covered contract.
  - (3) If the contractor fails to comply with this section, the city may terminate the covered contract and all monies due or to become due under the covered contract may be retained by the city. The city may also pursue any and all other remedies at law or in equity for any breach.
  - (4) If the city manager or his designee determines that a contractor has set up or used its contracting entity for the purpose of evading the requirements of this section, the city may terminate the covered contract.
- (d) Enforcement. If the contractor fails to comply with the provisions of this section:
- (1) The failure to comply may be deemed to be a material breach of the covered contract; or
  - (2) The city may terminate the covered contract; or
  - (3) Monies due or to become due under the covered contract may be retained by the city until compliance is achieved; or
  - (4) The city may also pursue any and all other remedies at law or in equity for any breach;
  - (5) Failure to comply with this section may also subject contractor to the procedures set forth in Division 5 of this article, entitled "Debarment of contractors from city work."
- (e) Exceptions and waivers.

The provisions of this section shall not apply where:

- (1) The contractor does not provide benefits to employees' spouses.
- (2) The contractor is a religious organization, association, society or any non-profit charitable or educational institution or organization operated, supervised or controlled by or in conjunction with a religious organization, association or society.
- (3) The contractor is a governmental entity.
- (4) The sale or lease of city property.
- (5) The provision of this section would violate grant requirement, the laws, rules or regulations of federal or state law (for example, The acquisition services procured pursuant to Chapter 287.055, Florida Statutes known as the "Contractors' Competitive Negotiation Act").
- (6) Provided that the contractor does not discriminate in the provision of benefits, a contractor may also comply with this section by providing an employee with the cash equivalent of such benefits, if the city manager or his/her designee determines that either:
  - a. The contractor has made a reasonable yet unsuccessful effort to provide equal benefits. The contractor shall provide the city manager or his/her designee with sufficient proof of such inability to provide such benefit or benefits which shall include the measures taken to provide such benefits or benefits and the cash equivalent proposed, along with its certificate

of compliance, as is required under this section.

- (7) The city commission waives compliance of this section in the best interest of the city, including but not limited to the following circumstances:
  - a. The covered contract is necessary to respond to an emergency.
  - b. Where only one bid response is received.
  - c. Where more than one bid response is received, but the bids demonstrate that none of the bidders can comply with the requirements of this section.
- (f) City's authority to cancel contract. Nothing in this section shall be construed to limit the city's authority to cancel or terminate a contract, deny or withdraw approval to perform a subcontract or provide supplies, issue a non-responsibility finding, issue a non-responsiveness finding, deny a person or entity prequalification, or otherwise deny a person or entity city business.
- (g) Timing of application. This section shall be applicable only to covered contracts awarded pursuant to bids which are after the date when this section becomes effective.



CONE OF SILENCE

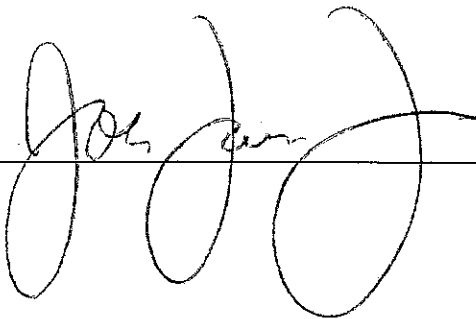
STATE OF FLORIDA

SS

COUNTY OF MONROE

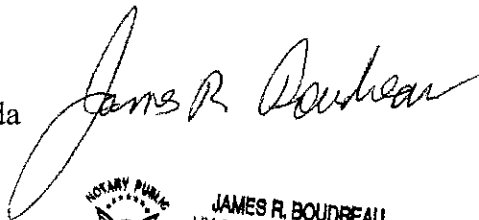
I the undersigned hereby duly sworn, depose and say that all owner(s) partners, officers, directors, employees and agents representing the firm of Faitella Enterprises have read and understand the limitations and procedures regarding communications concerning City of Key West issued competitive solicitations pursuant to City of Key West Ordinance Section 2-773 Cone of Silence.

BY: \_\_\_\_\_



Sworn and prescribed before me this 20 day of 12, 2017

NOTARY PUBLIC, State of Florida



My commission expires:



JAMES R. BOUDREAU  
MY COMMISSION # FF 128926  
EXPIRES: June 13, 2018  
Bonded Thru Budget Notary Services

## CALL FOR BIDS

KEY WEST, FLORIDA by the office of the City Clerk, 1300 White Street, Key West,

Florida 33040 until 3:00 P.M., December 27, 2017 for Bid 18-007

PURCHASE OF TRAILER  
MOUNTED PRESSURE WASHER UNIT.

Bids will be opened in the Office of the City Clerk then and there and publicly read aloud. Any bid received after the time announced will not be considered.

SPECIFICATIONS AND BID DOCUMENTS may be obtained from DemandStar by Onvia at

[www.demandstar.com/supplier](http://www.demandstar.com/supplier) or call toll-free at 1-800-711-1712. One (1) original and 2 (two) of flash drives of the bids are to be enclosed in two (2) sealed envelopes, one within the other, each clearly marked on the outside: BID # 18-007 PURCHASE OF TRAILER MOUNTED PRESSURE WASHER UNIT addressed and delivered to: CITY CLERK, CITY OF KEY WEST, FLORIDA

CITY HALL, 1300 WHITE ST  
KEY WEST, FLORIDA 33040

At the time of the award, the successful Bidder must show satisfactory document of such State, County and City licenses as would be required. Any permit and/or license requirement and subsequent costs are located within the bid documents. The successful Bidder must also be able to satisfy the City Attorney as to such insurance coverage and legal requirements as may be demanded by the bid in question. The City may reject bids: (1) for budgetary reasons, (2) if the bidder misstates or conceals a material fact in its bid, (3) if the bidder does not strictly conform to the law or is non-responsive to bid requirements, (4) if the bid is conditional, (5) if a change of circumstances occurs making the purpose of the bid unnecessary or (6) if such rejection is in the best interest of the City. The City may also waive any minor informalities or irregularities in any bid.



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
7/6/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Harbor Insurance 6645 S US Hwy 1  Port St Lucie FL 34952	<b>CONTACT NAME:</b> Erin Brown <b>PHONE (A/C, No, Ext):</b> (772) 461-6040 <b>FAX (A/C, No):</b> (772) 460-2315 <b>E-MAIL ADDRESS:</b> erin.brown@harboria.com  <table style="width: 100%; border: none;"> <tr> <td style="text-align: center; border: none;"><b>INSURER(S) AFFORDING COVERAGE</b></td> <td style="text-align: center; border: none;"><b>NAIC#</b></td> </tr> <tr> <td style="border: none;"><b>INSURER A:</b> Old Dominion Insurance Co</td> <td style="border: none;">40231</td> </tr> <tr> <td style="border: none;"><b>INSURER B:</b> Auto-Owners Insurance Company</td> <td style="border: none;">18988</td> </tr> <tr> <td style="border: none;"><b>INSURER C:</b></td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;"><b>INSURER D:</b></td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;"><b>INSURER E:</b></td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;"><b>INSURER F:</b></td> <td style="border: none;"></td> </tr> </table>	<b>INSURER(S) AFFORDING COVERAGE</b>	<b>NAIC#</b>	<b>INSURER A:</b> Old Dominion Insurance Co	40231	<b>INSURER B:</b> Auto-Owners Insurance Company	18988	<b>INSURER C:</b>		<b>INSURER D:</b>		<b>INSURER E:</b>		<b>INSURER F:</b>	
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<b>INSURER E:</b>															
<b>INSURER F:</b>															
<b>INSURED</b> FAITELLA ENTERPRISES, INC. DBA THE PAINT HOUSE 706 S. US HWY 1 FORT PIERCE FL 34950															

**COVERAGES**                                      **CERTIFICATE NUMBER:** 17/18 Master                                      **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:	X		BPP7597C	7/6/2017	7/6/2018	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 500,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 Policy Fee \$
	<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS						COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED    RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$
	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N		N/A			<input type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
B	Inland Marine			72261419	6/20/2017	6/20/2018	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)  
 Certificate Holder is an Additional Insured with respect to General Liability if required by written contract or agreement.

<b>CERTIFICATE HOLDER</b>  City of Key West PO Box 1409 Key West, FL 33041	<b>CANCELLATION</b>  SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.  AUTHORIZED REPRESENTATIVE  M Lombardi/ERBR01
--	---

**2017 FLORIDA PROFIT CORPORATION ANNUAL REPORT**

DOCUMENT# F64454

**Entity Name:** FAITELLA ENTERPRISES, INC.

**Current Principal Place of Business:**

706 SOUTH U.S. HIGHWAY 1  
FORT PIERCE, FL 34950

**Current Mailing Address:**

706 SOUTH U.S. HIGHWAY 1  
FORT PIERCE, FL 34950 US

**FEI Number:** 59-2186877

**Certificate of Status Desired:** No

**Name and Address of Current Registered Agent:**

FAITELLA, JOSEPH, JR  
706 SOUTH U.S. HIGHWAY 1  
FORT PIERCE, FL 34950 US

*The above named entity submits this statement for the purpose of changing its registered office or registered agent, or both, in the State of Florida.*

**SIGNATURE:**

\_\_\_\_\_  
Electronic Signature of Registered Agent

\_\_\_\_\_  
Date

**Officer/Director Detail :**

Title DP  
Name FAITELLA, JOSEPH, JR  
Address 706 SOUTH U.S. HIGHWAY 1  
City-State-Zip: FT PIERCE FL 34950

*I hereby certify that the information indicated on this report or supplemental report is true and accurate and that my electronic signature shall have the same legal effect as if made under oath; that I am an officer or director of the corporation or the receiver or trustee empowered to execute this report as required by Chapter 607, Florida Statutes; and that my name appears above, or on an attachment with all other like empowered.*

**SIGNATURE:** JOSEPH FAITELLA, JR

**PRESIDENT**

**02/10/2017**

\_\_\_\_\_  
Electronic Signature of Signing Officer/Director Detail

\_\_\_\_\_  
Date

# WARRANTY

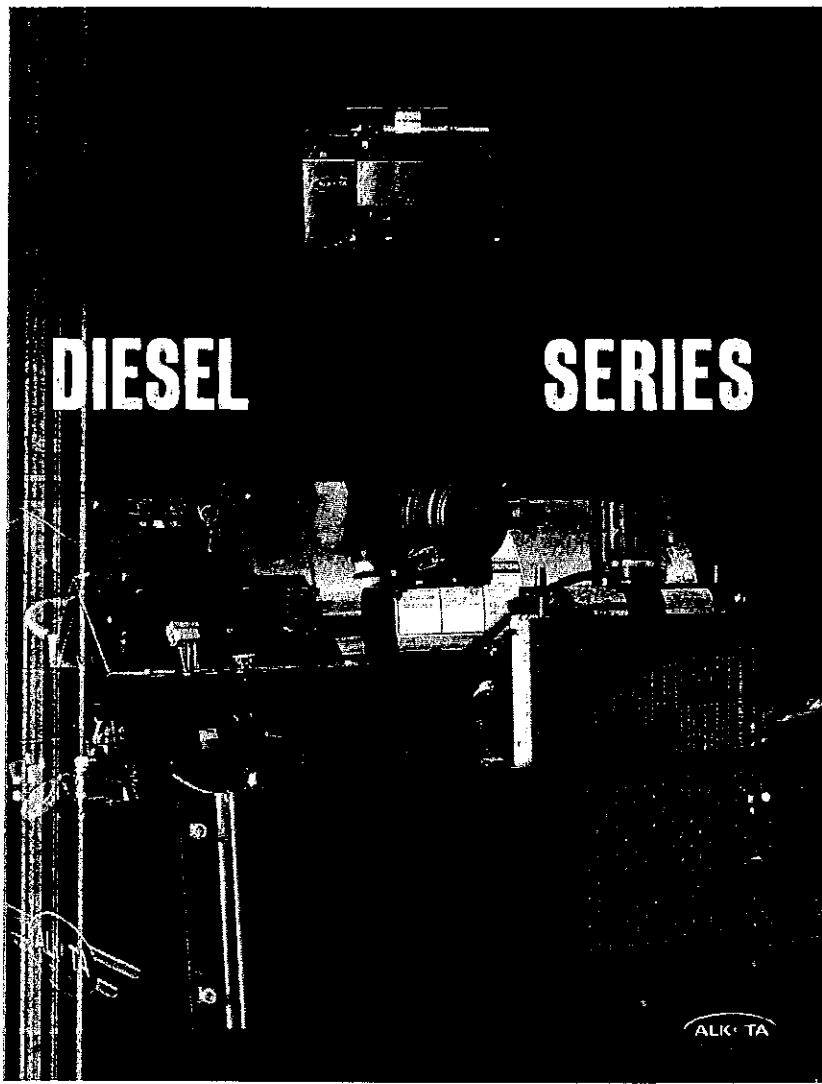
Product		Warranty Period
Water Pumps	General Pump	5 years
	A.R. Pump	5 years
	Comet Pump	5 years
	Cat Pump	2 years
Water Pump Accessories	Unloaders	6 months
	Pressure/Flow Switches	6 months
	Thermal Relief Valves	6 months
	Trigger Guns	6 months
	Quick Couplers	6 months
	Down Stream Injectors	6 months
Electric Motors	A.O. Smith, Baldor, Marathon*	1 year
Generators	Winco 2000 watt*	1 year
	Mecc Alte*	1 year
Oil Burner Components	Motor	1 year
	Fuel Pump	3 years
	Wayne Ignitor/Transformer	2 years
	Custom Coils Ignitor	1 year
Gas Burner Components	Gas Valve	1 year
	Pilot Couple	1 year
	Electric Ignition Module	1 year
Gas Engines	Briggs & Stratton, Vanguard*	3 year
	Honda*	3 year
	Kohler Command Magnum*	2 year
Diesel Engines	Kubota*	3 year limited
	Lombardini*	3 year/2 stage
Heating Coils		7 years prorated
Electrical	GFI Cordset, Cam Switch	1 year
	Vacuum Switch, Temp. Control	1 year

\* These products need to be taken/sent to your local certified service center for evaluation. Please contact our warranty department at 800-255-6823 to find a listing for your area.



Alkota Cleaning Systems, Inc. 105 Broad Street Alcester, South Dakota, USA 57001  
[www.alkota.com](http://www.alkota.com) email: [info@alkota.com](mailto:info@alkota.com)

# Service Manual



**Diesel Engine Drive  
Model 10307KK  
p/n 10307KK-SIN049**

---

INSTALLATION DATE

---

MAKE/MODEL

SERIAL NUMBER

---

SELLER

---

ADDRESS

CITY/STATE/ZIP

---

NOTES:

**20141008**

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# Specifications

## PERFORMANCE

Discharge Volume	10 gal /m / 37.9 L/m
Pump Head Pressure	3000 psi / 207 bar
Combustion Smoke/Bacharach Scale	#1 OR #2 SMOKE
Carbon Monoxide Allowed	0.01%
Draft/Stack Installation	0.2" – 0.04" WC READING
Heat Input	547,400 Btu/h / 137,944 kcal/h

## GENERAL

Minimum Inlet Water Pressure	<i>over 65 psi may require water inlet regulator</i> 10 psi / 0.68 bar
Weight	1560 lbs / 708 kg
Spray Tip	Yellow (#55 - 15") p/n J00-15055-2
Fuel & Engine Tank Capacity (Shared)	50 gal / 189 L
Coil	24"OD x 1/2"ID x 337' Schedule 80
Coil With Wrapper	
Coil Back Pressure (New)	5 psi / 0.34 bar
Coil Back Pressure Requiring Descaling	50 psi / 3.40 bar
Pump	Triplex, Oil Bath
Belt	
Generator	p/n R02-00243
Pump	p/n R02-00747

## ELECTRICAL

Machine Voltage	12vDC
Generator – 2000 Watt	p/n F05-00181-A
Battery Cable, Red + - 32" Clamp/Eye	p/n F05-00232-1R
Battery Cable, Black - 25" Clamp/Eye	p/n F05-00225

## PUMP ENGINE

Engine	F05-00518
Engine Horsepower	28.2 hp / 21 kw
Engine Fuel	Diesel
Engine Make	Kubota D1305
Engine Charge Rate	40 AMP
RPM	3000
Radiator	p/n F05-00518-16
Thermostat	p/n F05-00518-17
Gasket, Thermostat	p/n F05-00518-18
Filter, Oil	p/n F05-00518-08
Cap, Rain – Exhaust	p/n F05-00518-10
Starter	p/n F05-00518-12
Replacement keys	p/n F05-00518-01
Switch, Key	p/n F05-00518-05
Muffler, Spark Arrestor	p/n F05-00518-07
Gasket, Muffler	p/n F05-00518-03
Control Box	p/n F05-00518-09
Air Filter	p/n F05-00429-02
Fuel Filter	p/n F05-00429-03
Fuel Solenoid	p/n F05-00393-14

## BURNER

Burner Part Number	V00-17379-2
Burner Type	Pressure Atomizing
Fuel Type	Kerosene, #1 or #2 Diesel
Fuel Pressure	125 PSI / 9 BAR
Fuel Pump	(Suntec) P/N V00-14283
Motor Voltage	115v 1PH 60hz
Motor Speed	3250 RPM
Horsepower	1/4 HP
Fan Size	6"

## Burner Nozzle

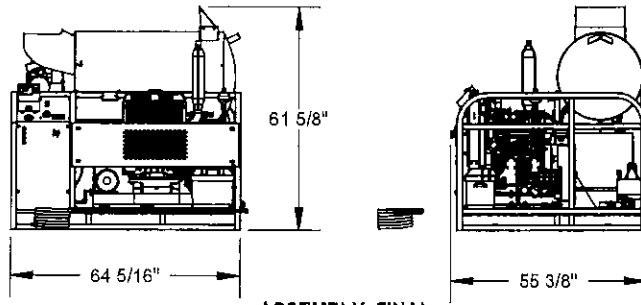
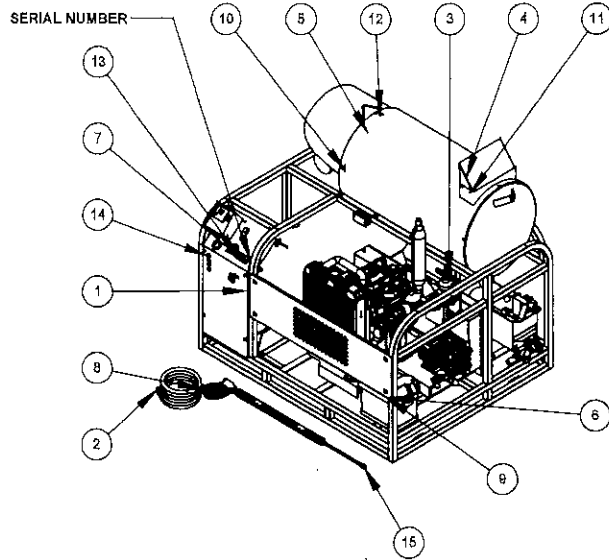
Burner Nozzle Part Number	V5.00 80DA
Fuel Consumption	5.36 Gal/Hr / 20.0 L/Hr
Nozzle Style	80 Degree A style

### English to Metric Conversions

1 gal/m	=	3.7843 L/m
1 hp	=	.7457 kw
100 psi	=	6.8964 bar
1 ft	=	.3048 m
1 in	=	2.54 cm
1 lb	=	.4536 kg
$\frac{(^{\circ}\text{F} - 32)}{1.8}$	=	$^{\circ}\text{C}$

## 2 Specifications

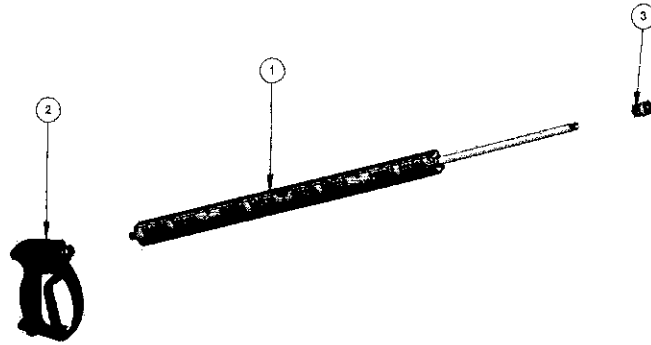
# Final Assembly



ASSEMBLY, FINAL  
p/n: 10307KK -SIN049  
02/17/2014

ITEM NO.	PART NUMBER	PART DESCRIPTION	QTY.
1	4120-00902P	ASSEMBLY, CHEMICAL LINE	1
3	10307KK-00605	10307KK CLEANER ASSEMBLY	1
4	AS16-92538NB	EXHAUST, DEFLECTOR	1
5	AS1893603NPR	24" BURNER COVER	1
6	AS1894600NPB	PANEL, GUARD	1
7	D02-00001E	DECAL, SERIAL NO	1
8	E06-00084-4	ADAPTER, 1/2FNPT X 3/8MNPT	1
9	F05-00210-1	BATTERY BOX - GROUP 24	1
10	H04-19010	SCREW, MACHINE	3
11	H04-19011	SCREW, SELF TAP	4
12	H06-19002	NUT, TINNERMAN	3
13	H09-12500	RIVET, POP	2
14	J00-15055-2	TIP, SPRAY -	1
15	J06-00158-B	ASSEMBLY, GUN & WAND - 42"	1

# Gun & Wand Assembly



ASSEMBLY, GUN & WAND - 42"  
p/n: J06-00158-B  
6/2/2009

ITEM NO.	PART NUMBER	PART DESCRIPTION	QTY.
1	J06-00104E	ASSEMBLY, WAND - 42"	1
2	J06-00158	GUN, TRIGGER	1
3	W04-24225-A	COUPLER, 1/4" X 1/4" FNPT	1

## 4 Trigger Gun & Wand

# Trigger Gun

## SPECIFICATIONS

MAXIMUM VOLUME.....10,0 GPM / 37,0 LPM  
 MAXIMUM PRESSURE.....5000 PSI / 344.7 BAR  
 RATED TEMPERATURE.....300 F / 150 C  
 WEIGHT.....1.8 LBS. / 0.8 KG  
 INLET.....3/8" NPT FEMALE  
 OUTLET.....1/4" NPT FEMALE

YG3500

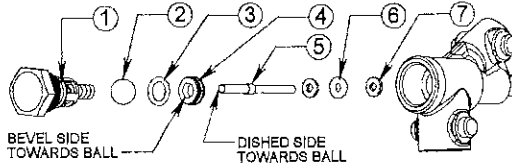
## REPAIR INSTRUCTIONS

1. Remove screws from handles and remove handle housings.
2. With 18mm socket remove retainer being careful to catch the spring and ball as they fall out of the housing.
3. Remove and replace parts with those found in the kit.
4. Assembly in reverse order.

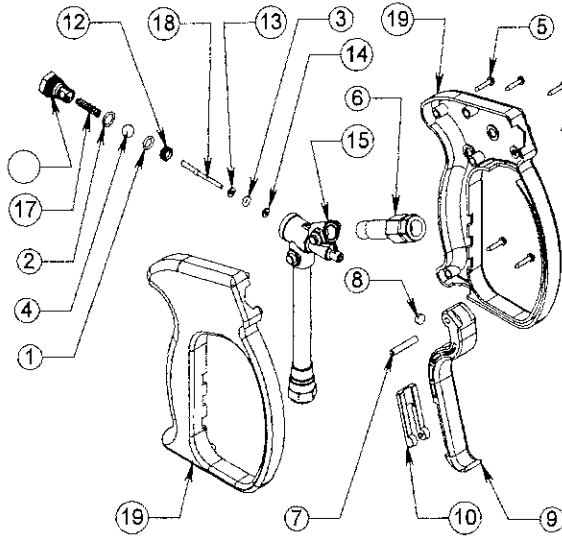
**WARNING:**  
DO NOT USE ACID CONCENTRATES THROUGH THE GUN

**WARNING:**  
Never secure trigger gun in an open position (trigger pulled back) by means other than the operator's hand. Bodily harm may occur if the operator loses control of the trigger gun.

**CAUTION:**  
Always engage trigger safety latch when not in use.



KIT, REPAIR PART - NUMBER J06-99158C

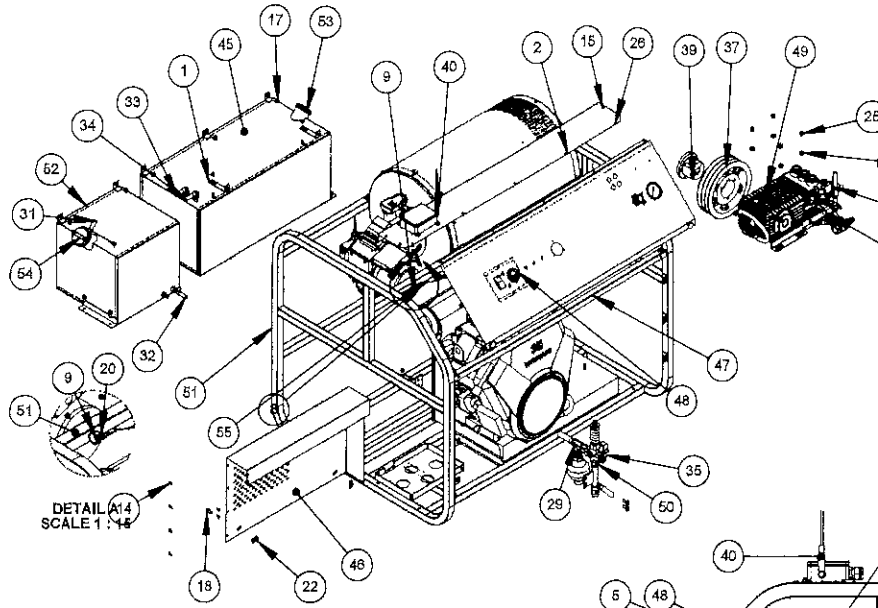


## PART LISTS

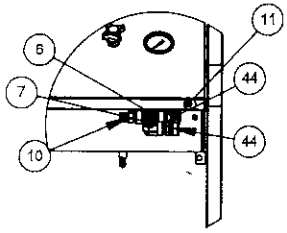
### QTY.

1	C07-01300-08	O-RING - 1/16CS X 5/16ID	1
2	C07-01425	FILTER, WATER	1
3	J08-00121-07	O-RING - 3/32 CS X 1/8 ID	1
4	J06-00121-15	BALL, SS 5/16	1
5	J06-00132-19	SCREW, SELF TAP - 3.5MM X 18MM	7
6	J05-00158-01	FITTING, DISCHARGE - 1/4 FNPT	1
7	J06-00158-02	PIN, TRIGGER - 5MM X 27.5MM	1
8	J06-00158-03	CAM	1
9	J06-00158-04	TRIGGER	1
10	J06-00158-05	LATCH, SAFETY	1
11	J08-00158-06	FITTING, INLET - 3/8 FNPT	1
12	J06-00158-08A	SEAT, VALVE	1
13	J06-00158-09	WASHER, FLAT	1
14	J06-00158-10	WASHER, FLAT - BRASS	1
15	J06-00158-11	HOUSING, VALVE	1
16	J06-00158-12A	RETAINER, VALVE	1
17	J06-00158-13	SPRING, COMPRESSION	1
18	J06-00158-14	PIN, VALVE - 4MM X 44MM	1
19			

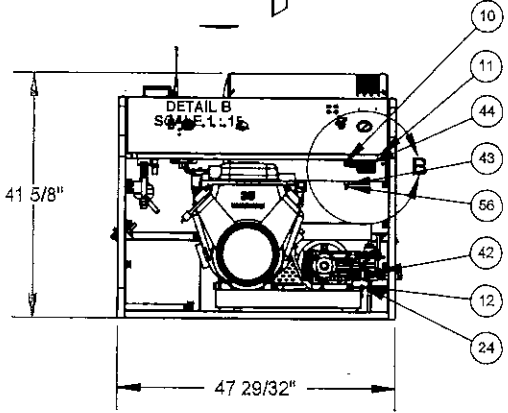
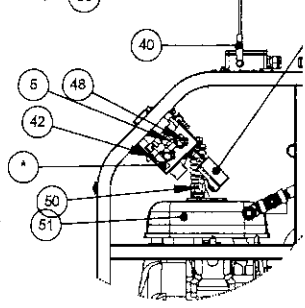
# General Assembly



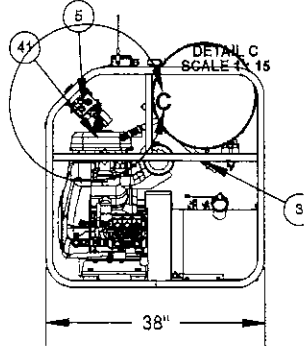
DETAIL A  
SCALE 1:15



ASSEMBLY, GENERAL  
p/n: W8365V-00617  
1/29/2014



DETAIL B  
SCALE 1:15

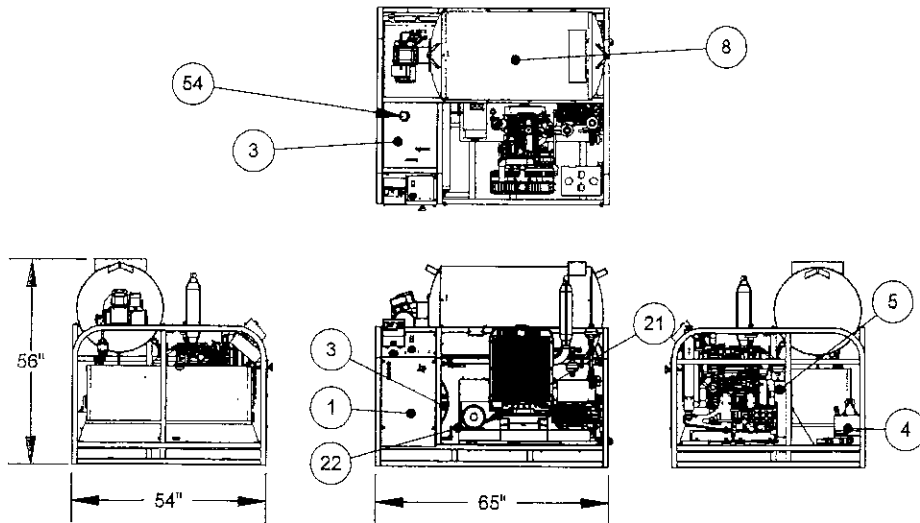


DETAIL C  
SCALE 1:15

## General Assembly

**ASSEMBLY, CLEANER**  
**p/n 10307KK-SIN049**  
**02/19/2014**

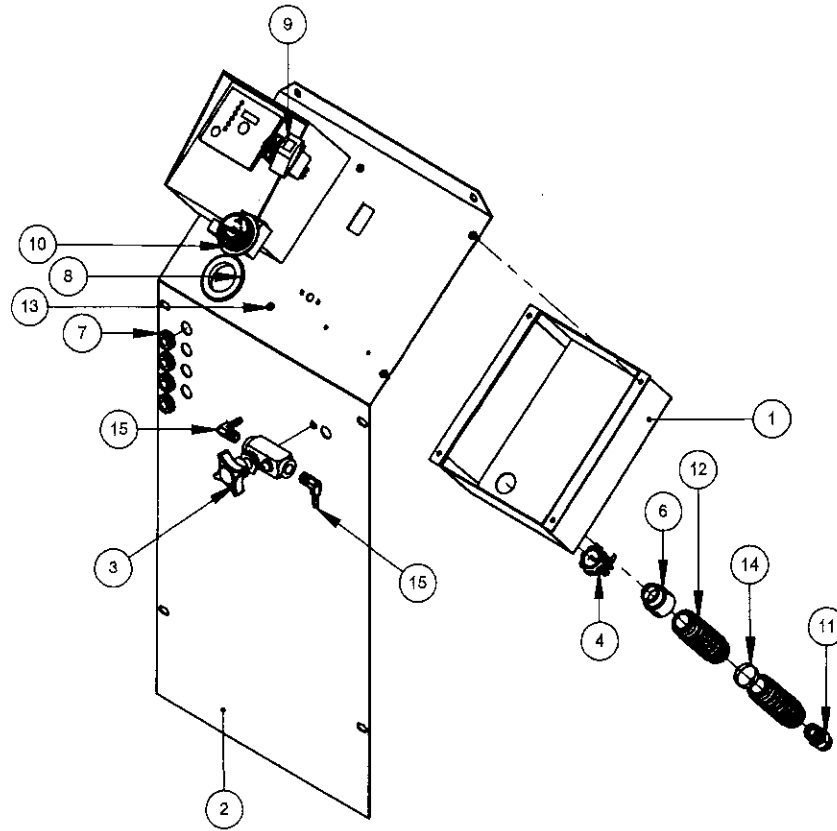
ITEM NO.	PART NUMBER	PART DESCRIPTION	QTY.	ITEM NO.	PART NUMBER	PART DESCRIPTION	QTY.
1	8367K-00302	ASSEMBLY, CONTROL PANEL	1	29	H06-25003	NUT, HEX	11
2	8307K-00159	WELDMENT, PANEL - END	1	30	H06-25006	NUT, TINNEMAN - 5/16	10
3	10307K-00128B	FUEL TANK ASSEMBLY W/ SHORT FILL NECK	1	31	H06-31300	NUT, LOCK - 5/16"	10
4	10307KK-00121	ASSEMBLY, FLOAT-TANK	1	32	H06-31301	NUT, LOCK - 5/16" - 18UNC SERRATED FLANGE	4
5	10307KK-00150	10307KK PULLEY SHIELD WELDMENT	1	33	H06-37503	NUT, 3/8-18UNC HEX - PLAIN	4
6	10307KK-00501	TWS10030S COMET PUMP ASSEMBLY	1	34	K00-03009	HOSE, WATER, BLACK, 1" X 80'	1
7	10307KK-00515	10307KK UNLOADER ASSEMBLY	1	35	K02-03218A2	ASSEMBLY, HOSE - 3/8 x 18"	1
8	10307KK-00657	10307KK FIE CLEANER ASSEMBLY	1	36	K02-04252A2	HOSE, 1/2" X 52' 100R2	1
9	AB18-01301PB	BRACE, PULLEY SHIELD	2	37	K23	HOSE, FUEL - 1/4 X 1'	2
10	AS18-01369PR	COVER, FLYWHEEL	1	38	K25-30000	HOSE, GAS - 3/16" X 36"	1
11	AS18-01464PB	PULLEY, SHIELD - TOP	1	39	K26-01500	HOSE, FUEL 5/16"	1
12	E04-00006-58	BUSHING, PIPE - 5000PSI	1	40	K26-03100	HOSE, FUEL-5/16 X 31"	1
13	E06-00088	ADAPTER	2	41	K80-04000	HOSE, WATER - 3/8 X 40"	1
14	E08-00016-6	ELBOW, FORGED	1	42	K80-05300	HOSE, WATER - 3/8 X 53"	1
15	E10-00005-6	TEE, PIPE - HI PRESSURE	1	43	R03-00844	PULLEY, V-	1
16	E10-00040-1	TEE, STREET, 1/2"	1	44	R03-075110	PULLEY, DBL V-	1
17	F04-00455	GROMMET, RUBBER	3	45	R03-09054	PULLEY, V	1
18	F04-00510	2" X 4" BLANK COVER	1	46	R04-00001	BUSHING, PULLEY	1
19	F04-00535	BOX, JUNCTION - 2" x 4"	1	47	R04-00002	BUSHING, PULLEY	1
20	F04-00830-02	BUSHING, 3/4 BARB	1	48	W02-00031	CLAMP, HOSE	4
21	F05-00181-A	GENERATOR	1	49	W02-00033	CLAMP, HOSE	12
22	H03-31311	BOLT, J-5/16-18UNC x 3 1/2	2	50	W02-00038	CLAMP, HOSE	2
23	H04-16420	SCREW, MACHINE B-32UNC X 1/2	6	51	W02-10019-8	BARB, HOSE	3
24	H04-19011	SCREW, SELF TAP	2	52	W04-54151-A	COUPLER, 1/2F X 1/2MNPT	1
25	H04-31301	SCREW, CAP - 5/16 X 3/4	2	53	Y01-00123	ACCUMULATOR	1
26	H04-31306	SCREW, CAP - 5/16 X 3/4	18	54	Y02-00030	GAUGE, FUEL - CAP - LEVEL 14"	1
27	H05-31306	WASHER, NORD LOCK	4	55	Z01-03613-2	HOSE, POLYBRAID	3
28	H05-37505	WASHER, NORD LOCK	4	56	Z01-10813-2	HOSE, POLYBRAID	1



**General Assembly 7**



# Control Panel Assembly



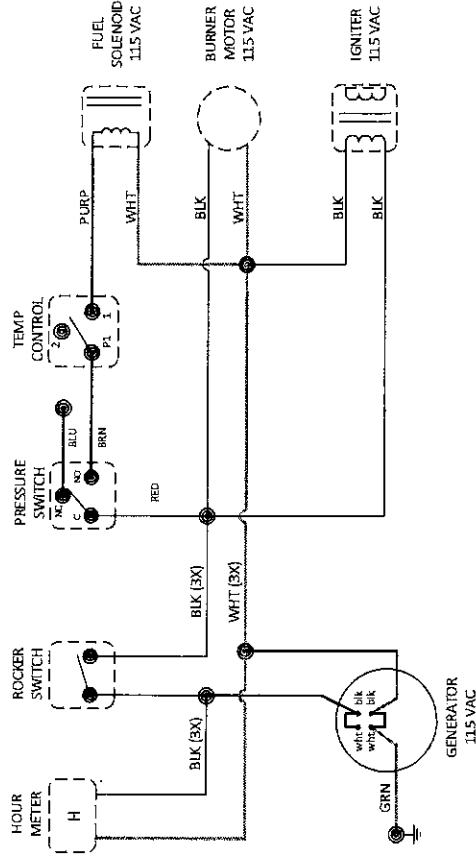
ASSEMBLY, CONTROL PANEL  
10/7/2008

ITEM NO.	PART NUMBER	PART DESCRIPTION	QTY.
1	5357K-05301	WELDMENT, ENCLOSURE BOX	1
2	AS1693616NPB	PANEL, CONTROL	1
3	C03-00307	VALVE, METERING	1
4	F04-00311	CONNECTOR, CONDUIT - 3/4" 0.68 - 0.80	1
5	F04-00318-LT	NUT, LQ TIGHT	1
6	F04-00352	ADAPTOR-3/4"	1
7	F04-00451	GROMMET, RUBBER	4
8	F04-00453	GROMMET, RUBBER	1

## 8 Control Panel Assembly

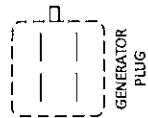
# Electrical Schematic

PART NUMBER  
ES-00559D



NOTE: THE LOWER CASE WIRE COLORS INSIDE THE GENERATOR SHOWN HERE, ARE THE GENERATOR MANUFACTURER SUPPLIED WIRES. IF THE WIRE HOLDER IS POSITIONED SO THE GENERATOR WIRES ARE LOCATED ON THE BACK OF THE PLUG (THE SIDE AWAY FROM YOU- THE VIEWER), THEN MAKE THE CONNECTIONS SHOWN.

NOTE:  
POSITION GENERATOR PLUG AS SHOWN HERE (KNOB ON RIGHT SIDE). PLUG WHITE WIRES INTO TOP SLOTS. PLUG BLACK WIRES INTO BOTTOM SLOTS.



- WHITE
- BLACK
- RED
- BROWN
- BLUE
- YELLOW
- GREEN
- PINK
- ORANGE

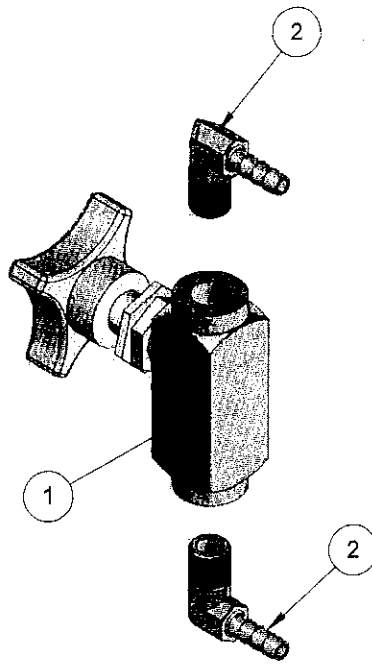
DATE: 01-22-13  
DRAWN BY: LCL

TITLE / DESCRIPTION  
**ELECTRICAL SCHEMATIC**

PART NUMBER  
ES-00559D



# Float Tank Assembly



ASSEMBLY, CHEMICAL METERING  
p/n 10301-00520

ITEM NO.	PART NUMBER	PART DESCRIPTION	QTY.
1	C03-00307	VALVE, METERING	1
2	W02-10031	BARB, HOSE	2

## 10 Control Panel Assembly

# Metering Valve

VALVE, METERING - P/N C03-00307

## OPERATION

### HANDLE

Turning Chemical flow handle clockwise will shut off chemical flow.

### FLOW ADJUSTING SCREW

Turning the flow adjusting screw clockwise lowers the chemical flow. Turning the screw counterclockwise lowers the flow.

## SPECIFICATIONS

Minimum Flow ..... 0 - 20 GPH / 0 - 76 LPH  
 MAXIMUM TEMPERATURE ..... 200F° / 93°C  
 WEIGHT ..... 0.75 LBS. / 0.33 KG  
 INLET ..... 1/4 FNPT  
 OUTLET ..... 1/4 FNPT  
 O-RINGS ..... VITON  
 VALVE HOUSING MATERIAL ..... BRASS

## MAINTENANCE

### VALVE STEM REMOVAL -

1. Using screw driver remove cap (item 1A).
2. Holding handle and using socket remove nut (item 1B) and lock washer (item 1C) found inside handle.
3. Remove mounting nut (item 1E).
4. Holding valve housing (item 7), turn the valve retainer (item 2) counter clockwise be careful not to lose o-ring off bottom of retainer.
5. Holding the valve retainer (item 2) turn stem (item 4) counterclockwise until it comes out of the bottom of the retainer.

### VALVE STEM INSTALLATION -

Reinstall in reverse order lubing o-rings before reinstallation.  
 Torque retainer (item 2) to 13 ft/lbs.

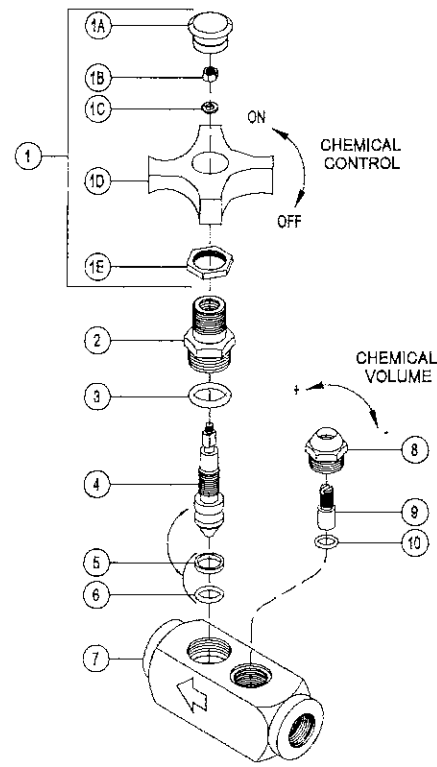
### REMOVE FLOW ADJUSTING SCREW -

1. Remove the adjusting screw retainer (item 8) turning counter-clockwise.
2. Hold the retainer (item 8), using a screw driver turn the adjusting screw (item 9) clockwise until it comes out of the bottom.
3. Inspect screw for any nicks or scratches and replace as necessary.
4. Remove and replace o-ring (item 10).

### REINSTALL FLOW ADJUSTING SCREW -

Reinstall in reverse order lubing o-rings before reinstallation.  
 Torque retainer (item 2) to 30 ft/lbs

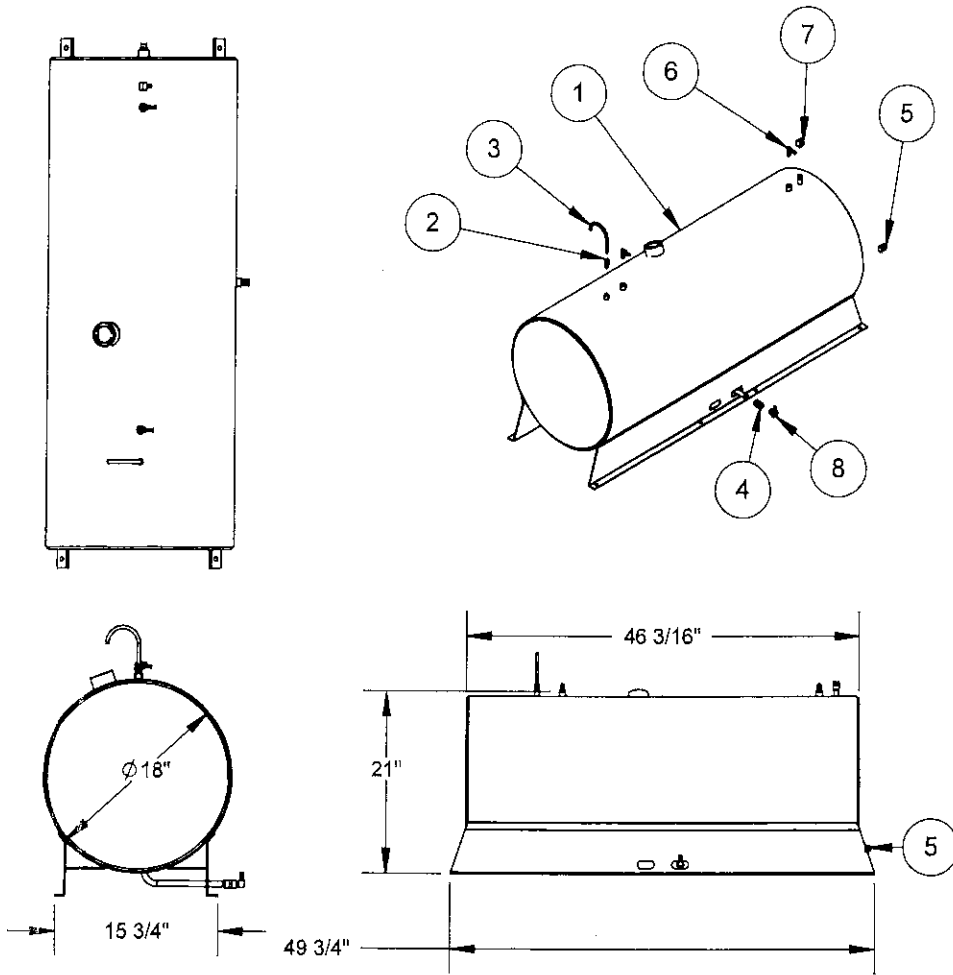
## EXPLODED VIEW



## PARTS LIST

ITEM	PART NO.	DESCRIPTION
1	C07-00307-01	KIT, HANDLE
1A	-----	CAP, PLASTIC
1B	-----	NUT, HEX
1C	-----	WASHER, LOCK
1D	-----	HANDLE, ADJUSTMENT
1E	-----	NUT, HEX
2	-----	RETAINER, VALVE STEM
3	-----	O-RING - VITON 1/16CS X 3/16ID
4	-----	STEM, VALVE - SHUT-OFF
5	-----	RING, ANTI-EXTRUSION
6	-----	O-RING - VITON 3/32CS X 1/4ID
7	-----	HOUSING, VALVE
8	-----	RETAINER, ADJUSTING SCREW
9	-----	SCREW, ADJUSTING - FLOW
10	-----	O-RING - VITON 1/16CS X 1/8ID
	D01-00060	DECAL, METERING VALVE

# Fuel Tank Assembly

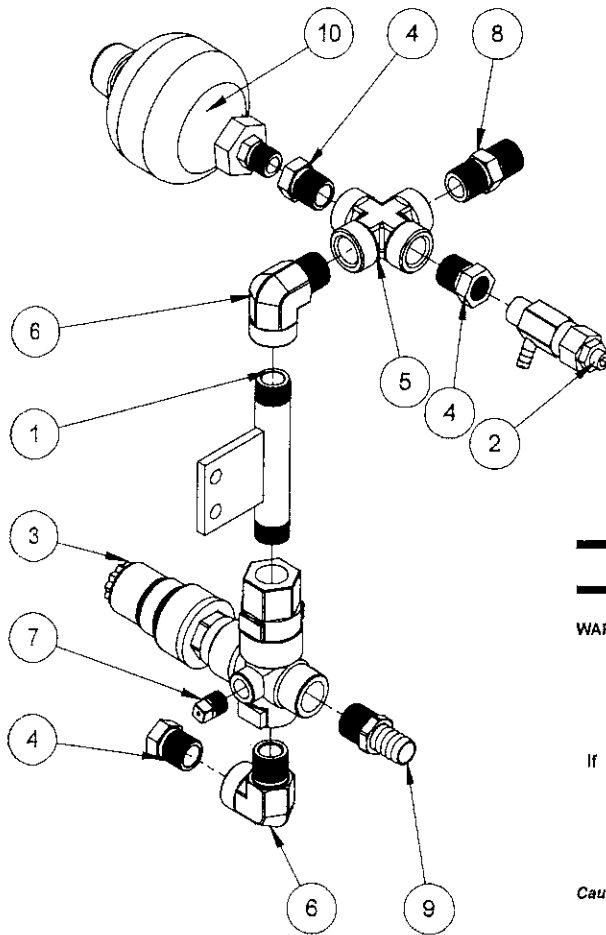


**ASSEMBLY, FUEL TANK**  
 p/n 10307K-00126B  
 01/16/2014

ITEM NO.	PART NUMBER	PART DESCRIPTION	QTY.
1	10307K-00126B	WELDMENT, TANK - FUEL, 55GAL	1
2	C06-00141-8	COMPRESSION CONNECTOR	1
3	C06-00902	1/4" X 7" COPPER VENT TUBE (CURVED)	1
4	E06-00003-4	COUPLING, FULL - 1/4"	1
5	E09-00004-2	PLUG, PIPE	1
6	W02-10031	BARB, HOSE	2
7	W02-10060	BARB, HOSE	1
8	W02-10092	BARB, HOSE	1

## 12 Tank Assembly

# Unloader Assembly



## Relief Valve

**WARNING:** The relief valve has been factory set and is a field nonadjustable part. Please contact the factory before setting the valve and will void the manufacturer warranty.

If pressure from should exceed safe limits it will automatically open to relieve dangerous system pressure overloads which can harm equipment and can also be dangerous for the operator.

*Caution: Inspect relief valve annually for any obstruction.*

**ASSEMBLY, UNLOADER**  
 p/n 10307KK-00515  
 04-04-2012

ITEM NO.	PART NUMBER	PART DESCRIPTION	QTY.
1	4306E-00514	WELDMENT, BRACKET	1
2	C03-00509	VALVE, RELIEF - SS	1
3	C07-06323	VALVE, UNLOADER - MULTIGUN	1
4	E04-00006-58	BUSHING, PIPE - 5000PSI	3
5	E07-00001-5	CROSS, PIPE	1
6	E08-00017-58	ELBOW, STREET	2
7	E09-00002-2	PLUG, PIPE	1
8	E15-00010-58	NIPPLE, HEX	1
9	W02-10025-8	BARB, HOSE	1
10	Y01-00123	ACCUMULATOR	1

# Specifications

## PRESSURE TRAPPED

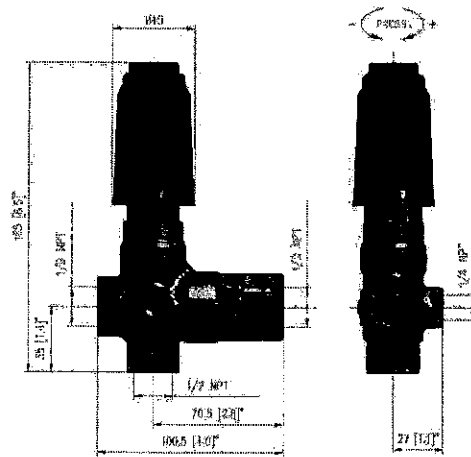
(p/n C07-06323)

### Specifications

Part Number	YVB4021B
Maximum Temperature	195° F <sup>1</sup>
Max. Volume	21.0 GPM
Rated Pressure	4050 PSI
Minimum Adjustable Pressure	400 PSI
Maximum Discharge Pressure	4500 PSI
Pressure Drop to Reset Bypass	32% <sup>2</sup>
Port Sizes: Inlet	1/2" NPT-F
Outlet	1/2" NPT-F
Bypass	1/2" NPT-F
Overall Dimensions	6.5" x 4.0" x 1.77"
Weight	2.5 lbs.

Materials . . . . . Brass Body, Stainless Steel  
*1 This unloader has been designed to operate at a continuous water temperature of 140°F. It can be operated for short periods at a maximum temperature of 195°F.*  
*2 This is the pressure reduction necessary in comparison to the set up, in order that the valve brings back pressure in the circuit (% figure of the pressure set up).*

### Dimensions

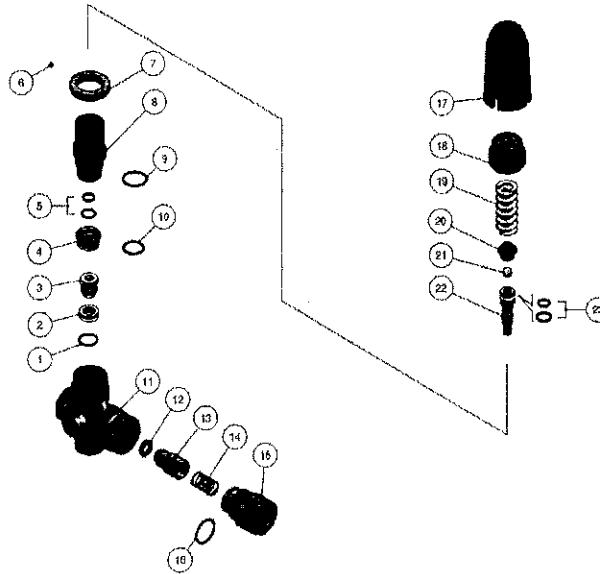


# Maintenance - Exploded View

**PRESSURE TRAPPED**

**(p/n C07-06323)**

## Exploded View



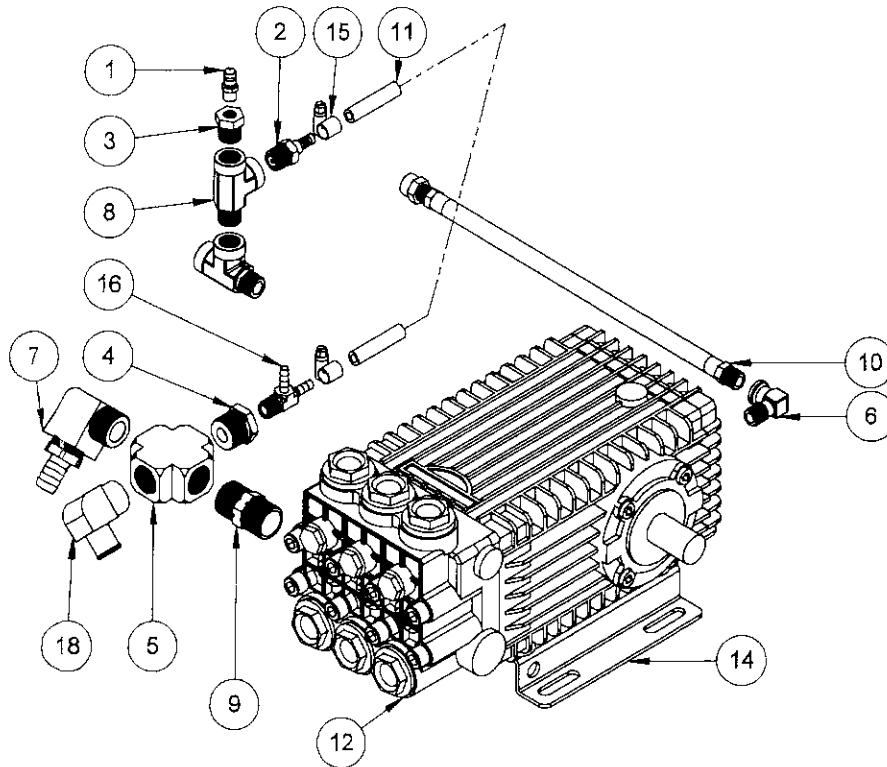
## Parts list

ITEM	PART #	DESCRIPTION	QTY	ITEM	PART #	DESCRIPTION	QTY
1	C07-01009A-02	O-ring, 1.78x15.8	1	13	Y80048899	Shutter Pin, Brass + O-ring 4x8	1
2	C07-01009A-13	Seal,Ball 11.6x19x8, SST	1	14	Y80048951	Spring, 0.8x13.3x27, SST	1
3	C07-01009A-12	Housing, Ball, M8, SST	1	15	Y80185231	Shutter Coupling, 1/2 F, NPT, Brass	1
4	C07-01009A-11	Spacer Ring, 10.3x23.4x12.5, Brass	1	16	Y10307260	O-ring, 1.78x21.85	1
5	C07-01009A-10	Stem Seal, 10x14.8	1	17	Y60172684	Valve Regulating Knob	1
6	N09-33061	Set Screw, M4x4	1	18	Y60172731	Valve Regulating Insert, Brass	1
7	C07-01009A-08	Ring Nut, M27x1, Brass	1	19	C07-01009A-04	Spring, 4.5x15.8x47	1
8	Y60180531	Piston Holder, Brass	1	20	C07-01009A-05	Guide, Spring - Brass	1
9	Y10307201	O-ring, 1.78x20.35	1	21	C07-03200-04	Ball, 11/32", SST	1
10	Y10306801	O-ring, 1.78x17.17	1	22	C07-01009A-07	Piston, M8, SST	1
11	Y60185105	Brass Body, 1/2" NPT	1	23	C07-01009A-06	Piston Seal, 9X14X2.2 + O-ring	1
12	Y10329290	O-ring, 4x8	1				

**UNLOADER PRESET AT FACTORY – DO NOT READJUST**  
**Unloading Adjustment – Adjustment only after repair or replacement**



# Water Pump



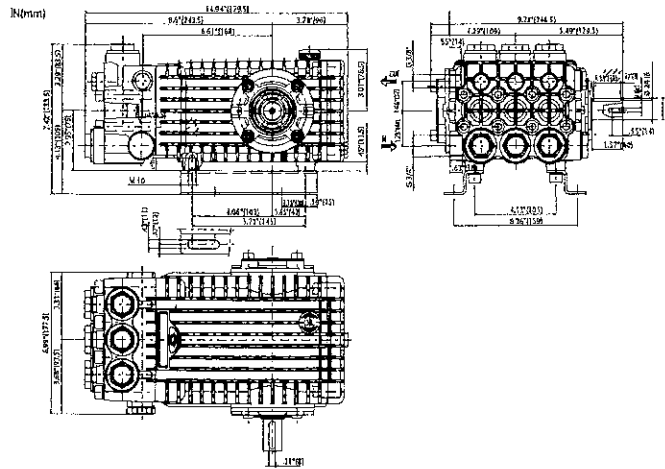
**ASSEMBLY, PUMP**  
p/n 10307KK-SIN049

ITEM NO.	PART NUMBER	PART DESCRIPTION	QTY.
1	C03-00810	VALVE, AIR	1
2	C09-00008	VALVE, EASY START	1
3	E04-00002-58	BUSHING, PIPE	1
4	E04-00007-4	BUSHING, 3/4MPT - 1/4FPT	1
5	E07-00002-4	CROSS, PIPE - 3/4	1
6	E08-00006-48	ELBOW, PIPE	1
7	E08-00039-4	ELBOW, STREET	1
8	E10-00021-58	TEE, STREE - 3/8	2
9	E16-00011-4	NIPPLE, HEX	1
10	K21-02214-1/4	ASSEMBLY, HOSE-OIL, DRAIN	1
11	K31-01100	HOSE, WATER	1
12	N07-00111	PUMP, WATER -	1
13	N07-40046	MOUNT, PUMP	1
14	N07-40046-P	MOUNT, PUMP wHOLE	1
15	W02-00032	CLAMP, HOSE	2
16	W02-10016-8	BARB, HOSE	1
17	W02-10028-8	BARB, HOSE	1
18	W02-10074-8	BARB, HOSE - 3/4B X 3/4MNPT	1

## **16** Water Pump

# Water Pump

## N07-00106, N07-00092, N07-00090, N07-00111



### Specifications

Pump Model	N07-00106 TSF2019		N07-00092 TSF2021		N07-00090 TSF2221		N07-00111 TSF2421		Torque*	
	Position	Ft.-lbs.								
Maximum Volume (gal/m)	7.6	6.3	8.5	7.0	10.2	8.5	12.0	10.0	2	33.2
Max. Discharge Pressure (psi)	3600				3000		2500	3000	10	95.9
Maximum Pump Speed (rpm)	1750	1450	1750	1450	1750	1450	1750	1450	12	14.8
Maximum Inlet Pressure	125 PSI								26	7.3
Maximum Inlet Vacuum	9 ft. water (7.9 in. Hg)								29	14.8
Bore	.787 in. / 20 mm				.866 in. / 22 mm		.944 in. / 24 mm		31	14.8
Stroke	.748 in. / 19 mm				.826 in. / 21 mm				38**	14.8
Crankcase Oil Capacity	31.0 oz								41	14.8
Crankshaft Rotation	Clockwise & Counterclockwise								42	29.5
Maximum Fluid Temperature	165°F								51	29.5
Inlet Port Thread	3/4-14 BSPP-F								55	51.6
Discharge Port Thread	3/8-19 BSPP-F								58	29.5
Shaft Diameter	.943 in. / 24 mm									
Weight	40.7 lbs.									
Dimensions	13.27 x 9.6 x 6.23									

\*Decrease torque by 20% if threads are lubricated.  
\*\*Note: Use Loctite 542.

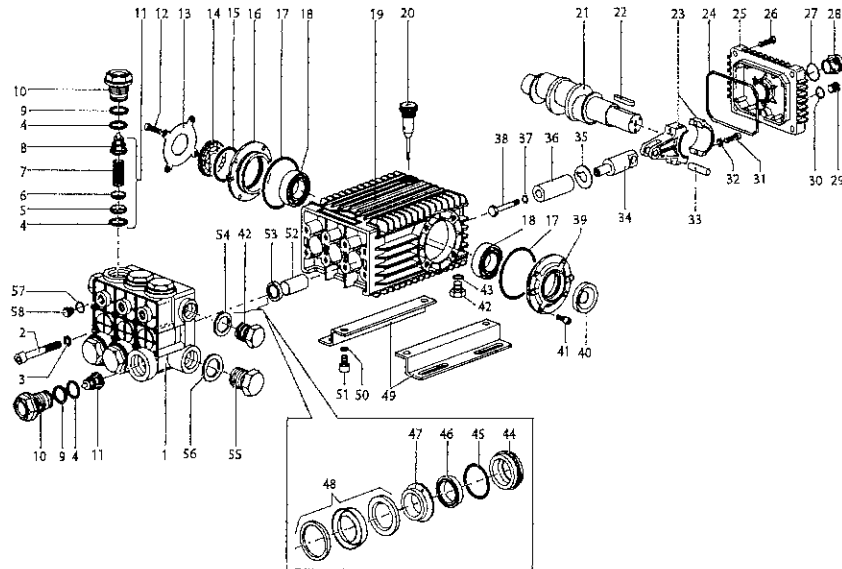
### Parts Packages

Kit #	Part No.	Item #s Included in Kit	Number of Assemblies in Kit	Number of Cylinders Kit will Service
1	N07-99002	53	3	3
2	N07-99003	40	1	-
3	N07-99169	4, 5, 6, 7, 8 (11)	6	3
4	N07-99170	46, 48	3	3
5	N07-99171	44, 45, 46, 47, 48	3	3
6	N07-99172	46, 48	3	3
7	N07-99173	44, 45, 46, 47, 48	3	3
8	N07-99181	46, 48	3	3
9	N07-99182	44, 45, 46, 47, 48	3	3

### Accessories

- Oil - Case (6) One Pint Bottles p/n N07-OILCA
- Oil - Bottle (1) One Pint Bottle p/n N07-OILCA-1
- Oil - Case (24) One Pint Bottles p/n N07-OILCA-2

**Water Pump (cont.)**  
**N07-00106, N07-00092, N07-00090, N07-00111**



Parts List				
Item	p/n	Description	Kit #	Qty
1		Manifold, 20mm		1
		Manifold, 22mm		1
		Manifold, 24mm		1
2	N07-57002	Headbolt, M10 X 90		8
3	N07-80003	Washer, M10		8
4	F02-85008	O-Ring	3	1
5		Valve, Seal	3	6
6		Valve, Poppel	3	6
7		Valve, Spring	3	6
8		Valve, Guide	3	6
9	N07-90080	Anti-exst Ring		6
10	N07-90010	Valve, Cap		6
11		Valve, Assy - Complete	3	6
12		Screw, M8 X 25		4
13		Cover		1
14	N07-47029	Sightglass		1
15	N07-20021	O-Ring		2
16		Side Cover		1
17	N07-40021	O-Ring		2
18		Bearing		2
19		Crankcase		1
20	N07-40024	Dipstick, Vented		1
21		Crankshaft, 19mm		1
		Crankshaft, 21mm		1
22	N07-98033	Key		1
23	N07-900034	Connecting Rod		3
24	N07-70025	O-Ring		1
25		Cover, Crankcase		1
26		Screw, M6 X 20		4
27	N07-80009	O-Ring		1
28	N07-98029	Sightglass, Bayonet Style		1
29	N07-20030	Plug, 1/4 X 9		1
30	N07-20028	O-Ring		1
31	N07-40037	Screw, M8 X 35		6
32	N0720003	Lockwasher, M8		6

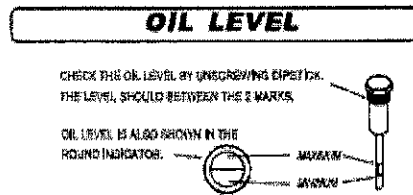
33	N07-900038	Wrist Pin		3
34	N07-900038	Piston Guide		3
35	N07-90039	Plinger Washer		3
36	N07-90040	Plunger, 20mm		3
		Plunger, 22mm		3
		Plunger, 24mm		3
37		O-Ring		3
38	N07-90043	Plunger Bolt		1
39	N07-900019	Side Cover, PTO		3
40	N07-40045	Seal, Shaft	2	1
41	N07-40018	Screw, M8 X 16		4
42	N07-20049	Plug, 3/8 X 13		2
43	C07-01409	O-Ring		1
44		Seal Retainer, 20mm	5	3
	N07-90015	Seal Retainer, 22mm	7	3
		Seal Retainer, 24mm	9	3
45	N07-40016	O-Ring	5, 7, 9	3
46	N07-20063	Lp Seal, 20mm	4, 5	3
	N07-106012	Lp Seal, 22mm	6, 7	3
		Lp Seal, 24mm	8, 9	3
47		Int. Ring, 20mm	5	3
	N07-90013	Int. Ring, 22mm	7	3
		Int. Ring, 24mm	9	3
48		Hp Seal, 20mm	4, 5	3
		Hp Seal, 22mm	6, 7	3
		Hp Seal, 24mm	8, 9	3
49	N07-40046	Pump Rail		2
50	N07-40047	Washer, M10		4
51	N07-40048	Screw, M10 X 18		4
52	N07-40044	Guide, Bushing		3
53	N07-99002	Seal, Plunger Rod	1	3
54	N07-20011	Gasket, Aluminum 3/8"		1
55	N07-80050	Plug, 3/4 X 16		1
56	N07-80051	Gasket, Aluminum 3/4"		1
57	N07-20028	O-Ring		3
58	N07-90081	Plug, 1/4 X 13		3

# Pump Maintenance

## Oil Level, Valve Service, Head Removal

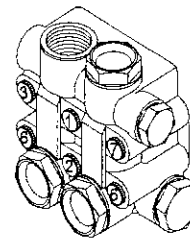
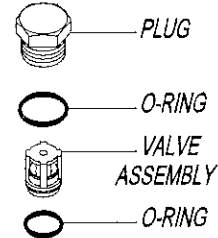
### General

PACKING EXTRACTION KIT P/N Z09-00028  
COMPLETE TOOL KIT P/N Z09-00021



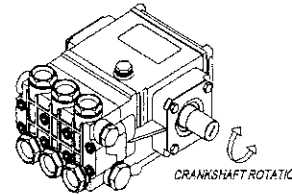
### Valve Service

1. Remove the plugs holding the valve assemblies.
2. Remove and discard o-rings from the plugs. Clean plugs with solvent or soap and water. Allow to dry.
3. Using needle nose pliers, fingers, or hook shaped tool, remove the valve assemblies from the head. Remove and discard the o-rings from the valve assemblies and/or head. Examine each valve assembly and discard damaged parts. Refer to the PUMP BREAKDOWN for part numbers of any replacement items.
4. Clean any accumulated debris from the valve cavities and flush with water.
5. Wash the valve assemblies in clean water and rinse. While still wet, test each valve assembly by sucking on the valve seat. A properly sealing valve will allow a good vacuum to be developed and maintained, while a malfunctioning valve will not. Good valve assemblies should be set aside for installation in step 7.
6. Malfunctioning valve assemblies must be replaced.
7. Lubricate a new o-ring with the pump crankcase oil and install into valve cavity in the head. Install a good valve assembly into the cavity as illustrated.
8. Lubricate a new o-ring with pump crankcase oil and place on a plug cleaned in step 2 above.
9. Install a plug into the pump head. Tighten plug by hand.
10. Torque the plug to the value indicated in the TORQUE section of the pump specifications.
11. Repeat steps 7 through 11 for remaining valve assemblies.



### Head Removal

1. Remove the cap screws holding the pump head to the crankcase. A metric tool is required for this step. Be careful not to lose the washer on each cap screw.
2. Remove the head by rotating the crankshaft and tapping the head away from the crankcase with a soft mallet. Keep rear surface of the head parallel to the front surface of the crankcase to prevent binding on the plungers.
3. Once the head is removed, protect the plungers from damage.



# Plunger Service, Removal, Installation

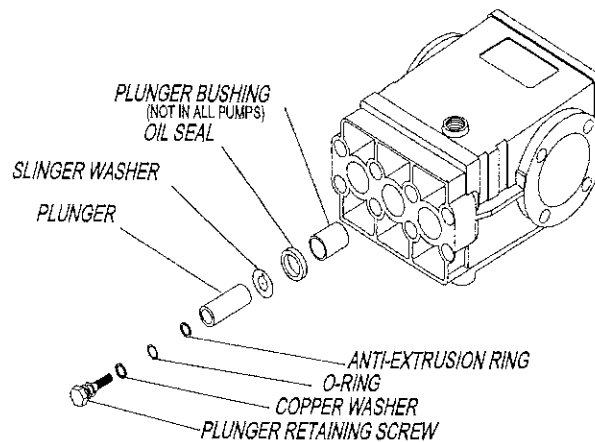
## Plunger Service

1. Remove pump head per HEAD REMOVAL.
2. Remove any packings and retainers left on the plungers by pulling them straight off.
3. Examine each plunger, looking for a smooth surface free of any scoring, cracks, or pitting. Any defective plungers should be removed per PLUNGER REMOVAL.
4. Discard and replace any defective plungers.
5. Reinstall the plunger per PLUNGER INSTALLATION.
6. Reinstall head per HEAD INSTALLATION.

## Plunger Removal

NOTE: When the plunger screw is removed, it is important to install new o-ring, anti-extrusion, and copper washers.

1. When the plunger screw is removed, it is important to install a new o-ring, anti-extrusion, and copper washers.
2. Remove the plunger retaining screw by turning counterclockwise. Remove and replace copper washer.
3. Remove and discard o-ring and anti-extrusion ring from retainer screw.
4. Remove the plunger from the cross head and examine it for cracks, scoring, or pitting.
5. Remove and discard copper flinger washer, clean with solvent and allow to dry.



## Plunger Installation

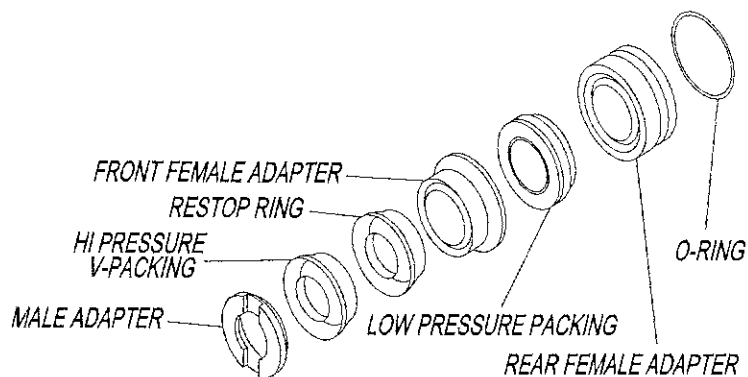
1. Install the copper flinger washer onto the cross head.
2. Slide the plunger onto the crosshead.
3. Lubricate an o-ring with crankcase oil and install into the groove on the plunger screw. Install the anti-extrusion ring into the groove next to the o-ring. NOTE: The o-ring should be nearest the screw head and the anti-extrusion ring nearest the threads.
4. Apply a drop of thread sealant to the threads of the retainer screw.
5. Thread the plunger retainer screw into the cross head making sure the copper flat washer is installed onto the screw.
6. Torque the plunger retainer screw to the value indicated in the torque section of the pump specifications.

## 20 Pump Maintenance

## Packing Service

### Packing Service

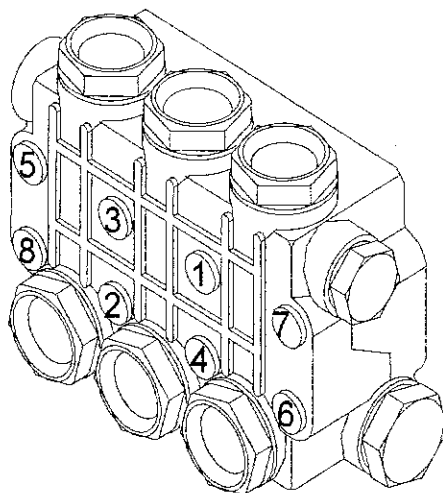
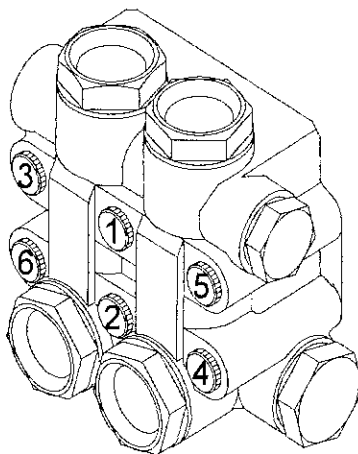
1. Remove the head per PUMP HEAD REMOVAL.
2. Remove any packings and female adapters left on the plungers by pulling them straight off. Insert proper packing extractor onto the extractor hammer. Insert packing extractor and tool through the packings and adapters remaining in the head. Tighten the hammer and remove the remaining items in the head. Remove packings and o-rings from adapters. Discard the o-rings and packings.
3. Clean the packing canities in the head and rinse with clean water.
4. Clean exposed plungers. Clean male and female adapters with soap and water and allow it to dry.
5. Examine male and female adapters, discard worn items. Trial fit the female adapters into the head checking for binding or damage. Discard and replace damaged items
6. Lubricate packing cavities in the head and all packings and adapters with pump crankcase oil.
7. Lay head on the bench with packing cavities up. Install one male adapter in each cavity with the flat side down.
8. Install one v-packing into each cavity with the lips pointing down. A packing insertion tool of the appropriate size is recommended for this operation.
9. Install the re-stop ring with the lips pointing down.
10. Install a front female adapter into each cavity with the flat side up. Make certain the adapter goes all the way down into the cavity.
11. Install the low pressure packing with the flat side down.
12. Install the rear female adapter into each cavity with the lips pointing down.
13. Lubricate o-rings with pump crankcase oil and install one into the groove of each adapter.
14. Install one adapter and o-ring into each cavity with the flat side up. Each adapter and o-ring assembly should push into the head to approximately 1/16 inch of being flush with the surface of the head. Only hand pressure should be required to perform this operation. This step is VERY IMPORTANT. If the rear female adapter does not fit is obtained, proceed to step 16. If a proper fit is not obtained, remove the female adapters from the offending cavity and reinstall items per steps 8 through 15.
15. Install head per HEAD INSTALLATION.



## Head Installation - Torque Sequence

### Head Installation

1. Prepare pump head per instructions in PACKING SERVICE.
2. Rotate the plungers so the outer plungers are projecting the same distance from the crankcase.
3. Lubricate the exposed plungers with crankcase oil.
4. Start the head onto the plungers and, using a soft mallet, tap the head evenly until it comes in contact with the crankcase.
5. Start the cap screws through the head and into the crankcase. Do not forget the lock washer on each screw.
6. Tighten all cap screws by hand.
7. Torque the cap screws to the value indicated in the TORQUE section of PUMP SPECIFICATIONS. Torque the cap screws in the order listed below.



### **22** Pump Maintenance

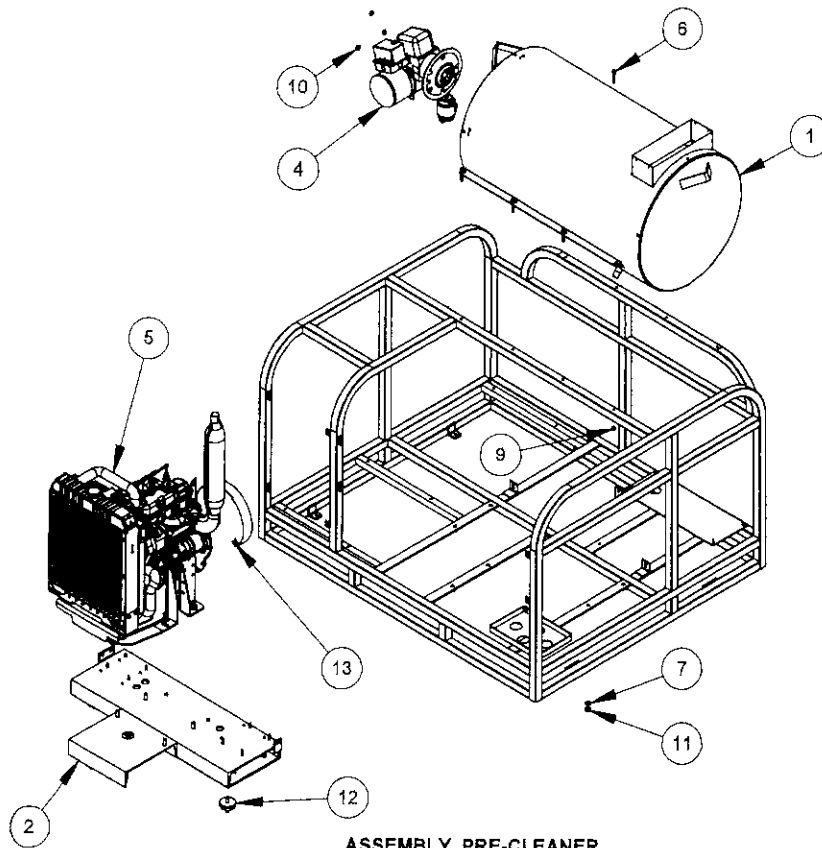
# Pump Maintenance Record

	<b>Oil Change</b>	
Month/Day/Year	Operating Hours	Oil Brand & Type

	<b>Pump Service</b>	
Month/Day/Year	Operating Hours	Type of Service



# Pre-Cleaner Assembly

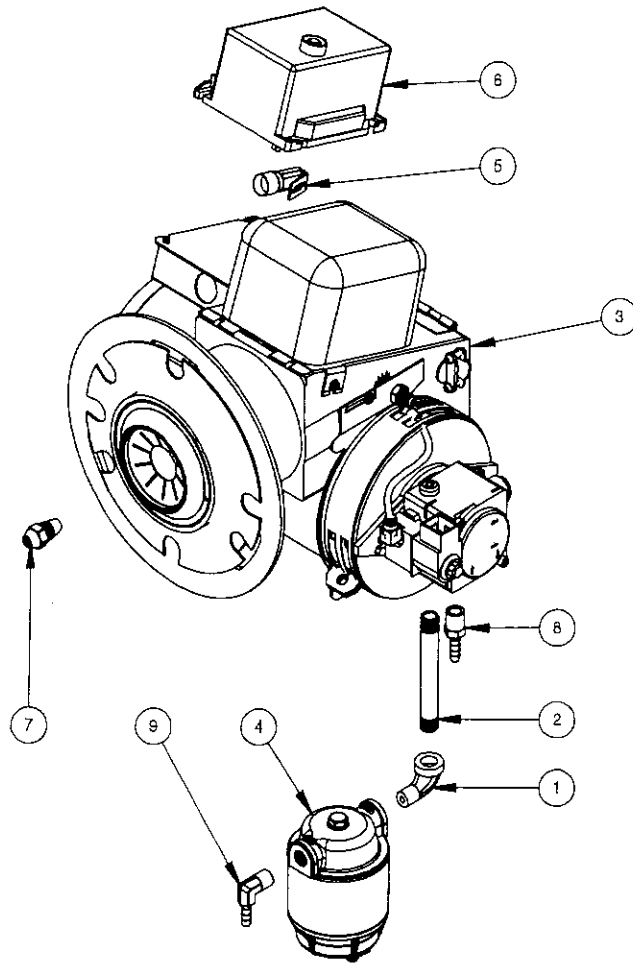


ASSEMBLY, PRE-CLEANER  
p/n 10307KK-SIN049  
02/19/2014

ITEM NO.	PART NUMBER	PART DESCRIPTION	QTY.
1	770-00111	24" COIL ASSEMBLY	1
2	8307K-00134	WELDMENT, CHANNEL	1
3	10307KK-00130	K FRAME WELDMENT - 24 INCH COIL	1
4	10307KK-00401	ASSEMBLY, BURNER-W/SOL	1
5	F08-00518-C	ENGINE, DIESEL - 28.2HP KUBOTA	1
6	H04-31326	CAP, SCREW	8
7	H05-50001	WASHER, HELICAL LOCK - 1/2"	12
8	H05-50006	1/2" WASHER, NORD LOCK	4
9	H06-31300	NUT, LOCK - 5/16"	8
10	H06-37500	NUT, LOCK-3/8-18UNC HEX	3
11	H06-50001	NUT, 1/2 - 20UNF	16
12	H10-50000	MOUNT, SHOCK	6
13	W5507K-00159	FLYWHEEL, COVER	1

## 24 Pre-Cleaner Assembly

# Oil Burner Assembly

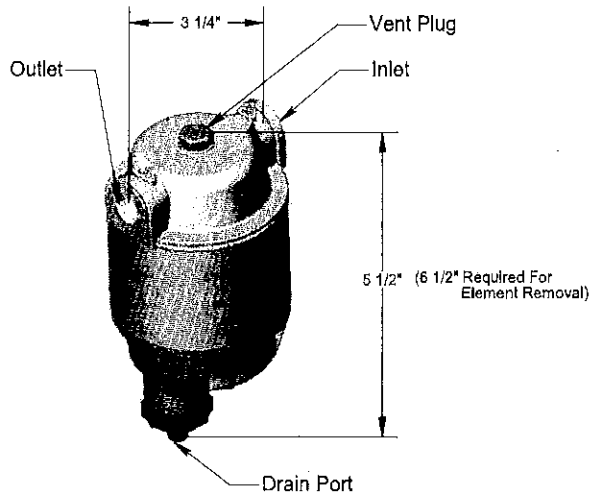


ASSEMBLY, BURNER-W/SOL  
6/24/2011

ITEM NO.	PART NUMBER	PART DESCRIPTION	QTY.
1	E08-00006-2	ELBOW, PIPE	1
2	E13-00040-2	NIPPLE, PIPE	1
3	V00-17379-2	BURNER, OIL - 115V	1
4	V04-00308	FILTER, FUEL	1
5	V04-00401	DETECTOR, CAD CELL FLAME	1
6	V04-00410	CONTROL, OIL PRIMARY-115 VAC 1PH 60HZ 15SEC CSA	1
7	V5.00 80DA	NOZZLE, BURNER	1
8	W02-10019-8	BARB, HOSE	1
9	W02-10031	BARB, HOSE	1

# Fuel Filter

**FILTER, FUEL**  
P/N V04-00308



ALL DIMENSIONS ARE  
IN INCHES UNLESS OTHERWISE  
NOTED. 25.4 MM = 1 INCH

### SPECIFICATIONS

• MAXIMUM FLOW	16 GPH / 57 LPM
• MAXIMUM FILTRATION	2 MICRONS
• MAXIMUM TEMPERATURE	212°F / 100°C
• WEIGHT	1.0 LBS. / 340 GM
• INLET	1/4 NPT
• OUTLET	1/4 NPT

### TROUBLE SHOOTING

TROUBLE	POSSIBLE CAUSE	REMEDY
1. Fuel bowl leaking.	A. Deteriorated gasket. B. Housing Cracked. C. Bowl rim cracked, nicked, or scratched. D. Gasket missing. E. Loose Fuel Bowl.	A. Remove and Replace Gasket. B. Remove and Replace Housing. C. Remove and Replace Bowl. D. Replace Gasket. E. Tighten Fuel Bowl Onto Filter.
2. Air leaking Into system (Indicated by air bubbles in bowl during operation).	A. Loose Valve Assembly. B. Cracked Component. C. loose Filter bowl.	A. Tighten Valve Assembly. B. Inspect Filter Bowl, Filter Housing, and Gasket. C. Tighten Fuel Bowl Onto Fuel Filter.

## FILTER, FUEL BREAKDOWN - P/N V04-00308

### MAINTENANCE PROCEDURES

#### **PRIMING THE MACHINE**

Shut off the fuel tank valves. Spin off the element, fill with clean fuel and coat the square gasket (3) with fuel. Reinstall the element and tighten 1/4 to 1/3 turns after the gasket contacts the upper housing. Turn on the fuel tank valves. Start the machine and check that there are no leaks.

#### **2. DRAINING WATER**

Check the collection bowl daily. Drain off water contaminants by opening the head vent and then the drain. If more than 1/8 cup of fluid is drained, follow the priming instructions, otherwise, close the vent and drain. Start the machine and allow air to purge from the fuel system prior to operating the equipment.

#### **3. ELEMENT REPLACEMENT FREQUENCY**

Frequency of element replacement is determined by contamination level in the fuel. Replace the element upon power loss of the engine (if so equipped) or every 500 hours whichever comes first.

**NOTE:** Foul smelling diesel fuel is an indication of microbiological contamination. A change in fuel source is recommended. Always carry a spare element as one tank full of contaminated fuel will plug the fuel filter element prematurely.

#### **4. ELEMENT REPLACEMENT PROCEDURE:**

1. Shut off the fuel tank valves.
2. Unscrew the amber bowl from the fuel filter.
3. Unscrew and discard the filter from the upper housing.
4. Follow listed procedures under "PRIMING".

### MAINTENANCE SCHEDULE

#### **GASKETS:**

1. Inspect for deterioration or tearing.
2. Remove and Replace.

#### **BOWLS:**

Inspect rim of bowl to insure it is free of nicks, cracks, or scratches.

#### **FILTER ELEMENT:**

1. Inspect for damage or deterioration.
2. Remove and Replace. (500 hours)

#### **FUEL BOWL:**

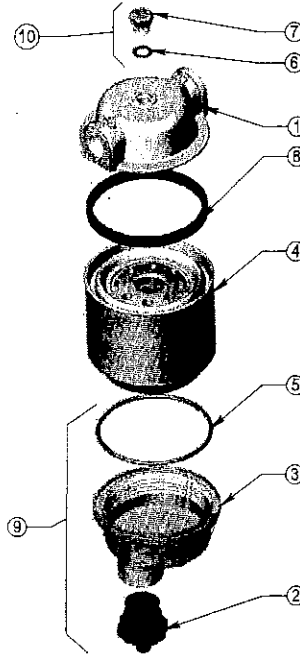
If contaminants are found, check more frequently.

	WEEKLY 100 HRS	
GASKETS:	*	*
BOWLS:	*	
FILTER ELEMENT:	*	
FUEL BOWL:	*	

#### **NOTE:**

Intervals stated are for normal operating conditions. The intervals suggested may be shortened or lengthened as determined by existing conditions.

### EXPLODED VIEW



PARTS LIST

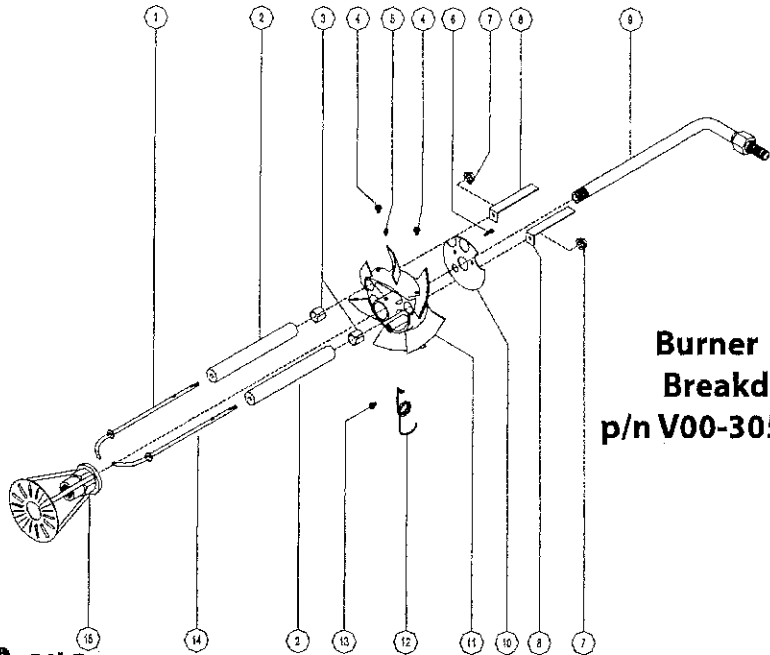
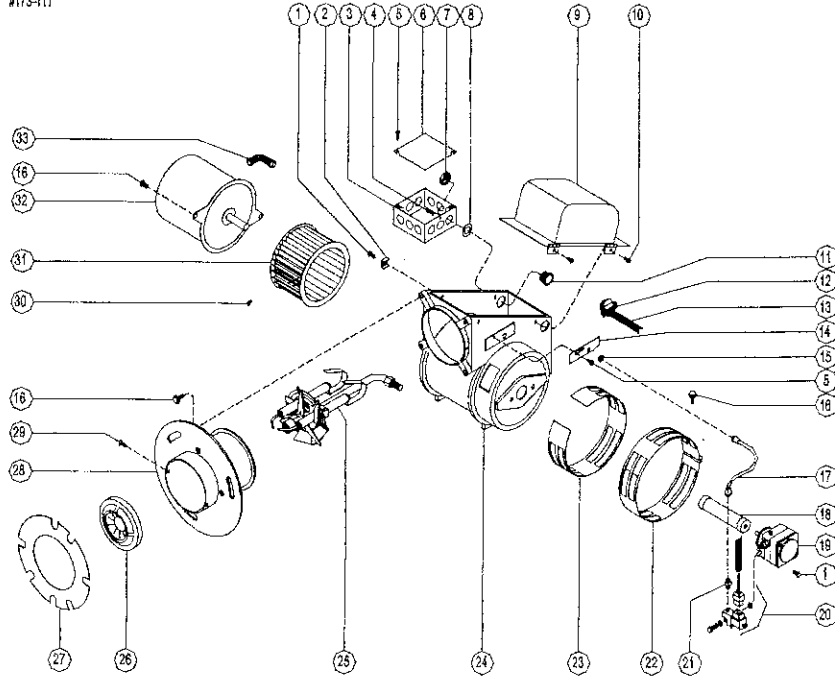
ITEM	PART NUMBER	PART DESCRIPTION	QTY.
1	V04-00308-02	HOUSING, UPPER	1
2	V04-00308-07	ASSEMBLY, DRAIN	1
3	V04-00308-06	BOWL, AMBER - 3"	1
4	V04-00308-01	ELEMENT, FILTER	1
5	V04-00308-05	O-RING - 3/32GS X 2 1/2ID	1
6	C07-01300-08	O-RING - 1/16CS X 5/16ID	1
7	V04-00308-06	PLUG, PIPE	1
8	V04-00308-03	RING, FLAT	1
9	V04-00308-K	KIT, REPLACEMENT BOWL	1
10	V04-00308-04	ASSEMBLY, VENT	1

# Oil Burner Exploded View

20140206

## Burner Breakdown - Exploded View p/n V00-17379-2

#173-411



## Burner Gun Breakdown p/n V00-30537-043

## Parts List

### Burner Breakdown - Parts List p/n V00-17379-2 (173-111)

20140206

Item	Part No.	Description			
			18	V00-13279	Coupling, Shaft
1	V00-13360	Screw, Thread Cutting	19	V00-14283	Pump, Fuel
2	V00-13038	Clip, Hold Down	20	F04-00974	Solenoid, Oil – 115v
3	F04-00517	Box, Junction	20a	V13-00653	Coil, Solenoid – 230v
4	H04-19000	Screw, Thread Cutting	21	V00-13064-1	Connector, Flare
5	H04-16401	Screw, Machine	22	V00-02668	Band, Air – Outer
6	F04-00512	Cover, Junction Box	23	V00-2669	Band, Air – Inner
7	F04-00315	Nut, Hex	24	V00-20372	Housing, Fan
8	H05-87500	Washer, Flat	25	V00-30535-43	Assembly, Burner Gun
9	V00-20358	Transformer, Ignition	26	V00-13003	Cone, Air – 3 9/16
10	V00-13045	Screw, Thread Cutting	27	V00-12484	Gasket, Flange
11	F04-00316	Nipple, Chase	28	4120-00440	Weldment, Air Tube
12	F04-00310	Connector, Conduit	29	V00-12699	Screw, Thread Cutting
13	F05-12310	Conduit, Electrical	30	H04-31302	Screw, Set
14	V00-13392	Cover, Slot	31	V00-20289	Fan w/Item 30
15	V00-14296	Nut, Hex	32	V00-21126	Motor, Electric – 1/4HP 115v
16	H04-31310	Screw, Cap	33	V00-13121	Strain Relief, Cord

### Burner Gun Breakdown Parts List p/n V00-30535-43

Item	Part No.	Description
1	V00-100631	Stem, Electrode – RH
2	V00-12574	Insulator, Electrode
3	V00-12408	Bushing, Insulator
4	V00-12694	Screw, machine
5	H04-19002	Screw, Set
6	V00-12695	Screw, Machine
7	V00-13110	Nut, Pal
8	V00-12231	Bar, Bus – 2" Straight
9	V00-21410-13	Assembly, Oil Pipe
10	V00-13407	Plate, Baffle – 2"
11	V00-14310	Support, Electrode
12	V00-14442	Spring, Electrode Support
13	H04-16400	Screw, Thread Cutting
14	V00-100632	Stem, Electrode – LH
15	V00-12988	Adapier, Nozzle

# Oil Burner Maintenance

## Air Band Adjustment, Fuel Pump Filter, Blower Fan Replacement, Transformer test

### AIR BAND ADJUSTMENT

NOTE: The air band adjustment on this burner has been preset at the factory (elevation approximately 1400 feet). On equipment installed where elevation is substantially different, the air band(s) must be readjusted.

1. Loosen the cap screw retaining the air shutter (round slotted disc behind pump) and move the air shutter and if necessary the bulk air band to obtain a clean burning flame.

Reduce the air supply until the flame tips appear slightly smoky, then increase the air just enough to cause the tips to appear clean.

2. Move the air bands as indicated below with the machine in operation fo at least 10 minutes.

The air band should be set so the exhaust gives the smoke spot of #1 or #2 on a Shell-Bacharach scale with carbon monoxide 0.01%. Add air to reduce the CO<sub>2</sub> and reduce air to increase CO<sub>2</sub>.

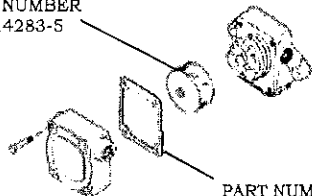
If a smoke tester is not available, a smoky exhaust, oily odor, or sweet smell indicates insufficient air while eye-burning fumes indicate too much air.

3. Tighten the cap screws retaining the air shutter and air band.

### FUEL PUMP FILTER SUNDSTRAND PUMP

1. Shut off fuel supply.
2. Loosen the 4 screws holding the cover to the fuel pump housing.
3. Take cover and cover gasket off and pull strainer off of pump housing.
4. Clean out any dirt remaining in the bottom of strainer cover. If there is evidence of rust inside of the unit, be sure to remove water in supply tank and fuel filter.

PART NUMBER  
V00-14283-5



PART NUMBER  
V00-14283-2

5. Turn on fuel supply. Failure to do so will result in fuel pump damage.

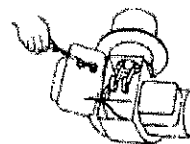
### BLOWER FAN REPLACEMENT

1. Shut off power to the burner and disconnect wires.
2. Loosen the 2 screws securing blower motor and fan to the housing.
3. Remove the blower.
4. Install the blower onto the shaft and place .030 feeler gauge on the motor as shown, sliding blower until it contacts feeler the gauge. Rotate wheel until set screw is centered on the flat of the motor shaft. Tighten set screws onto motor shaft.
5. Reinstall motor and blower assembly.
6. Reconnect wires and turn on pwer.



### TRANSFORMER TEST

1. Remove burner junction box cover.
2. Turn on burner and make sure ignition transformer is receiving rated voltage.
3. Turn off burner.
4. Loosen screw and swing transformer away from burner gun assembly.
5. Turn on burner.
6. Short the high voltage terminals. **CAUTION:** Use screwdriver with a well insulated handle to avoid shock.
7. Open gap by drawing screwdriver away from one electrode while touching the other.
8. The spark should jump between 5/8 inches and 3/4 inches, if it doesn't jump, replace the transformer.
9. Turn burner off.
10. Partially close transformer. Check if buss bars align and contact transformer electrodes. If buss bars do not contact, see Buss Bar Alignment.
11. Close transformer, reposition retainer clip and tighten screw.



# Buss Bar Adjustment , Burner Gun Removal, Electrode Adjustment

## BUSS BAR ALIGNMENT

1. With burner off, loosen screw and swing the transformer away from burner gun assembly.
2. Inspect the buss bars and transformer electrodes for pitting or corrosion.
3. Partially close the transformer. Check if the buss bars contact and are in alignment with transformer electrodes.
4. Proper adjustment is obtained by gently bending the buss bars until they spring against, parallel, and are in full contact with the transformer electrodes.
5. With buss bars aligned, carefully close and fasten the transformer.



## BURNER GUN REMOVAL & INSTALLATION

1. Disconnect the fuel line from the burner gun assembly oil line fitting. Loosen the other end of the line and swing line out of the way.
2. Remove the retaining nut.
3. Loosen screw and swing transformer away from burner gun assembly.
4. Carefully remove the burner gun assembly.
  - A. Check and replace electrode insulators if cracked.
  - B. Clean burnt buss bars.
  - C. Clean carbon off electrodes.
  - D. Clean carbon off oil nozzle. (Use caution not to scratch face of nozzle or orifice.)
  - E. Check for a loose oil nozzle.

NOTE: Check with dealer and/or replace nozzle with proper nozzle.
5. Gently replace burner gun assembly in air tube. **CAUTION:** Do not force. Forcing will cause electrode misalignment
6. Reinstall the retaining nut.

Reinstall the oil line making sure both ends are tight.

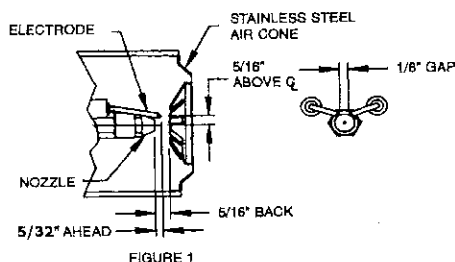
7. Partially close transformer. Check if buss bars align and contact the transformer electrodes. If buss bars do not contact, see Buss Bar Alignment.
8. Close transformer, reposition retainer and tighten screw.

## ACCESSORIES

Z01-00095 - Fuel Nozzle Changing Wrench  
Z01-00092 - Fuel Pump Wrench (Sundstrand)  
Z01-00093 - Solenoid Wrench (ASCO)

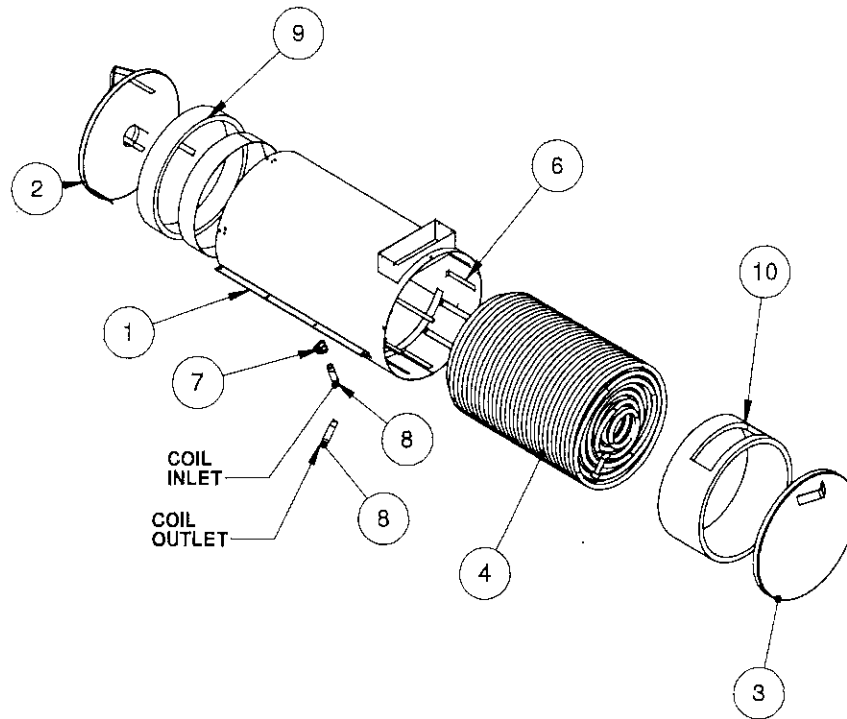
## ELECTRODE ASSEMBLY ADJUSTMENT

1. Loosen screws holding electrode assemblies.
2. Raise electrode tips  $5/32$  inches above surface plane or end of oil nozzle.
3. Place each electrode tip  $5/16$  inches from center of spray nozzle hole, maintaining previous measurement.
4. Spread electrode tips to  $1/8$ -inch gap maintaining previous measurements.
5. When the proper measurements are obtained, gently tighten screws that hold electrode assembly in place. **CAUTION:** Do not over tighten, as this will cause the electrode insulator to fail.





# Coil Assembly



CHASSIS & COIL  
p/n 770-00111

ITEM NO.	PART NUMBER	PART DESCRIPTION	QTY.
1	770-00105	24" COIL WRAPPER WELDMENT	1
2	770-00117	BURNER END HEAD WELDMENT	1
3	770-00118	EXHAUST END HEAD WELDMENT	1
4	770-00204	24" SCH80 OIL FIRED COIL W/O WRAP	1
5	AS18-C0101-PB	BRACKET,ANGLE	3
6	AS18-00702-B	CLIP, INSULATION	9
7	E08-00019-5	ELBOW, 3/4 FNPT	1
8	E16-00045-1	NIPPLE, 3/4 X 4 1/2	2
9	Z01-05094	INSULATION, 1 X 4 X 94 1/2	1
10	Z01-05094-A	INSULATION, 1 X 10 X 94 1/2	1

# Troubleshooting

## Pump

Trouble	Possible Cause	Remedy
Oil leaking in the area of water pump crankshaft	Worn crankshaft seal, bad bearing, grooved shaft, or failure of retainer o-ring.	Remove and replace.
Excessive play on crankshaft	Defective bearings.	See "Worn bearing."
	Excess shims.	Set up crankshaft.
Loud knocking in pump	Loose connecting rod screws.	Tighten connecting rod screws per PUMP SPECIFICATIONS
	Worn connecting rod.	Replace connecting rod per PUMP MAINTENANCE.
	Worn bearings.	Replace bearings per PUMP MAINTENANCE.
	Loose plunger bushing screw.	Tighten plunger screw per PUMP SPECIFICATIONS.
Oil leaking at the rear portion of the pump	Damaged or improperly installed oil gauge window gasket or rear cover.	Replace gasket or o-ring.
	Oil gauge loosed.	Tighten oil gauge.
	Rear cover screws loose.	Tighten rear screws to torque values in PUMP SPECIFICATIONS.
	Pump overfilled with oil, displaced through crankcase breather hole in oil cap/dipstick.	Drain oil. Refill to recommended oil level as stated in OIL LEVEL in PUMP MAINTENANCE.
Water in crankcase	May be caused by humid air condensing into water inside.	Maintain or step up lubrication schedule.
	Worn or damaged plunger screw o-ring.	Remove and replace. See PLUNGER SERVICE in PUMP MAINTENANCE.
Worn bearing	Excessive belt tension.	See BELT TENSION in MACHINE MAINTENANCE.
	Oil contamination.	Check oil type and change intervals per PUMP SPECIFICATIONS.
Short bearing life	Excessive belt tension.	See BELT TENSION in MACHINE MAINTENANCE.
	Misalignment between pump and motor.	Re-align pump and motor.
	Oil has not been changed on regular basis.	Check oil type and change intervals per PUMP SPECIFICATIONS.
Short seal life	Damaged plunger bushing.	Replace plunger bushing.
	Worn connecting rod.	Replace connecting rod.
	Excess pressure beyond the pump's maximum rating.	Match pressure stated in PUMP SPECIFICATIONS.
	High water temperature.	Lower water temperature stated in PUMP SPECIFICATIONS.

# Troubleshooting

## Pump Continued

Dirty or worn check valves	Normal wear.	Remove and replace.
	Debris.	Check for lack of water inlet screens.
Presence of metal particles during oil change	Failure of internal component.	Remove and disassemble to find probable cause.
	New pump.	New pumps have machine fillings and debris and should be drained and refilled per PUMP SPECIFICATIONS.
Water leakage from under head	Worn packing.	Install new packing.
	Cracked/scored plunger.	Remove and replace plunger.
	Failure of plunger retainer o-ring.	Remove and replace plunger retainer o-ring.
Loud knocking noise in pump	Pulley loose on crankshaft.	Check key and tighten set screw.
	Defective bearing.	Remove and replace bearing.
	Worn connecting rod, crankshaft, or crosshead.	Remove and replace.
Frequent or premature failure of the packing	Scored, damaged, or worn plunger.	Remove and replace plungers.
	Overpressure to inlet manifold.	Reduce inlet pressure.
	Abrasive material in the fluid being pumped.	Install proper filtration on pump inlet pumping.
	Excessive pressure and/or temperature of fluid being pumped.	Check pressures and fluid inlet temperature. Be sure they are within specified range.
	Over pressure of pumps.	Reduce pressure.
Running pump dry.	Do not run pump without water.	
Low Pressure	Dirty or worn check valves.	Clean/replace check valves.
	Worn packing.	Remove and replace packing.
	Belt slipping.	See BELT TENSION in MACHINE MAINTENANCE.
	Improperly sized spray tip or nozzle.	See MACHINE SPECIFICATION for specified spray tip or nozzle.
	Inlet filter screen is clogged.	Clean inlet filter screen.
	Pitted valves.	See VALVE SERVICE in PUMP MAINTENANCE.

# Troubleshooting Pump Continued

Erratic pressure; pump runs rough	Dirty or worn check valves.	Clean/replace check valves.
	Foreign particles in valve assemblies. High Inlet water temperature.	See temperature in PUMP SPECIFICATIONS.
Excessive vibration	Dirty or worn check valves	See "Dirty or worn check valves."
Scored plungers	Abrasive material in fluid being pumped.	Install proper filtration on pump inlet plumbing.
Fitted plungers	Cavitation.	Decrease Inlet water temperature and/or increase inlet water pressure.
Cavitation	High Inlet fluid temperature, low inlet pressure.	Lower inlet fluid temperature and raise Inlet fluid pressure.

## Burner

Trouble	Possible Cause	Remedy
Burner will not ignite	Electrodes out of alignment.	See "ADJUSTING ELECTRODE ASSEMBLY" in BURNER MAINTENANCE SECTION.
	Electrode insulator failure.	Remove and replace if there are breaks, cracks, or spark trails.
	Water flow switch not closing.	Adjust, repair, or replace switch.
	Vacuum switch not closing.	Adjust, repair, or replace switch.
	Temperature control switch not closing.	Adjust or replace the TEMPERATURE CONTROL.
	Fuel solenoid valve not opening.	Clean, repair, or replace solenoid.
	Weak transformer.	Clean and check transformer terminals. Check transformer for spark pre "TRANSFORMER TEST" in BURNER MAINTENANCE SECTION.
	Faulty cad cell (if equipped).	Clean and test cad cell, replace if required.
	Faulty primary control (if equipped).	Replace primary control.
	Burner motor thermal protector locked out.	See "Burner motor thermal protector locked out."
	Wiring.	All wire contacts are to be clean and tight. Wire should not be cracked or frayed.
	Burner switch.	Test switch operation. Remove and replace as necessary.
	Pump pressure.	See "Low fuel pressure."
Venting.	A downdraft will cause delayed ignition. Soot deposits on the coil and burner can interrupt air flow, and cause shorting of the electrodes. Clean as required.	
Sooting.	Soot deposits on the coil and burner can interrupt air flow, and cause shorting of the electrodes. Clean as required.	
No fuel.	See "No fuel."	

# Troubleshooting

## Burner Continued

No fuel	Clogged fuel filter.	Remove and replace filter per FUEL FILTER SECTION.
	Fuel leak.	Repair as necessary.
	Kinked or collapsed fuel line.	Remove and replace fuel line.
	Low fuel pressure.	See "Low fuel pressure."
	Faulty burner oil pump.	Adjust pressure or replace.
	Air leak in intake lines.	Tighten all fittings.
	Clogged burner nozzle.	Remove and replace (do not clean).
Low fuel pressure	Clogged fuel filter.	See "No Fuel."
	Clogged fuel pump filter screen.	Remove pump cover and clean strainer using a brush and clean fuel oil, diesel oil or kerosene.
	Fuel oil too viscous.	Operate a lighter oil or in warmer area.
	Air leaks in intake lines.	Tighten all fittings.
	Kinked or collapsed fuel line.	Remove and replace.
	Burner shaft coupling slipping.	Remove and replace.
	Fuel nozzle worn.	Remove and replace with specified nozzle on BURNER ASSEMBLY.
	Faulty oil pump.	Remove and replace.
Pulsating pressure	Partially clogged fuel pump strainer or filter.	Remove and replace strainer per FUEL PUMP FILTER in OIL BURNER MAINTENANCE section.
	Air leaking around fuel pump cover.	Check fuel pump cover screws for tightness and damaged gasket.
Unit smokes	Improper fuel.	Refuel with FUEL specified on MACHINE SPECIFICATIONS.
	Air to burner insufficient.	See AIR BAND ADJUSTMENT in OIL BURNER MAINTENANCE section.
	Fuel nozzle interior loose.	Replace nozzle.
	Water in fuel	Inspect fuel filter for water presence.
	Gun out of alignment.	Bend oil pipe to center burner nozzle.
Burner motor thermal protector kicked out	Low voltage.	Voltage must match those specified in the BURNER section of MACHINE SPECIFICATIONS section.
	Fuel too viscous.	See "Low fuel pressure."
	Fuel pump defective.	Check that fuel pump turns freely.
	Motor defective.	Call service technician or take motor to repair/warranty station.

# Troubleshooting

## Burner Continued

Delayed ignition (rumbling, noise starts)	Dirty or damaged electrodes.	Clean or replace.
	Air adjustment open too far.	Readjust per AIR BAND ADJUSTMENT in OIL BURNER MAINTENANCE section.
	Poor fuel spray pattern.	Remove and replace with fuel nozzle specified in BURNER ASSEMBLY.
	Incorrect electrode setting.	Readjust per ADJUSTING ELECTRODE ASSEMBLY in OIL BURNER MAINTENANCE section.
	Weak transformer.	See TRANSFORMER CHECK on OIL BURNER MAINTENANCE section.
Burner does not electrically come on	Burner motor reset button tripped.	Reset if necessary. CAUTION: Do not keep hitting the "reset" button if you have oil pressure you are just filling the burner combustion chamber with oil and if ignited will cause an explosion.
	High limit temp control reset tripped if so equipped.	Reset if necessary.

## Water Heater

<i>Trouble</i>	<i>Possible Cause</i>	<i>Remedy</i>
Machine will not rise to operating temperature	Low fuel pressure.	See BURNER on MODEL SPECIFICATOSN for specified pressure.
	Water in fuel piping.	Drain fuel tank and remove and replace filter per FUEL FILTER INSERT.
	Fuel filter clogged.	Remove and replace fuel filter element per FUEL FILTER INSERT.
	Poor combustion.	See "Poor combustion."
	Improper fuel supply.	Use fuel specified in BURNER section of the MODEL SPECIFICATIONS.
	Temperature control inoperative (if equipped).	See TEMPERATURE CONTROL INSERT.
Machine overheats	Insufficient water.	See "Low operating pressure" on MACHINE TROUBLESHOOTING insert.
	Temperature control inoperative.	See TEMPERATURE CONTROL INSERT.
	Improper fuel supply.	Use fuel specified in BURNER section of the MODEL SPECIFICATIONS.
Dry steam (very little moisture, very hot steam)	Insufficient water.	See "Low operating pressure" on MACHINE TROUBLESHOOTING insert.
	Improper fuel supply.	Use fuel specified in BURNER section of the MACHINE SPECIFICATIONS.
	Improper fuel pressure.	See BURNER on MODEL SPECIFICATIONS for specified pressure.

# Troubleshooting

## Water Heater Continued

Machine smokes (sweet smelling exhaust)	Improper fuel supply.	Use fuel specified in BURNER section of MODEL SPECIFICATIONS.
	Insufficient combustion air.	See AIR BAND ADJUSTMENT on OIL BURNER MAINTENANCE insert.
	Leaking fuel system.	Correct leakage problem.
	Clogged or improper burner nozzle.	Remove (DO NOT CLEAN) and replace nozzle per BURNER ASSEMBLY INSERT.
	Loose burner nozzle.	See BURNER MAINTENANCE insert.
Machine fumes (exhaust burns eyes)	Too much combustion air.	See BURNER TROUBLESHOOTING insert.
	Improper fuel pressure.	See FUEL on MODEL SPECIFICATIONS for specified pressure.
Excessive oil dripping from laydown coil condensate.	Loose nozzle.	See BURNER TROUBLESHOOTING insert.
	Fuel pressure too high.	See FUEL PRESSURE ADJUSTMENT section on BURNER MAINTENANCE insert.
	Burner nozzle defective.	Remove and replace with appropriate nozzle found on the BURNER ASSEMBLY or BREAKDOWN insert.
	Incorrect burner nozzle.	Remove and replace with appropriate nozzle found on the BURNER ASSEMBLY or BREAKDOWN insert.
Poor combustion	Low fuel pressure.	See "Low fuel pressure" on BURNER TROUBLESHOOTING insert.
	Improper fuel supply.	See "Low fuel pressure" on BURNER TROUBLESHOOTING insert.
	Insufficient combustion air.	See AIR BAND ADJUSTMENT section on OIL BURNER MAINTENANCE.

# Warranty

## Warranty Policy

Machines are guaranteed to be free from defects in material or workmanship under normal use and service for period of one year after delivery from the factory. Any part (other than vendor items) that is determined to be warranty will be repaired or replaced at **NO CHARGE** provided the warranty registration form is filled out in its entirety and the part is sent back freight prepaid. Any replacement parts accepted as warranty will be returned to you freight prepaid.

Our heating coil will carry a seven-year prorated warranty credit. The manufacturer will repair or replace the coil without charge for five years after delivery date from the factory for any defect in the coil that was caused by workmanship or defective steel. After the five years have expired, the credit will be prorated as follows:

First 5 years 100% Credit

Years 6 & 7 50% Credit

After 7 Years No Credit Allowed

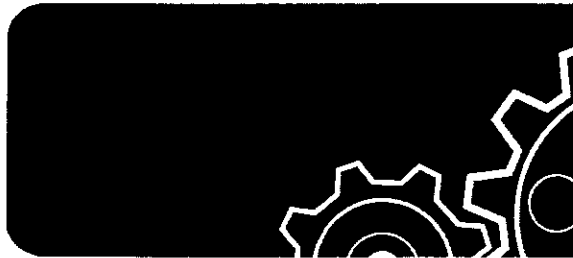
All parts supplied to us by other manufacturers will be subject to their guarantee and warranty. Generators, motors, and engines are required by vendors to be repaired or replaced by authorized warranty repair stations. The manufacturer will assist you in locating warranty stations around the country in cases where that is necessary. Select items carry a six-month warranty such as unloaders, triggers guns, etc.

The manufacturer, at its option, will repair or replace defective parts only, and does not allow for field labor charges for removal, installation, analysis, travel expense, or special freight expenses incurred for replacement parts.

Warranty does not apply to normal wear and tear including, but not limited to, freezing damage, freight damage, damage caused by misuse or misapplication, chemical related failures, contaminated filters and screens, moisture related fuel pump failures, stuck check valves, pump packings or seals, nozzles or orifices, paint, hoses, and gauges.



**For full warranty information, contact your delivering distributor or contact the manufacturer at [info@warrantysvc.com](mailto:info@warrantysvc.com)**



# Trailer Manual



**MODEL 20152K**

**p/n 266176-IM49D7A**

20161208

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INSTALLATION DATE

PART NUMBER

---

MAKE/MODEL

SERIAL NUMBER

---

SELLER

---

ADDRESS

CITY/STATE/ZIP

NOTES:

**ALKOTA CLEANING SYSTEMS, INC.**

110 North Iowa Street, PO Box 288

Alcester, South Dakota, USA 57001

TEL: 800-255-6823 • 605-934-2222

[www.alkotacleaningsystems.com](http://www.alkotacleaningsystems.com)

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# Specifications

Overall Length	
Overall Width	
Axles	Tandem (2) 3500 lbs / 1588 kg
Axle Brakes	Both axles – Electric
Tire Size	225/75/R15 – p/n G02-00044
Tire Stud Pattern	6 on 5 ½"
Coupler	2"Ball 5000 lb.
GVWR (Fully Loaded with Water etc.)	
Front Jack	1000 lbs / 680 kg
Jumper Hose – Machine to Hose Reels	½" npt x 14' - p/n K04-04114AE7 ½" npt x 6' - p/n K04-04106AE7

## **\*Trailers with Electric Brakes\***

Tow trailer with vehicle's headlights on to recharge the trailer's breakaway system.

# Operation

## Preparing to Tow

### Before Each Use

Breakaway Brakes – Battery must be fully charged, connections must be clean

Hydraulic Brakes – Check gauge for proper vacuum of 18 in. HG.

Coupler and Hitch of GN Ball – Check for cracks, pits, flats. Replace w/ ball having GVW. Grease. Check locking device.

Fifth Wheel and Pin – Grease and replace when worn.

Lights & Signals – Check for proper operation. Verify connection is clean & tight.

Tires – Check tire pressure when cold. Inflate as needed.

Lug Bolts & Hub – Check and tighten.

### GAWR

This is the maximum gross weight that each axle can support. It is the lowest of axle, wheel or tire rating.

### GVWR

This is the maximum allowable gross weight of your trailer and its contents. The gross weight of your trailer includes the weight of the trailer and all of the items within it, such as cargo, water, food and other supplies.

GVWR is sometimes referred to as GTWR (gross trailer weight rating), or MGTW (maximum gross trailer weight). GVWR, GTWR and MGTW are all the same rating.

The sum total of the GAWR for all trailer axles may be less than the GVWR. The total weight of the cargo and trailer must not exceed the lesser of the total GAWR or GVWR.

### PSIC

The tire pressure (pounds per square inch) measured when cold.

### VIN

This is the Vehicle Identification Number

### Empty Weight

The documents that accompany the trailer, such as the Manufacturer's Statement of Origin, are not a reliable source for "empty" or "net" weight information, because the shipping documents reflect average or standard weights and your trailer may be fitted with options. If you need to know the "empty" or "net" weight of your trailer, you must weight it on an axle scale. Axle scaling requires knowing the axle weights of your tow vehicle, without the trailer coupled.

### Tow Vehicle

Whether you are purchasing a new vehicle, or are using an older vehicle to tow your trailer, consult the vehicle dealer for advice on how to equip the towing vehicle. The following information and equipment must be discussed with the vehicle dealer. Overall Carrying and Towing Capacity of vehicle manufacturers will provide you with the maximum capacities of their various models. No amount of reinforcement will give a 100 horsepower, 2500 pound truck the towing capacity that a 300 horsepower, 5000 pound truck has. Suspensions System Sway bars, shock absorbers, heavy duty springs, heavy duty tires and other suspension components must be appropriate to accommodate the size and weight of the trailer that is going to be towed.

### Brake Controller

This device is part of the tow vehicle and is necessary to operate the brakes on your trailer if your trailer is so equipped. It provides brakes on trailers with a GVWR of 3,000 pounds or more. The brake controller here is not the same as the safety breakaway brake unit that may be provided on the trailer itself.

### **Side View Mirrors**

The size of the mirrors that are required depends on the size of the trailer that is being towed and your state law requirements. In addition, you must consider the fact that some states prohibit having extended mirrors on a towing vehicle, except while a trailer is actually being towed. In these cases, detachable extended mirrors are required. You must check with your dealer or the appropriate state agency for mirror requirements.

### **Heavy Duty Flasher**

This electrical component may be required when your trailer turn signal lamps are attached to the tow vehicle flasher circuit.

### **Electrical Connector**

This component is used to connect the lighting and brake facilities on the trailer to the light and brake controls on the towing vehicle.

### **Heavy Duty Cooling System**

The engine on the tow vehicle is working harder when you are towing your trailer. Depending on the size of the trailer being towed, it may be necessary to have an engine oil cooler. Inadequate cooling may result in sudden engine failure. Check with the tow vehicle dealer.

### **Automatic Transmission Oil Cooler**

The automatic transmission of a towing vehicle is handling more power when a trailer is being towed. Inadequate cooling will shorten transmission life, and may result in sudden transmission failure. Check with the tow vehicle dealer.

### **Fire Extinguisher**

It is wise to carry a fire extinguisher in the tow vehicle.

### **Emergency Flares & Triangle Reflectors**

It is prudent to carry these warning devices even if you are not towing a trailer. It is especially important to carry these when towing a trailer, because the hazard flashers of your towing vehicle will not operate for as long a period of time when the battery is running the trailer lights in addition to the towing vehicle lights.

## **Coupling the Trailer**

It is the responsibility of each individual to maintain safe operation and maintenance of the trailer. Good safety habits protect not only the operator, but all those in the vicinity of the equipment.

Every individual operating the trailer should be made familiar with the proper hookup procedures and pre-trip inspection steps. Maintaining your trailer in good working order could prevent the possibility of an unfortunate accident.

To safely hook up your trailer, please follow these steps:

1. Clear the area of bystanders.
2. Use the trailer jack to align the coupler with the ball. If the coupler does not line up with hitch ball, adjust the position of the tow vehicle.
3. Lower the hitch by turning the jack handle counter-clockwise onto the ball. Continue raising the jack until it is totally collapsed.
4. Cross the chain underneath the hitch and coupler with minimum slack to permit turning and hold the tongue up. If the trailer comes loose, attach the appropriate safety chain. Provide sufficient slack in the chain for turning.
5. Attach the breakaway cable. Check breakaway battery (charge) pressing the test button.  
Green = sufficient power

## **6 Operation**

Red = low charge

6. Attach the electrical plug to the vehicle receptacle. Check the brake, turning, and marking lights making sure all are in operating order.

Adjust speed down when towing trailer. The maximum speed that the trailer can be safely towed, under ideal road conditions, is 60 m/hr. Do not tow your trailer faster than this. The tires on the trailer will overheat and possibly blowout if you drive too fast. Also, the likelihood of suddenly losing control increases as your speed increases.

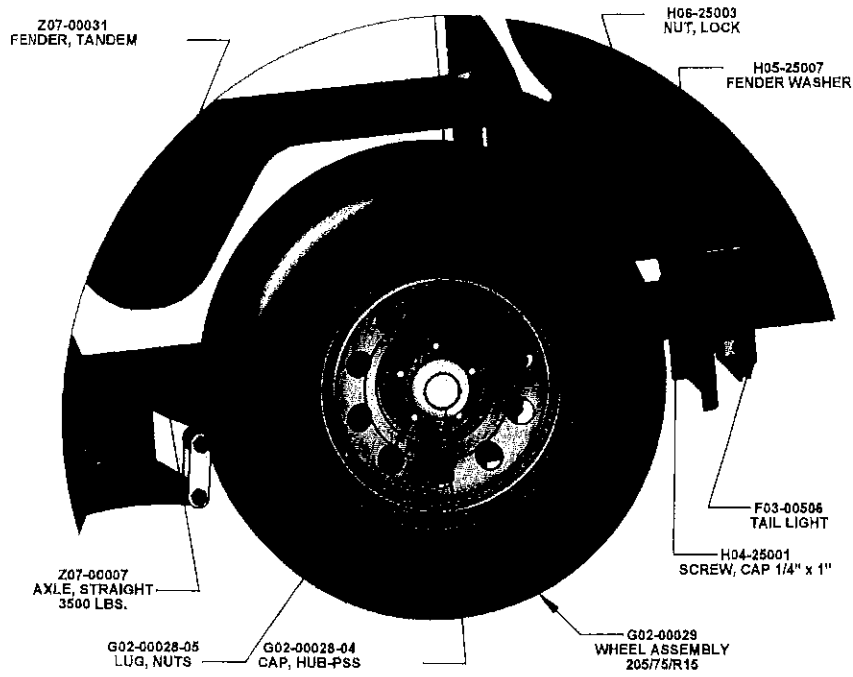
## Uncoupling the Trailer

To safely unhook your trailer please follow these steps:

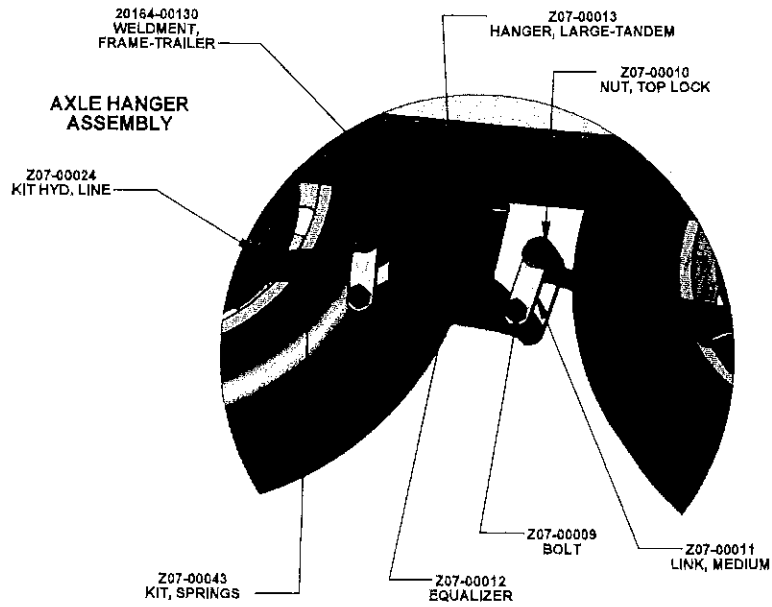
1. Clear the area of bystanders.
2. Block the trailer tires to prevent from rolling, before jacking the trailer up.
3. Disconnect the electrical connector.
4. Disconnect the breakaway brake switch cable. Do not pull the pin out of the hitch.
5. Disconnect the safety chains from the tow vehicle.
6. Unlock the coupler.  
Turn the jack handle clockwise lowering the jack.
7. Use the trailer jack to align the coupler with the ball. If the coupler does not line up with hitch ball, adjust the position of the tow vehicle.
8. Lower the hitch by turning the jack handle counter-clockwise onto the ball. Continue raising the jack until it is totally collapsed.
9. Clamp locking jaws in place and secure with lock-pin.



# Assembly, Trailer Wheel Assembly

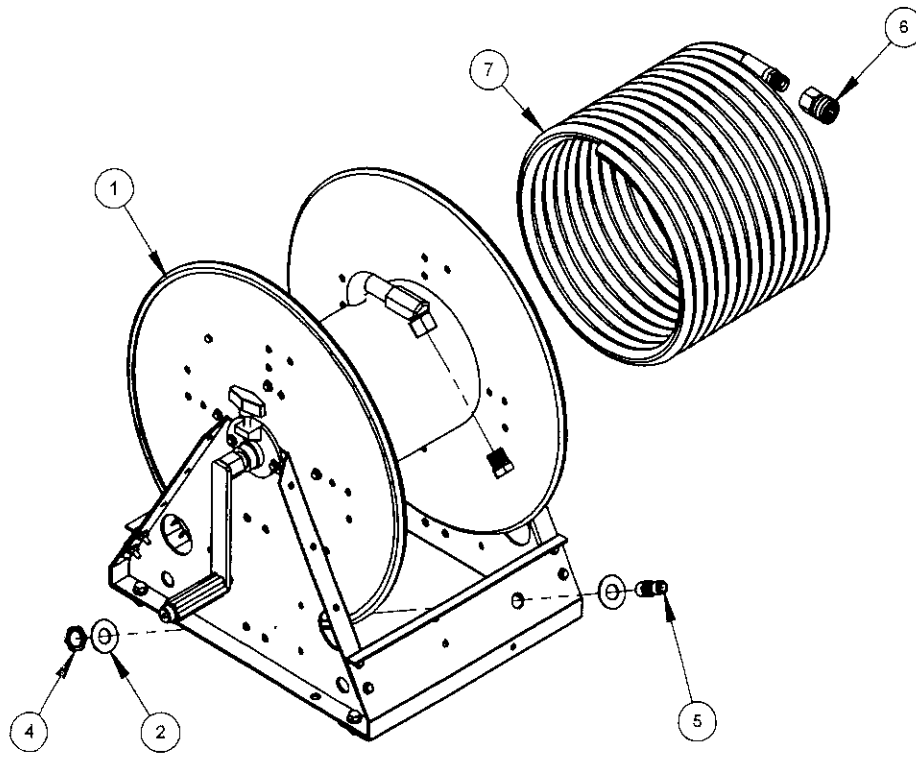


## WHEEL ASSEMBLY



## 8 Operation

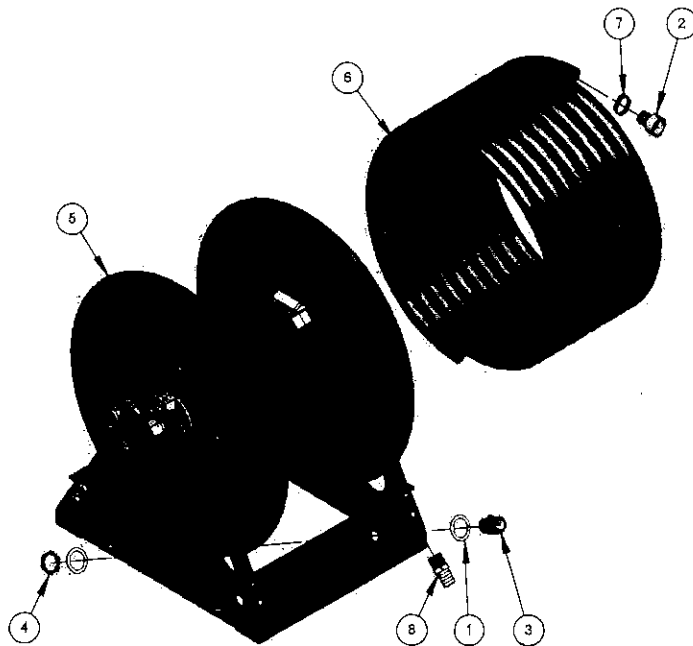
# High Pressure Hose Reel Assembly



**HIGH PRESSURE HOSE REEL ASSEMBLY**  
 p/n: 20151-00914-HT  
 2/10/2012

ITEM NO.	PART NUMBER	PART DESCRIPTION	QTY.
1	HTREM105	REEL, 1/2" X 175', HAND CRANK	1
2	AS14-90108-P	WASHER, DISHED	2
3	E04-00006-48	BUSHING, PIPE	1
4	F04-00315-LT	NUT, LQ TIGHT	1
5	W04-31131-B	COUPLER, 3/8M X 3/8MNPT	1
6	W04-34231-A	COUPLER, QUICK DISCONNECT	1
7	K02-31100E33 (ROLLED)	3/8" X 100' HOSE (ROLLED)	1
8	H04-31301	SCREW, CAP - 5/16 X 3/4	2
9	H04-31306	SCREW, CAP - 5/16 X 3/4	2
10	H06-31300	NUT, LOCK - 5/16"	2

# Low Pressure Hose Reel Assembly

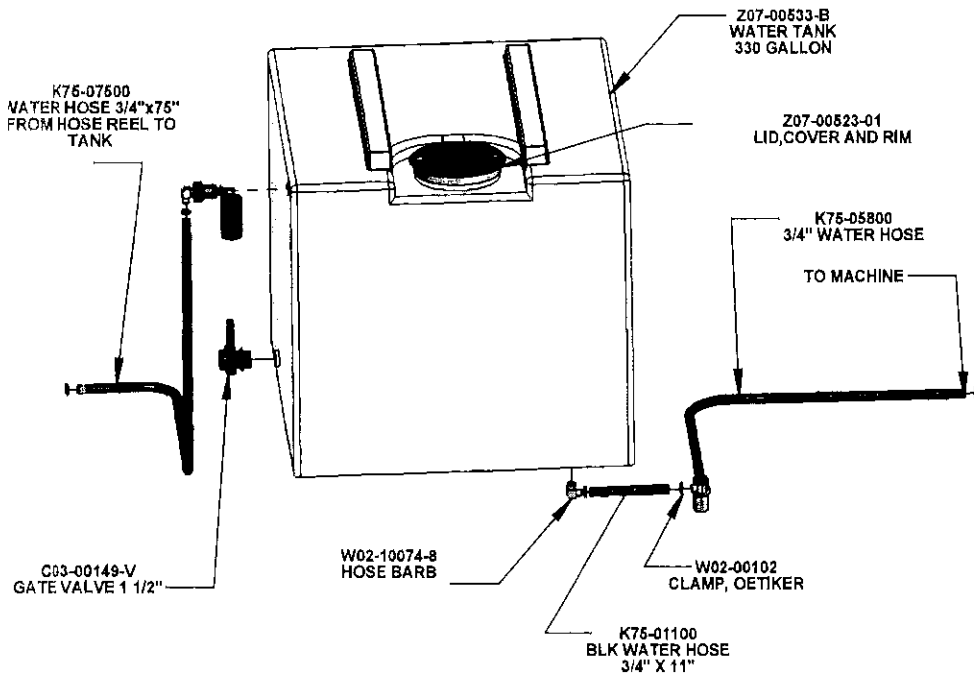


LOW PRESSURE HOSE REEL ASSEMBLY  
 p/n: 20151-00915-HT  
 2/21/2011

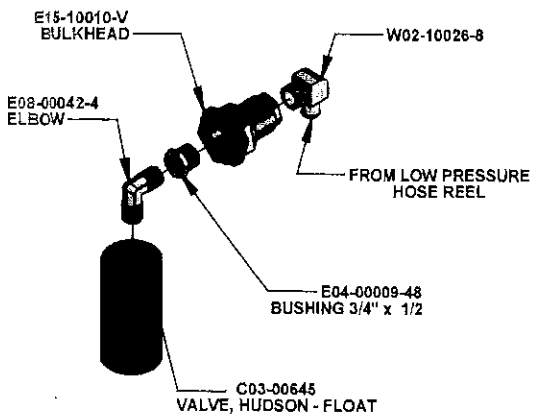
ITEM NO.	PART NUMBER	PART DESCRIPTION	QTY.
1	AS16-90110-P	WASHER, DISHED	2
2	C05-00275-B	BARB HOSE, FEMALE 3/4" THREAD x 3/4" ID BARB HOSE, GARDEN SWIVEL	1
3	C05-00293	ADAPTER, 3/4" GARDEN HOSE X 1/2" MNPT	1
4	F04-00318-1	NUT, LQ TIGHT	1
5	HTREM105	REEL, 1/2" X 175', HAND CRANK	1
6	K75-120000	3/4" X 100' WATER HOSE (ROLLED)	1
7	W02-00102	CLAMP, SS-OETIKER, 3/4" HOSE SIZE 28.6	1
8	W02-10027-8	BARB, HOSE	1

# Tank Assembly

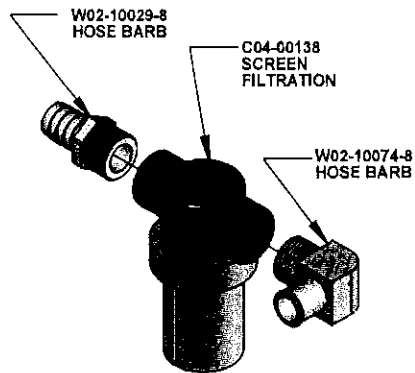
20152-00905  
WATER TANK ASSEMBLY  
330 GALLONS



## WATER INTAKE



## WATER OUTLET TO MACHINE



# Specifications

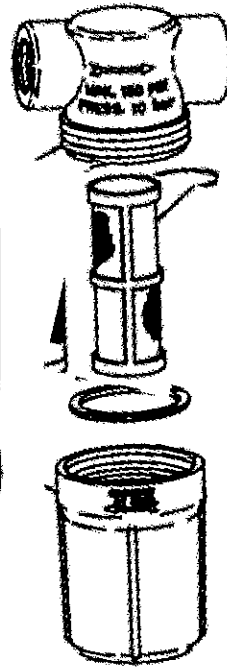
## Material

Base Polypropylene  
Screen 304 Stainless Steel-Color Red

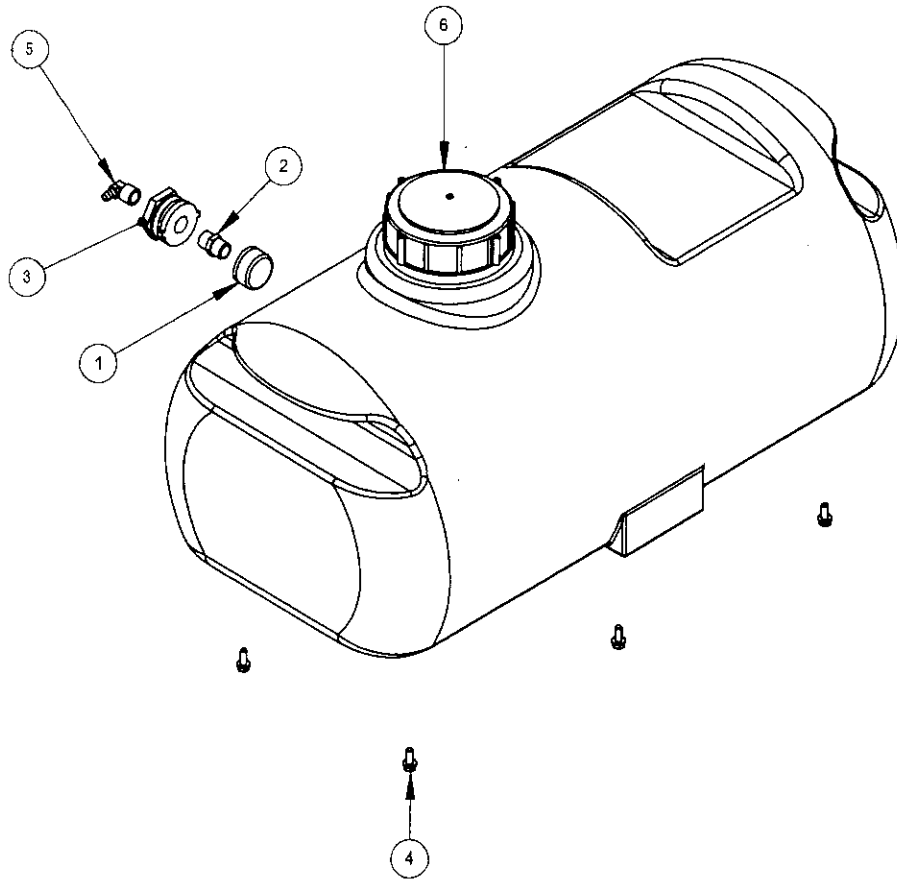
## General

Screen 50 Mesh  
Gasket EPDM Rubber

C04-00138 PART LIST		
ITEM	PART NUMBER	PART DESCRIPTION
1	C04-00138-01	Screen, 304SS-50 Mesh
2	C04-00134-01	Gasket, EPDM Rubber
3	C04-00134-03	Bowl, replacement -Poly



# Assembly, Chemical Tank



**25GAL TANK ASSEMBLY**  
 p/n: 20152-00912  
 12/8/2016

ITEM NO.	PART NUMBER	PART DESCRIPTION	QTY.
1	C04-00120	FILTER, SOAP SCREEN	1
2	E15-00010-P	NIPPLE, PIPE - NYLON 1/2MPT	1
3	E15-10010-V	BULKHEAD 1/2 X 1/2	1
4	H04-31306	SCREW, CAP - 5/16 X 3/4	6
5	W02-10036-8	BARB, HOSE	1
6	Z07-00525	ASSEMBLY, TANK & LID	1

# Warranty

## WARRANTY POLICY

All machines and parts are guaranteed to be free from defects in material or workmanship under normal use and service for a period of 1 year after delivery from the factory. Any part (other than the vendor items) that is determined to be warranty will be repaired or replaced at **NO CHARGE** provided the warranty card is filled out in its entirety and the part is sent back freight prepaid. Any replacement parts accepted as warranty will be returned to you freight prepaid.

Any parts supplied to us by other manufacturers will be subject to their guarantee and warranty. Generators, motors, and engines are required by vendors to be repaired or replaced by authorized warranty repair stations. We will assist you in locating warranty stations around the country in cases where that is necessary. Select items carry 6 (six) month warranty such as unloaders, trigger guns, etc.

This warranty covers the repair and replacement of defective parts only, and does not allow for field labor charges for removal, installation, analysis, travel expense, or special freight expenses incurred for replacement of parts.

Warranty does not apply to normal wear and tear including, but not limited to, freezing damage, freight damage, damage caused by misuse or misapplication, chemical related failures, contaminated filters and screens, moisture related fuel pump failures, stuck check valves, pump packing or seals, nozzles or orifices, paint, hoses, and gauges.

Record Model Number and Serial Number  
Always include them in Service Correspondence