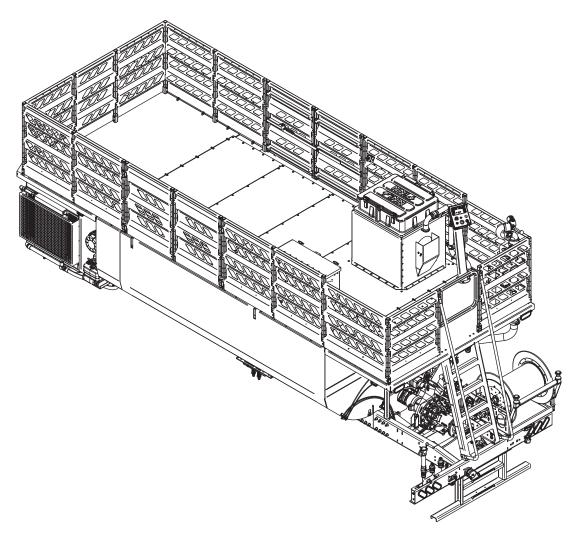


9281 LeSaint Drive • Fairfield, Ohio 45014 Phone (513) 874-2818 • Fax (513) 874-2914

Sales: 1-800-543-7166



# TITAN HT330/TITAN HT400 HydroSeeder®

Parts Manual

Item A3153-001 Serial No.

	FOR OFFICE USE ONLY		
DATE	UPDATE DESCRIPTION	CODE	
05/14/20	Initial release	OS0514	

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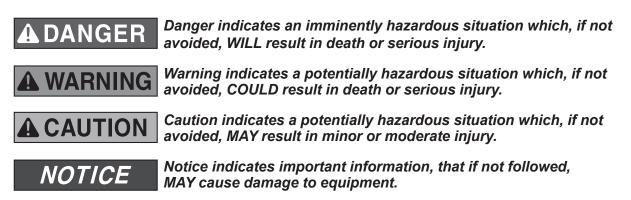
## SAFETY FIRST

With any piece of equipment, new or used, the most important part of its operation is SAFETY!

FINN Corporation encourages you and your employees to familiarize yourselves with your new equipment and stresses safe operation.

The first pages of this manual are a summary of the main safety aspects associated with this unit. Be sure to read and understand completely before operating the machine.

The symbols below are used throughout the operation and maintenance sections of this manual to call attention to safety procedures.



**NOTE:** This is helpful information.

#### **CALIFORNIA PROPOSITION 65**

**A WARNING** The engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm. Wear protective equipment.



**A WARNING** Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Wash hands after handling.

## HYDROSEEDER® SAFETY SUMMARY SECTION

It is important that all operators of this machine are familiar with all safety aspects covered in this section and have read the entire Operator's Manual before operating the machine. Always keep a copy of this manual with the machine. It is the responsibility of the operator of the machine to fully understand this safety summary section. Remember that YOU are the key to safety. Good safety practices protect not only you but also the people working with and around you. Keep in mind that this safety section is written for this type of machine only. Practice all other usual and customary safe working precautions. Above all, remember that safety is up to you.



The FINN HydroSeeder<sup>®</sup> is designed to mix and apply water, seed, fertilizer, agricultural lime, and hydraulic mulch to the prepared seedbed. The resultant slurry from mixing one or more of the above materials may react, causing harmful or deadly gasses within the tank. Heat, evaporation, or extended emptying period can/ will accelerate the formation of these gasses. Please contact your supplier(s) of these slurry components regarding their potential reactivity.

## I. PRE-START EQUIPMENT CHECK (equipment check is to be made with the engine off)

 If you have a chassis-mounted unit, check devices securing HydroSeeder<sup>®</sup> to the truck or trailer frame.



- 2. If HydroSeeder<sup>®</sup> is a trailer unit, check hitch and hitch bolts, lights, brakes, and all safety components.
- 3. Make sure loading hatch bag cutter is in place and secure.
- 4. Check that all guard railing is in place and secure.
- 5. Verify that all guards are in place.
- 6. With the ignition switch ON, verify that the signal horn is operating correctly.
- By carefully looking down through the loading hatch, inspect the slurry tank for foreign objects. Never enter the tank without following the procedures described in step 3 of section IV. MAINTENANCE.
- 8. Remove unnecessary objects (or material) from the tank top.
- 9. Make sure no one is working on or inside the machine. Give a visual and audible signal that all is clear, before starting the engine.
- 10. Inspect all hydraulic hoses for cracks, bulges, or damage. If hoses are bad, replace immediately.
- 11. Inspect all discharge hoses for cracks, bulges, or damage. If hoses are bad, replace immediately.

#### **II.MACHINE OPERATION**

 Always wear safety goggles when operating the machine. Other safety attire such as safety shoes, ear protection, gloves, hard hats, dust masks, etc. should be worn as required by warning decals on machine, operator's manuals, or job



site requirements. Remove rings, watches, etc. Avoid wearing loose-fitting clothing that may get caught in rotating machinery.

2. Do not operate the machine without all guards in place.



- 3. Do not load unit while in transit. Load only when parked and unit is as level as possible. Take care not to drop pens, lighters, etc. or pieces of paper or plastic bags into the tank, as these objects might plug the slurry system. Should any object be dropped into the tank, do NOT reach into the tank to retrieve the foreign object. See step 3 under section IV. MAINTENANCE before allowing any personnel to enter the tank.
- 4. Make sure area to be sprayed is clear of all persons, animals, etc.
- 5. The driver of the carrying or towing vehicle is responsible for the safety of the operator(s) of the machine. Make sure the driver is aware of and avoids all possible hazards to the operator(s) of the machine, such as low tree limbs, low power lines, etc. Vehicles on which equipment is mounted or towed must be stopped and started gradually. Avoid abrupt starts or stops. Never operate on a slope or a hill that may endanger the driver and/or the operator(s). All personnel should review and be familiar with stop/ start signals between the driver and operator(s) before going into operation. Only the operator should be located on the platform during operation.

#### **II.MACHINE OPERATION (Continued)**

- Operator(s) of equipment should never ride on the machine at speeds of greater than 5 mph (8 km/h).
- 7. Never operate machine in an enclosed area without venting the engine exhaust of both the equipment and vehicle on which the equipment is mounted. Deadly carbon monoxide fumes can accumulate.



 Never operate this or any other machinery when fatigued, tired, under the influence of alcohol, illegal drugs, or medication. You must be in good physical condition and mentally alert to operate this machine.

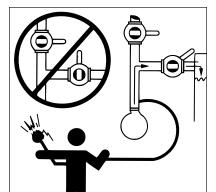


- 9. Never modify the machine. Never remove any part of the machine (except for service and then reinstall before operating).
- 10. Use proper means (steps, ladder) for mounting and dismounting of the machine. Never mount or dismount a moving machine.



#### **III. SLURRY APPLICATION**

- Do not aim discharge spray toward power-lines, transformers, or other high voltage electrical conductors. Also do not aim discharge spray towards people, animals or anything other than the intended application area.
- Never engage (turn on) the slurry pump when both the recirculation and discharge valves are closed (as illustrated to the right). Operation with both valves closed will result in extreme heat generation that could cause



severe bodily injury and damage to the equipment.

 Plan application so that the farthest area is covered first, then work back toward the HydroSeeder<sup>®</sup>, so individuals are not walking back over slippery ground.

- 4. Recirculation valve is to remain open at all times during normal operation. This valve is only intended to isolate the slurry tank should it be full during pump or boom maintenance. A closed or plugged recirculation line can cause extreme heat in the pump or discharge lines that may result in severe bodily injury and damage to the equipment.
- During application through a hose, high pressure can be exerted at the end of the hose. Hose-holding personnel must establish good footing. The operator should apply gradual pressure to the hose only



after hose-holding personnel are firmly positioned and have firm control of the hose. Additional personnel to direct hose may be necessary if working on slopes. The proper technique for grasping the hose used by hose-holding personnel is to route and firmly grasp the hose over the shoulder or under both arms. Never route/hold the hose so it goes between the legs. If the hose-holding personnel finds that it is uncomfortable for him to handle the hose by himself, additional hoseholding personnel should be positioned at the end of the hose.

 Before opening any valves or pipe clamps, shut machine down and verify that there is no remaining pressure in the lines and that the contents (slurry, hydraulic fluid, etc.) are not hot. If hot or still under pressure, do **NOT** open



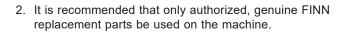
valves or pipe clamps as the hot/pressurized/caustic material may cause severe personal injury. Allow to cool and relieve pressure prior to opening with caution. Do not allow contents to come into contact with personnel as severe bodily injury could result.

- Except when loading materials, keep loading hatch lid closed to protect operator and prevent splashing of wet material onto the tank top.
- Wash off spillage of slippery mulch or slurry additive from the tank top and platform before operating equipment.

#### **IV. MAINTENANCE**

 Before servicing the machine, turn off engine and allow all moving parts to stop. To prevent accidental starting, disconnect battery cables. Tag the engine operating area to show that the machine is being serviced. Use lockout/tagout procedure (Occupational Health and Safety Administration (OSHA) 29 CFR 1910.147).





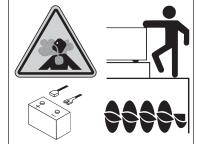
## HYDROSEEDER<sup>®</sup> SAFETY SUMMARY SECTION

#### **IV. MAINTENANCE (Continued)**

 Do not use ether or cold start fluid; glow plug type heaters and other intake manifold preheaters could cause an explosion or fire and damage to engine or severe injury or death could result.



 When combined with water, heat or time, some hydroseeding amendments may react causing harmful or deadly gasses. Consult your material suppliers for reactivity and SDS



information. The slurry tank and associated plumbing must be flushed and drained after each day of operation.

5. Never enter the tank through the loading hatch or riser atop the tank. Remove the fasteners securing the access panel adjacent to the loading hatch and utilize a ladder or steps to enter here.

Your slurry tank may be considered a confined space by OSHA under 29 CFR 1910.146. Before entering any confined space, your company must develop a procedure for safe entry. Make sure your company's plan meets all the requirements of 29 CFR 1910.146, and/or local legal requirement.

- Before loosening any clamps or opening any valves, determine if material in the line is hot by feeling the pipe. Do NOT allow material to come in contact with personnel. Severe bodily injury could result.
- 7. On trailer units, perform general maintenance such as checking the safety chains, hitch and hitch bolts, tires, and brakes. Repair or replace if worn or broken. Never operate machine on improperly inflated or damaged tires. Always use a safety



cage or cable restraints when inflating a repaired tire.

8. Radiator maintenance: Liquid cooling systems build up pressure as the engine gets hot. Before removing radiator cap, stop the engine and let the system cool. Remove radiator cap only after the coolant is cool.



 Battery maintenance: Lead-acid batteries contain sulfuric acid, which will damage eyes or skin on contact. Always wear a face shield to avoid getting acid in the eyes. If acid contacts the eyes, flush immediately

with clean water and get medical attention. Wear rubber gloves and protective clothing to keep acid off skin. Lead-acid batteries produce flammable and explosive gasses. Keep arcs, sparks, flames, and lighted tobacco away.

10. Filling of fuel: Never fill the tank with the engine running, while smoking, or when near an open flame. Never smoke while handling fuel or working on the fuel system. The fumes in an empty fuel container are explosive.



Never cut or weld on fuel lines, tanks, or containers. Move at least 10 ft. (3 m) away from fueling point before starting engine. Wipe off any spilled fuel and let dry before starting engine.

**IMPORTANT:** Be careful not to allow fuel, lubricant, hydraulic fluid, or cooling fluids to penetrate into the ground or be discharged into the water system. Collect all fluids and dispose of them in accordance with local municipal regulations.

11. Diesel fuel or hydraulic fluid under pressure can penetrate the skin or eyes and cause injury, blindness, or death. Pressure may build up in the hydraulic system; use caution when removing the cap.

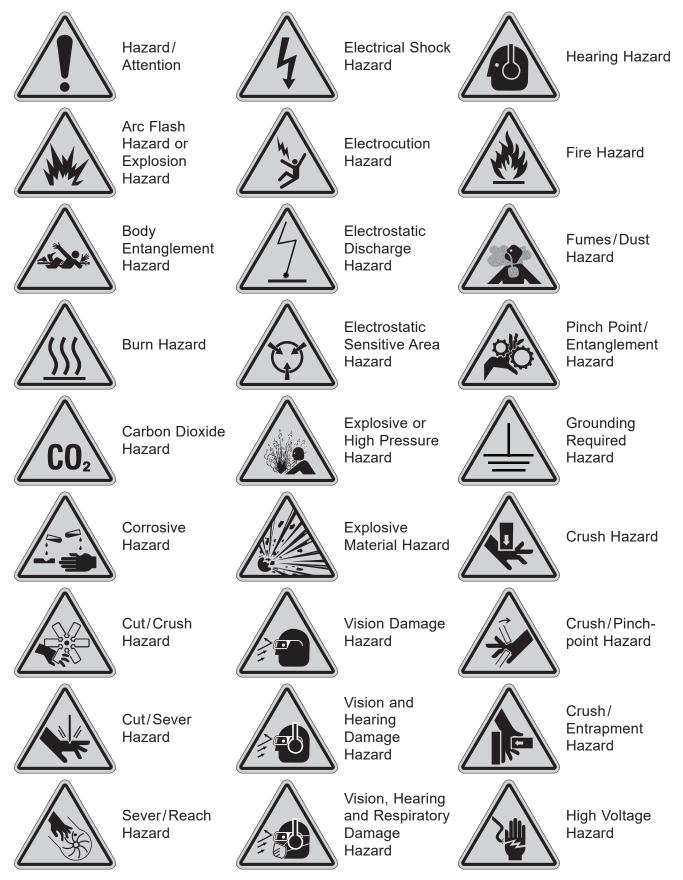


- 12. Make certain that all decals on the machine are maintained in good legible condition. Replacement decals are available through FINN Corporation by specifying part number shown in the lower right-hand corner of the decal. See the Parts Section of this manual for the location and quantity of all decals on this unit.
- Do not pressure wash this unit. Do not pressure wash around any control boxes, radio remotes or control panels. Pressure washing this unit can cause damage to the electrical systems and components and also

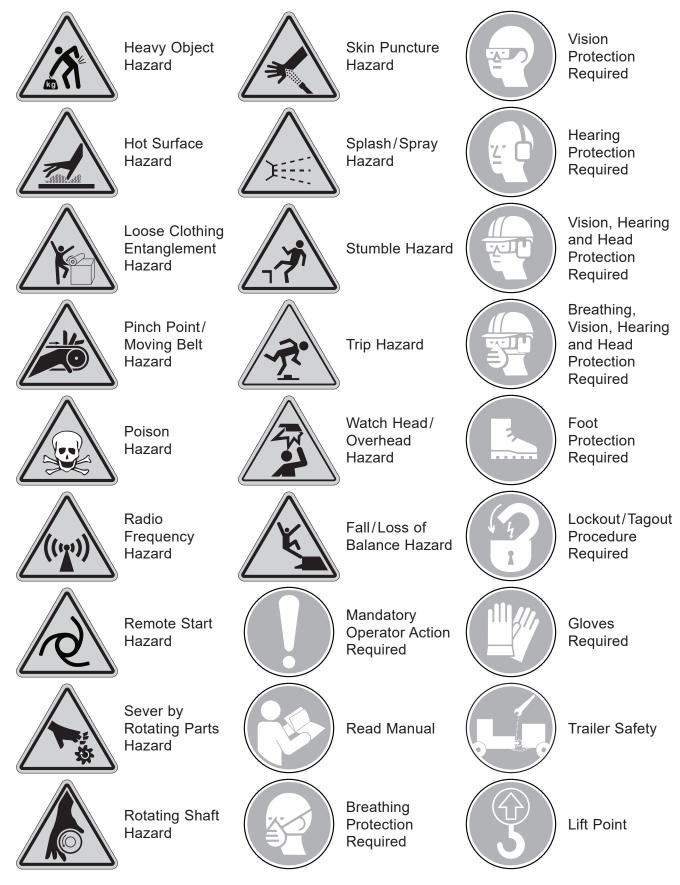


cause the unit to not function. Pressure washing injects water into sensitive electrical components. To clean the unit, use a method that controls the amount of water that is applied to surface of the unit.

## **COMMON SAFETY SYMBOLS**



## **COMMON SAFETY SYMBOLS**



## COMMON SAFETY SYMBOLS



## SAFETY DECAL EXAMPLES



# NGER

CONFINED SPACE HAZARD! (Reference: OSHA 29 CFR 1910.146)

1.Drain, flush, and ventilate tank interior.

2. Turn off engine and disconnect battery cables.

3. Continuously ventilate area or wear appropriate breathing apparatus. 4. Provide standby individual outside tank able to communicate with

person inside and able to remove him with a lifeline if necessary. FLYING MATERIAL HAZARD!

Wear eye protection around operating equipment.

Failure to comply will result in death or serious injury.



DO NOT aim stream toward electrical lines

Avoid spraying toward bystanders.

HAZARD!

Failure to comply will result in death or serious injury.



place. Failure to comply could result in death or serious injury.



Keep hands clear! Rotating fan and gears.

- DO NOT operate without guards or doors in place.
- Shut off engine, disconnect battery, and allow all moving parts to
- stop before servicing.
- FLYING DEBRIS! Wear eye protection around equipment.

Cooling system is under pressure.

RADIATOR HANDLING INSTRUCTIONS

Allow system to cool before handling Remove radiator cap slowly.

Wear appropriate safety gear. Failure to comply could result in death or serious injury.

BURN HAZARD!

Failure to comply could result in death or serious injury.



Ø

## A WARNING

Use a 50/50 solution of water and antifreeze. Using 100% antifreeze will result in engine damage.
 Check and replenish water prior to use. More water will be consumed when operating in hot conditions.

•





A WARNING

DO NOT use remote valve unles recirculation valve is

open. Excessive heat or

bodily injury could occur. Failure to comply could

result in death of serious injury.



#### **A**WARNING FALL HAZARD! All gates must be closed during operation. Failure to comply could result in death or serious injury.

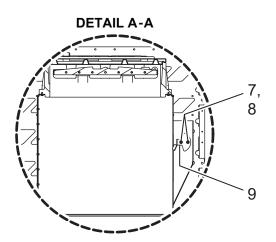
If overflow pipe begins emitting vapor, check and replenish water.
 Remove and clean screen when dirty.
 Check and clean fins periodically. Clogged fins will increase water consumption.
 Protect radiator from fertilizer corrosion by washing radiator core with water.

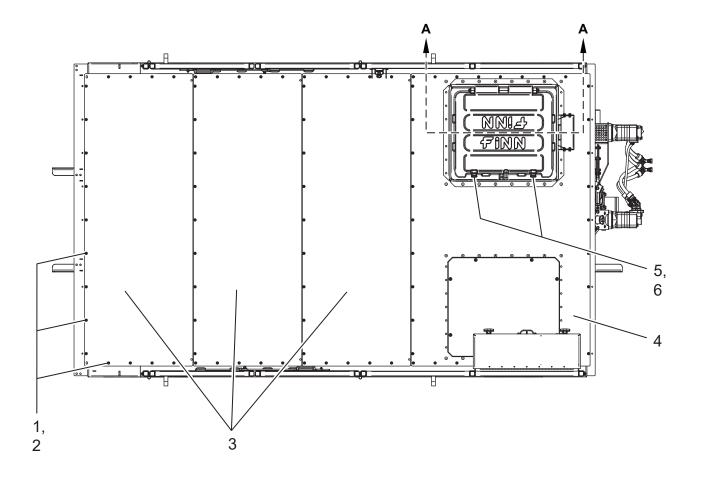


# TITAN HT330/TITAN HT400 HydroSeeder<sup>®</sup> Parts Manual

Model <u>OS</u> Item <u>A3153-001</u>





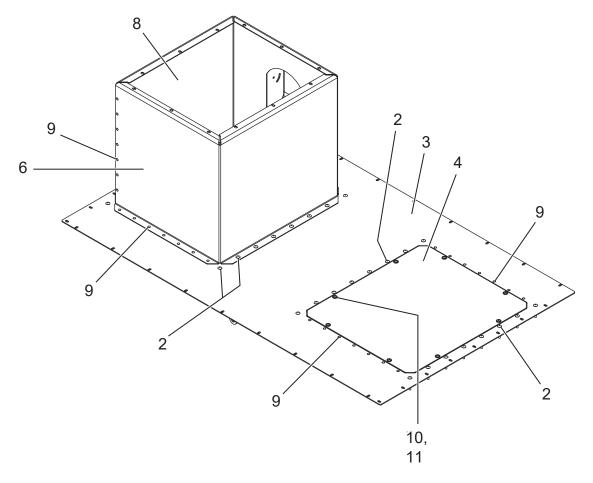


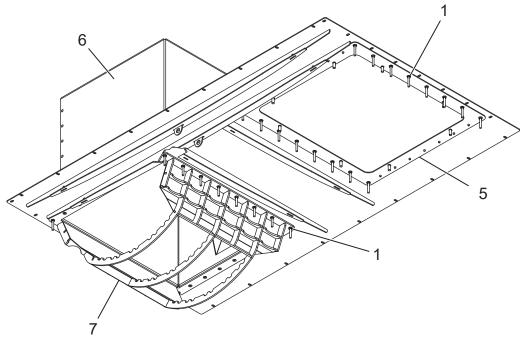


Ref. No.	Part Number	Description	No. Req'd HT330	No. Req'd HT400
1	•	3/8-16 x 1 Hexagon Socket Button Head Cap Screw	62	72
2	•	3/8 Washer	62	72
3	A3129-001	Tank Lid A Weldment Assembly, Steel	3	4
	— OR —			
	A3129-002	Tank Lid A Weldment Assembly, Stainless Stee	el 3	4
4		Loading Hatch Tank Lid B Assembly (Shown for Reference Only)	1	1
5	005433	Flexible Draw Latch	2	2
6	•	No.10-24 UNC - 1/2 Hexagon Socket Head Cap Screw	8	8
7	•	Hex Flange Nut	2	2
8	•	3/8-16 UNC x 0.75 Hex Flange Screw, Regular Thread	2	2
9	A4846-001	Fill Port Deflector	1	1
NOT SHOWN				
	A3162-001	Tank Seal Strips (Tank Width)		
	A3844-001	Tank Seal Strips (Tank Length)		
KITS AND MA	RKERS			
	Standard Hardy	vere Item Aveilable at your least hardware store		

• Standard Hardware Item - Available at your local hardware store.









## LOADING HATCH/TANK LID B ASSEMBLY

Ref. No.	Part Number		No. Req'd A4317-001	No. Req'd A4317-002
1	A2484-004	Lock Bolt Collar, 3/8	32	32
2	A2487-005	Lock Bolt, 3/8	32	32
3	A3133-001	Tank Lid B Weldment, Steel	1	0
	A3133-002	Tank Lid B Weldment, Stainless Steel	0	1
4	A3134-001	Tank Lid B Access Panel, Steel	1	0
	A3134-002	Tank Lid B Access Panel, Stainless Steel	0	1
5	A3136-001	Tank Lid B Access Frame Assembly, Steel	1	0
	A3136-002	Tank Lid B Access Frame Assembly, Stainless Ste	el O	1
6	A3138-001	Riser Wall Section, Steel	1	0
	A3138-003	Riser Wall Section, Stainless Steel	0	1
7	A3147-001	Bale Grinder Basket Weldment, Steel	1	0
	A3147-002	Bale Grinder Basket Weldment, Stainless Steel	0	1
8	A3155-001	Weldment, Riser Fill Section, Steel	1	0
	A3155-002	Weldment, Riser Fill Section, Stainless Steel	0	1
9	•	Ø0.25 Rivet, Regular Protruding Head, Pull Through Mandrel, Blind	42	42
10	•	3/8 Stainless Steel Plain Washer, Type A	8	8
11	•	3/8-16 x 1 Hex Socket Button Head Cap Screw, Stainless Steel	8	8

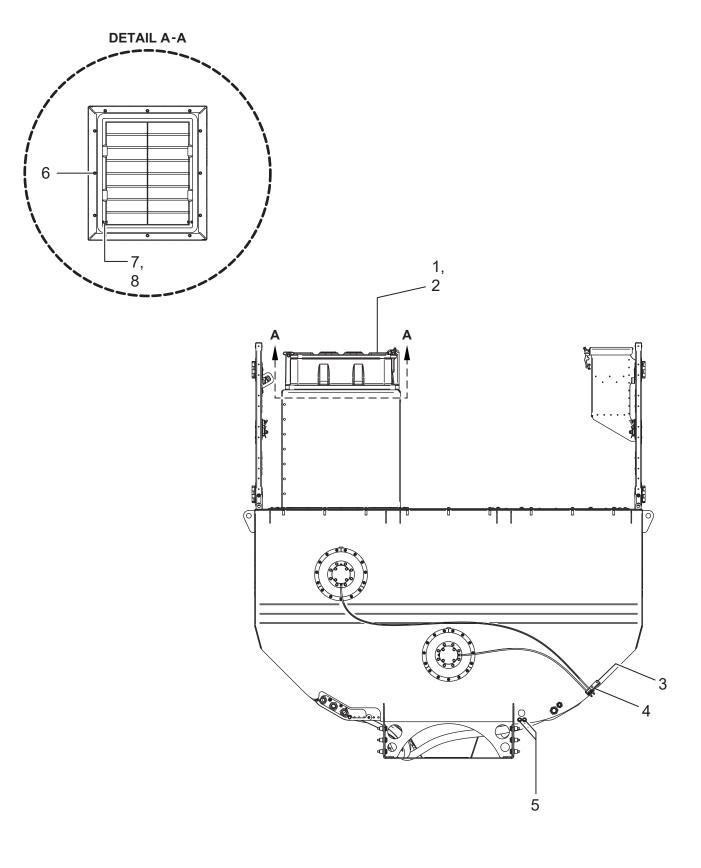
#### KITS AND MARKERS

Standard Hardware Item - Available at your local hardware store.



#### NOTES

SEE AGITATOR BEARING INSTALLATION SECTIONS FOR INSTRUCTIONS AND PART DETAILS.



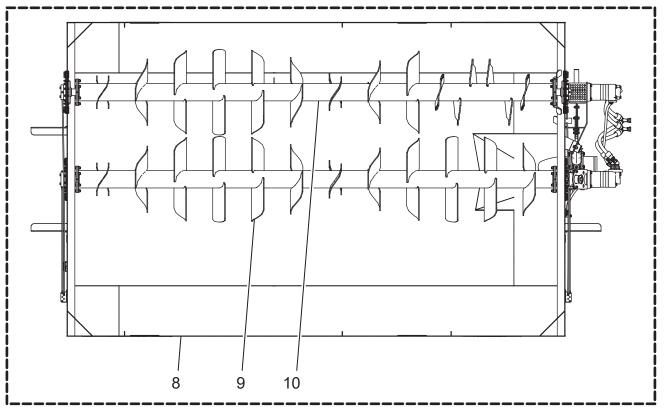


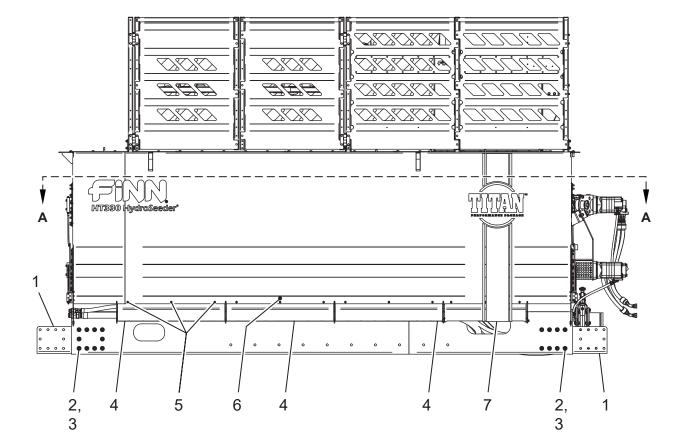
Ref. No.	Part Number	Description	No. Req'd
1	012833	Black Poly Hatch Assembly	1
2	012834	Bag Cutter, Stainless Steel	1
3	•	Ø 0.25 Rivet, Regular Protruding Head, Pull Through Mandrel, Blind	3
4	A3238-001	Grease Fitting Mount	1
5	004656	Rubber Grommet 5/8 in. ID x 7/8 in. OD	4
6	•	1/4-20 UNC - 0.5 Hex Cap Screw	12
7	•	3/8-16 UNC - 1.5 Hex Cap Screw	2
8	•	3/8-16 Hex Nut	2

#### KITS AND MARKERS

• Standard Hardware Item - Available at your local hardware store.







WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE

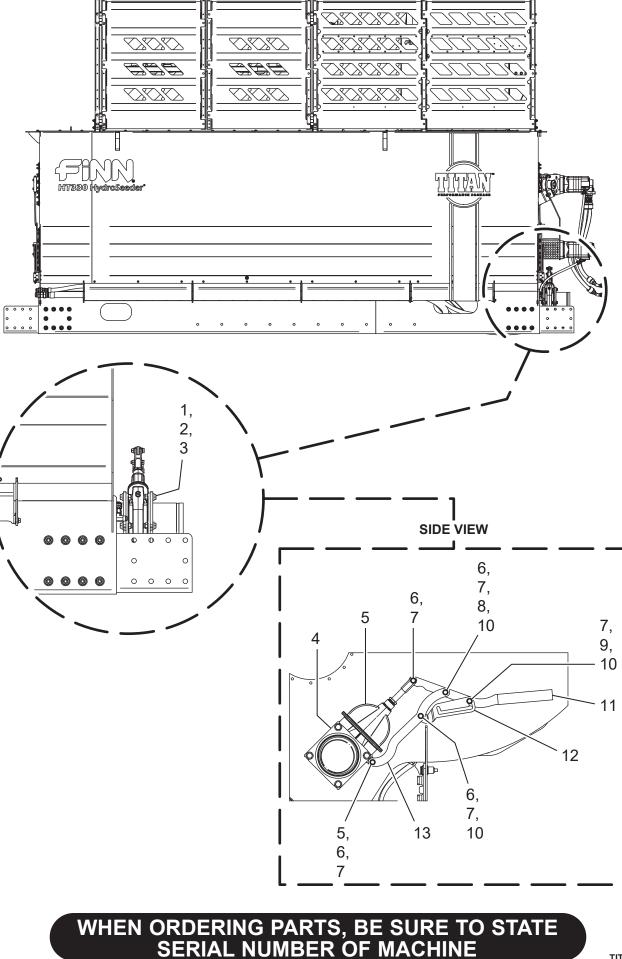
Ref. No.	Part Number	Description	No. Req'd
1	A3247-001	Module Joint Plate	2
2	A2669-031	Lock Bolt, 16mm	18
3	A2816-003	Lock Bolt Collar, 16mm	18
4	A3326-001	Tank Run Cover Assembly	3
5	•	1/4-20 UNC x 1 Hex Flange Screw - Regular Thread	12
6	A1227-001	LED Marker/Clearance Light, 12VDC, Amber	1
7	A4380-001	Tank Run Transition Cover Assembly, 26 in.	1
8	A3117-001	Hydroseeder Tank Weldment, 330, Steel (see NOTE belov	v) 1
9	A2835-001	Agitator Assembly, 330, Mix, Steel (see <b>NOTE</b> below)	1
10	A2835-003	Agitator Assembly, 330, Grind, Steel (see <b>NOTE</b> below)	1

#### KITS AND MARKERS

• Standard Hardware Item - Available at your local hardware store.

**NOTE:** Items 8, 9 and 10 are placed for visual purposses showing the cross-section of this tank configuration. A complete list of tank weldments and agitator assemblies can be found in their corresponding sections later in the manual.





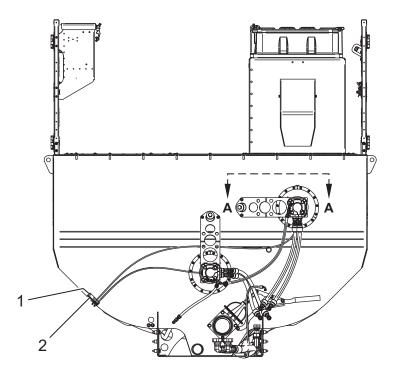
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Ref. No.	Part Number	Description	No. Req'd
1	•	1/2-13 Prevailing Torque Type Hex Nut	8
2	•	1/2 Washer	8
3	•	1/2-13 UNC - 1.5 Hex Cap Screw	8
4	A4524-001	Suction Adapter Weldment	1
5	A4694-001	Valve, 6 in. Stem Gate With Flanges, Modified	1
6	•	3/8-16 UNC x 1.5 Hex Flange Screw - Regular Thread	4
7	•	3/8-16 Prevailing Torque Type Hex Flange Nut	5
8	•	1/2-13 UNC - 4 Hex Bolt - Regular Thread	1
9	•	3/8-16 UNC x 1.25 Hex Flange Screw - Regular Thread	1
10	•	3/8 Washer	5
11	A3630-001	Valve Handle Weldment	1
12	A3627-001	Valve Handle Latch	1
13	A3626-001	Valve Handle Pivot	2

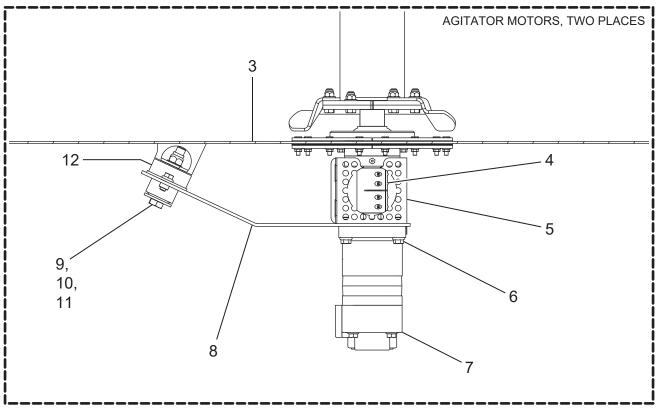
#### KITS AND MARKERS

• Standard Hardware Item - Available at your local hardware store.









## WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE

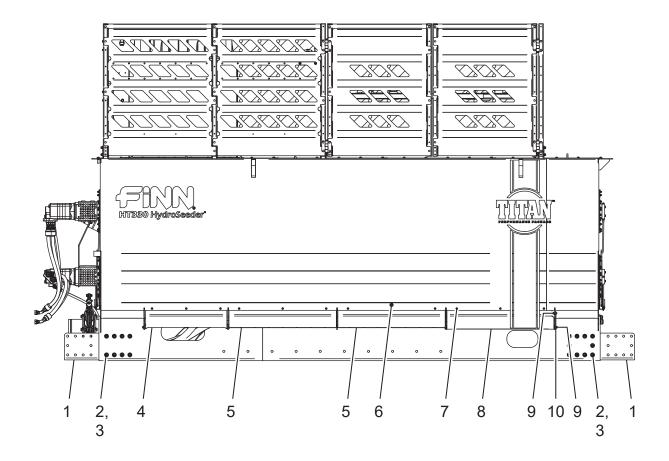
Ref. No.	Part Number	Description	lo. Req'd
1	•	Ø 0.25 Rivet, Regular Protruding Head, Pull Through Mandrel, Blind	3
2	A3238-001	Grease Fitting Mount	1
3	A3117-001	Hydroseeder Tank Weldment, 330, Steel (see NOTE below	') 1
4	A2466-010	Rigid Coupling	2
5	A3204-001	Coupling Guard	2
6	•	1/2-13 UNC x 1.75 Hex Flange Screw - Regular Thread	8
7	A2949-001	Hydraulic Motor	2
8	A3202-001	Torque Arm Weldment	2
9	•	3/4-10 Prevailing Torque Type Hex Nut	2
10	A3209-001	Snubbing Washer	2
11	•	3/4-10 UNC - 5 Hex Cap Screw	2
12	A3207-004	Flange Mount Isolator Bushing	2

KITS AND MARKERS

• Standard Hardware Item - Available at your local hardware store.

**NOTE:** Item 3 is placed for visual purposses showing the cross-section of this tank configuration. A complete list of tank weldments can be found in the corresponding section later in the manual.





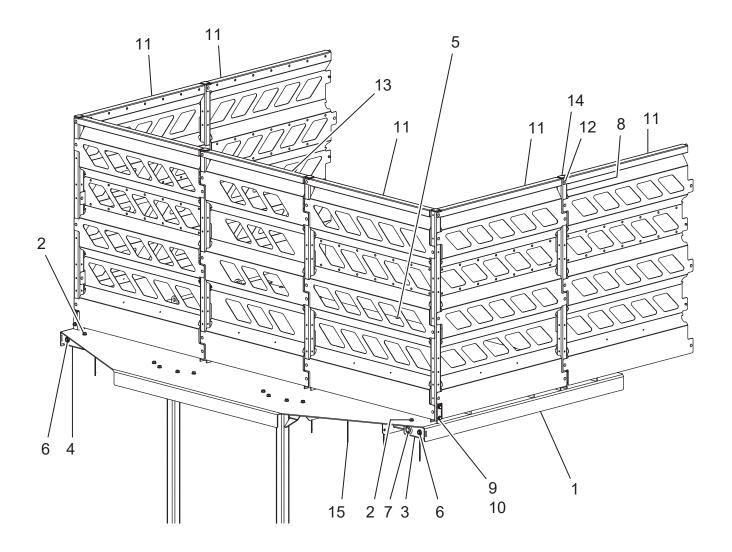


A3247-001 A2669-031	Module Joint Plate Lock Bolt, 16mm	2
	Lock Bolt, 16mm	
A0046 000		18
AZ010-003	Lock Bolt Collar, 16mm	18
A4380-001	Tank Run Transition Cover Assembly, 26 in.	1
A3326-001	Tank Run Cover Assembly	2
A1227-001	LED Marker/Clearance Light, 12VDC, Amber	1
•	1/4-20 UNC x 1 Hex Flange Screw - Regular Thread	24
A4911-001	Tank Run Transition Cover Assembly, 34 in.	1
•	3/8-16 UNC x 0.75 Hex Flange Screw - Regular Thread	2
A4896-001	Hose Restraint Loop Assembly	1
	A3326-001 A1227-001 A4911-001	A2816-003Lock Bolt Collar, 16 mmA4380-001Tank Run Transition Cover Assembly, 26 in.A3326-001Tank Run Cover AssemblyA1227-001LED Marker/Clearance Light, 12VDC, Amber•1/4-20 UNC x 1 Hex Flange Screw - Regular ThreadA4911-001Tank Run Transition Cover Assembly, 34 in.•3/8-16 UNC x 0.75 Hex Flange Screw - Regular Thread

#### KITS AND MARKERS

• Standard Hardware Item - Available at your local hardware store.







#### **PLATFORM STRUCTURE - FORWARD HANDRAILS**

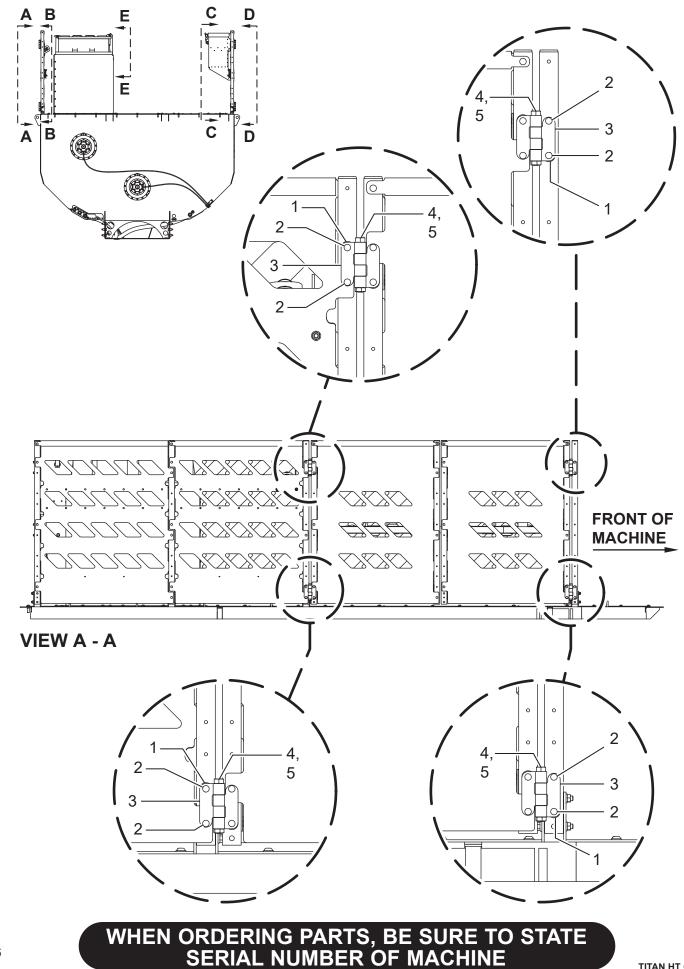
Ref. No.	Part Number	Description	No. Req'd
1	A3330-001	Platform Weldment, Front Engine Module	1
2	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	10
3	A4374-001	Bracket Assembly, Marker and Go Light	1
4	A4379-001	Bracket Assembly, Marker Light	1
5	•	3/8-16 x 1 Hexagon Socket Button Head Cap Screw	9
6	A1227-001	Light, LED Marker Clearance, 12V DC, Amber	2
7	A4660-001	Light, 1-1/4 in. Green LED, 12V DC	1
8	A3160-001	Tube, Handrail Upright, Full Height	6
9	•	3/8-16 UNC x 2.5 Hex Flange Screw - Regular Thread	12
10	•	Hex Flange Nut	12
11	A3159-001	Handrail Panel, Standard, 35 inch, Black	6
12	•	Ø0.25 Rivet, Regular Protruding Head, Pull Through Mandrel, Blind	84
13	A3159-003	Handrail Panel, Standard, 29 inch, Black	1
14	005613	Finishing Plug, 1-1/2 in. x 11 Gauge Square Tube	6
15	A4423-001	Cable Tie, Fir Tree Mount, 0.25 in. Hole x 6 in. LG	10

#### KITS AND MARKERS

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Standard Hardware Item - Available at your local hardware store.





TITAN HT OS0514

## **PLATFORM STRUCTURE - LOADING GATE HINGES**

Ref. No.	Part Number	Description	No. Req'd
1	A3656-001	Modular Handrail System Spacer	8
2	•	Ø0.25 Rivet, Regular Protruding Head, Pull Through Mandrel, Blind	16
3	A3210-001	Hinge Plate	8
4	•	1/2-13 UNC - 4 Hex Bolt - UNC (Regular Thread - Inch)	8
5	•	1/2-13 Hex Nuts (Inch Series) Hex Jam Nut	8

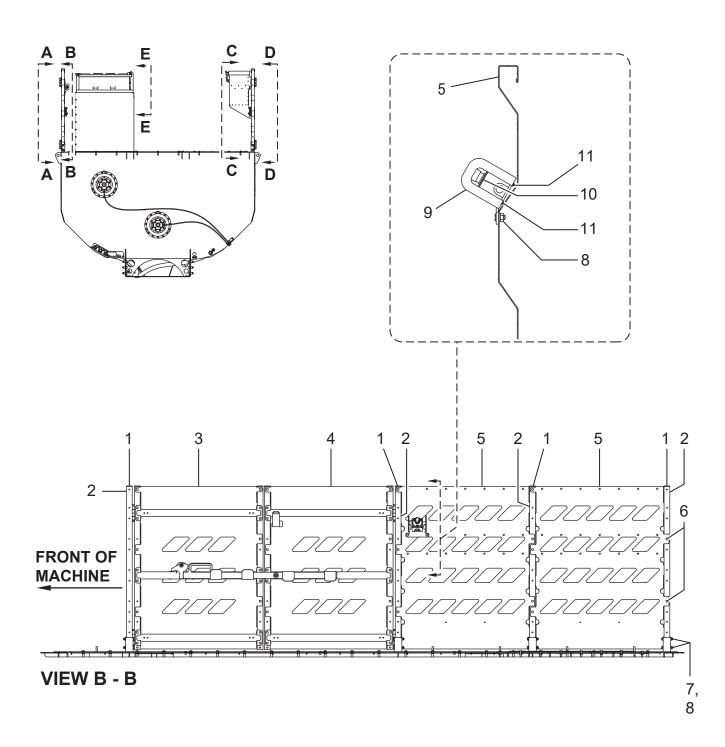
#### KITS AND MARKERS

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• Standard Hardware Item - Available at your local hardware store.

**NOTE:** The same items and quantities are used for the loading gate hinges on the passenger side of the unit (View D-D).







#### **PLATFORM STRUCTURE - HANDRAILS**

Ref. No.	Part Number	Description	No. Req'd
1	005613	Finishing Plug, 1-1/2 in. x 11 Gauge Square Tube	4
2	A3160-001	Tube, Handrail Upright, Full Height	4
3	A3708-001	Loading Gate Assembly, Left	1
4	A3707-001	Loading Gate Assembly, Right	1
5	A3159-001	Handrail Panel, Standard, 35 in., Black	2
6	•	Ø0.25 Rivet, Regular Protruding Head, Pull Through Mandrel, Blind	10
7	•	3/8-16 UNC x 2.5 Hex Flange Screw - Regular Thread	8
8	•	Hex Flange Nut	9
9	A4893-001	E-Stop Bracket Assembly	1
10	A2395-001	E-Stop Button Assembly	1
11	•	No. 6-32-3/8 Cross Recessed Pan Head Machine Screw	4

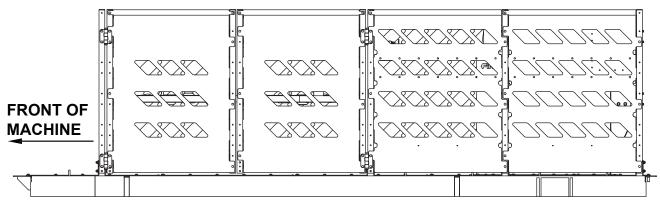
#### **KITS AND MARKERS**

Standard Hardware Item - Available at your local hardware store.

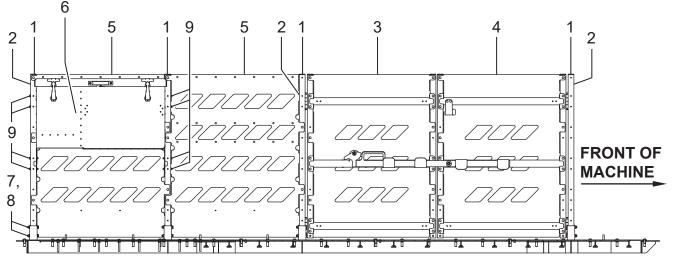


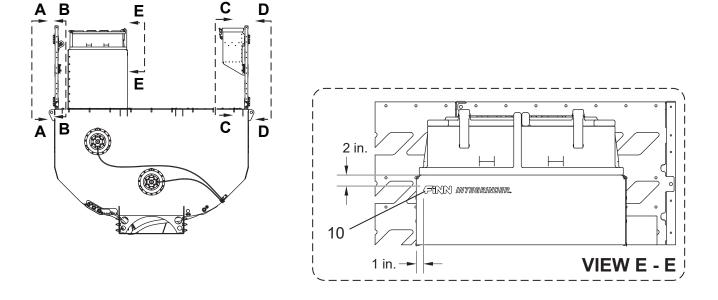
## WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE

#### VIEW D - D



#### VIEW C - C





#### **PLATFORM STRUCTURE - HANDRAILS**

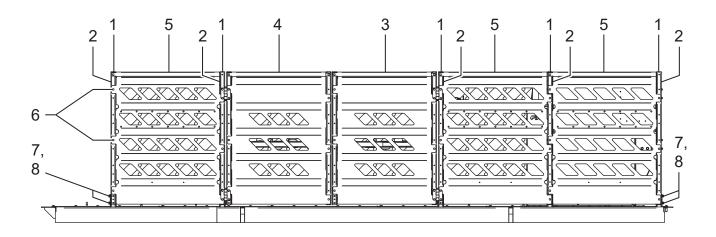
Ref. No.	Part Number	Description	No. Req'o
1	005613	Finishing Plug, 1-1/2 in. x 11 Gauge Square Tube	4
2	A3160-001	Tube, Handrail Upright, Full Height	4
3	A3708-001	Loading Gate Assembly, Left	1
4	A3707-001	Loading Gate Assembly, Right	1
5	A3159-001	Handrail Panel, Standard, 35 in., Black	2
6	A4474-001	Formed Aluminum Toolbox Assembly	1
	002909	Handle	1
	A3758-001	Latch, T-Handle Flexible Draw	2
	•	3/8 Cross Recessed Pan Head Machine Screw (for Latch)	8
	A1096-001	Manual Canister	1
	A4513-001	Seal-Rubber, Bulb, Edge Mount (53 in.)	1
7	•	3/8-16 UNC x 2.5 Hex Flange Screw - Regular Thread	8
8	•	Hex Flange Nut	8
9	•	1/4-20 UNC x 2 Hex Flange Screw - Regular Thread	8
10	A4950-001	Integrinder Decal	1

#### KITS AND MARKERS

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Standard Hardware Item - Available at your local hardware store.





FRONT OF MACHINE

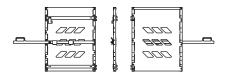


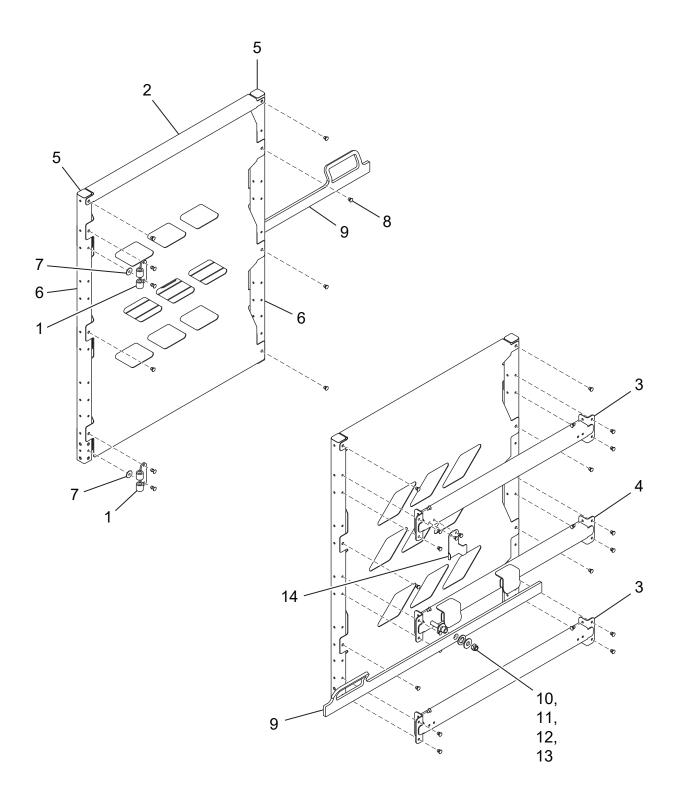
## PLATFORM STRUCTURE - HANDRAILS (HT400 MODEL SPECIFIC)

Ref. No.	Part Number	Description	No. Req'd
1	005613	Finishing Plug, 1-1/2 in. x 11 Gauge Square Tube	5
2	A3160-001	Tube, Handrail Upright, Full Height	5
3	A3708-001	Loading Gate Assembly, Left	1
4	A3707-001	Loading Gate Assembly, Right	1
5	A3159-001	Handrail Panel, Standard, 35 in., Black	6
6	•	Ø0.25 Rivet, Regular Protruding Head, Pull Through Mandrel, Blind	17
7	•	3/8-16 UNC x 2.5 Hex Flange Screw - Regular Thread	20
8	•	Hex Flange Nut	26

#### **KITS AND MARKERS**







# WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE

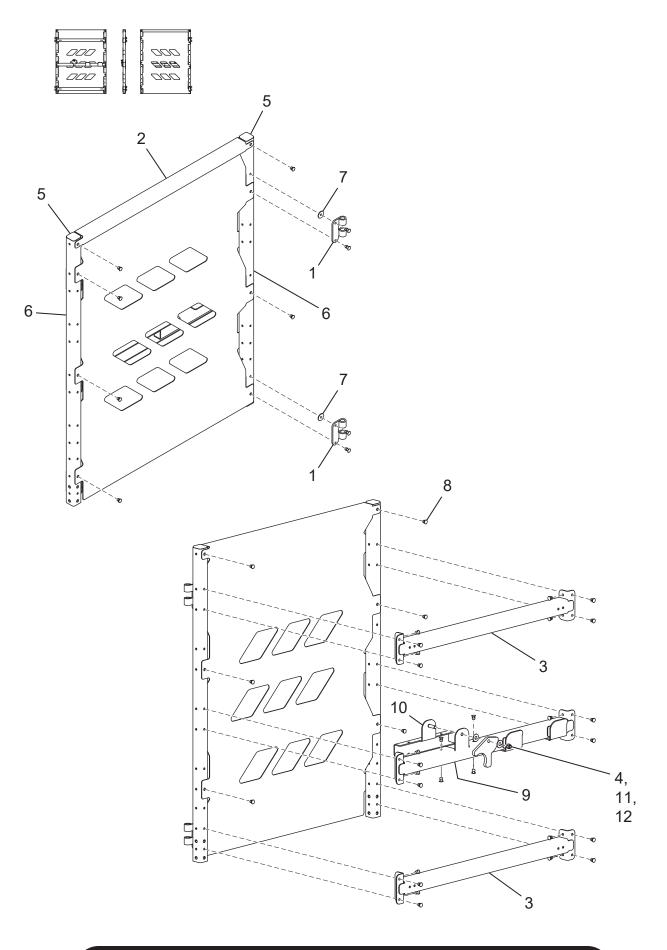
## **PLATFORM STRUCTURE - LOADING GATE, RIGHT**

Ref. No.		Part Number	Description	No. Req'd
1		A3210-001	Sheet, Formed, Hinge Plate	2
2		A3159-004	Sheet, Formed, Handrail Panel, Swing Gate, 35 in., Black	x 1
3		A3696-001	Loading Gate Brace, Standard	2
4		A3696-002	Loading Gate Brace, Lock Bar Mount	1
5		005613	Finishing Plug, 1-1/2 in. x 11 Gauge Square Tube	2
6		A3160-001	Tube, Handrail Upright, Full Height	2
7		A3656-001	Sheet, Modular Handrail System Spacer	2
8	•	•	Ø0.25 Rivet, Regular Protruding Head, Pull Through Mandrel, Blind	42
9		A3710-001	Plate, Formed, Lock Bar	1
10		A3711-001	Tube, Aluminum Lock Bar Spacer	1
11		•	1/2 - Wide - Type A Plain Washer (Inch)	2
12		•	3/4 - Narrow - Type B Plain Washer (Inch)	1
13		•	1/2-13 Metal Type Prevailing Torque Type Hex Nut	1
14		A3714-001	Sheet, Formed, Lock Bar Catch	1
14		A3714-001	Sheet, Formed, Lock Bar Catch	]

#### KITS AND MARKERS

- A3707-001 Loading Gate Assembly, Right
- Standard Hardware Item Available at your local hardware store.





# WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE

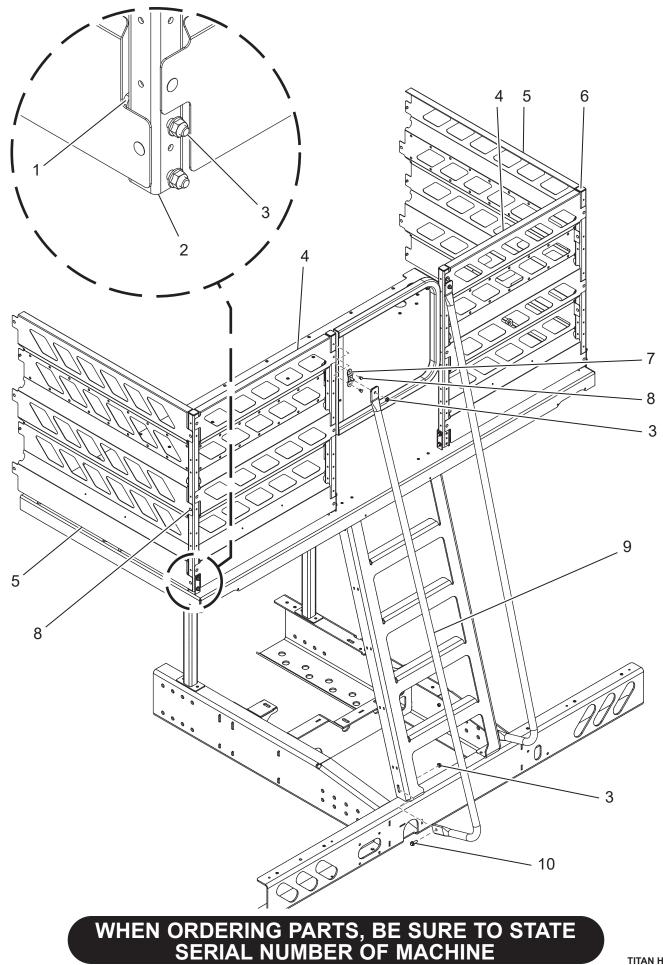
## **PLATFORM STRUCTURE - LOADING GATE, LEFT**

Ref. No.	Kit Ref.	Part Number	Description	No. Req'd
1	•	A3210-001	Sheet, Formed, Hinge Plate	2
2	•	A3159-004	Sheet, Formed, Handrail Panel, Swing Gate, 35 in., Black	: 1
3	•	A3696-001	Loading Gate Brace, Standard	2
4	•	•	3/8-16 Metal Type Prevailing Torque Type Hex Nut	1
5	•	005613	Finishing Plug, 1-1/2 in. x 11 Gauge Square Tube	2
6	•	A3160-001	Tube, Handrail Upright, Full Height	2
7	•	A3656-001	Sheet, Modular Handrail System Spacer	2
8	•	•	Ø0.25 Rivet, Regular Protruding Head, Pull Through Mandrel, Blind	44
9	•	A3696-003	Loading Gate Brace, Lock Bar Receiver	1
10	•	A3703-001	Sheet, Formed, Gravity Lock Doubler Assembly	1
11	•	A3709-001	Plate, Gravity Lock	1
12	•	•	3/8 - Regular - Type B Plain Washer (Inch)	2

#### KITS AND MARKERS

- A3708-001 Loading Gate Assembly, Left
- Standard Hardware Item Available at your local hardware store.

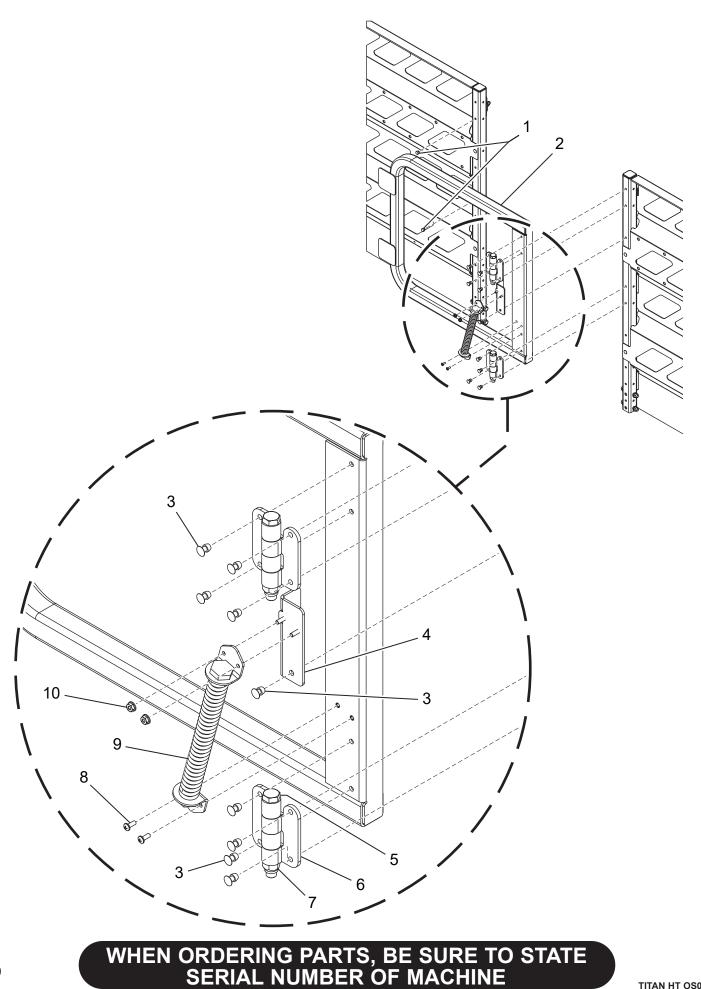




### **PLATFORM STRUCTURE - REAR GATE AND HANDRAILS**

Ref. No.	Part Number	Description	No. Req'd
1	•	3/8-16 UNC x 2.5 Hex Flange Screw - Regular Thread	8
2	A3160-002	Tube, Handrail Upright, Boom Height	4
3	•	16 Hex Flange Nut	12
4	A3685-001	Handrail Panel - Boom Rear	2
5	A3686-001	Handrail Panel - Boom Side	2
6	005613	Finishing Plug, 1-1/2 in. x 11 Gauge Square Tube	4
7	A4755-001	Bracket Assembly, Ladder Railing	2
8	٠	Ø0.25 Rivet, Regular Protruding Head, Pull Through Mandrel, Blind	42
9	A3720-001	Ladder Handrail	2
10	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	2



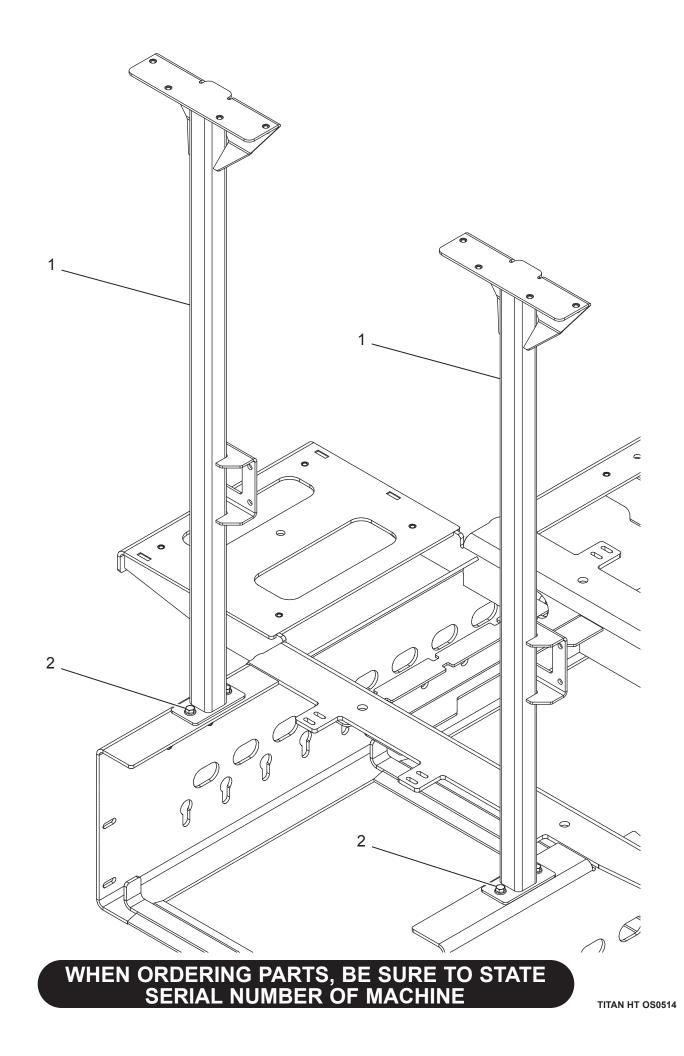


### **PLATFORM STRUCTURE - REAR GATE DETAILS**

Part Number	Description	No. Req'd
A4753-001	Rubber Bumper, Push-In	2
A4749-001	Gate Weldment	1
•	Ø0.25 Rivet, Regular Protruding Head, Pull Through Mandrel, Blind	9
A3320-001	Gate Spring Bracket Assembly	1
•	1/2-13 UNC - 4.5 Hex Cap Screw	2
A3210-001	Hinge Plate	4
•	1/2-13 Metal Type Prevailing Torque Type Hex Nut	2
•	#10-32 - 1/2 Cross Recessed Pan Head Machine Screw	2
A4750-001	Gate Spring, 11 in.	1
•	#10-32 Hex Flange Nut	2
	A4753-001 A4749-001 • A3320-001 • A3210-001 • A4750-001	<ul> <li>A4753-001 Rubber Bumper, Push-In</li> <li>A4749-001 Gate Weldment</li> <li>Ø 0.25 Rivet, Regular Protruding Head, Pull Through Mandrel, Blind</li> <li>A3320-001 Gate Spring Bracket Assembly</li> <li>1/2-13 UNC - 4.5 Hex Cap Screw</li> <li>A3210-001 Hinge Plate</li> <li>1/2-13 Metal Type Prevailing Torque Type Hex Nut</li> <li>#10-32 - 1/2 Cross Recessed Pan Head Machine Screw</li> <li>A4750-001 Gate Spring, 11 in.</li> </ul>

#### KITS AND MARKERS





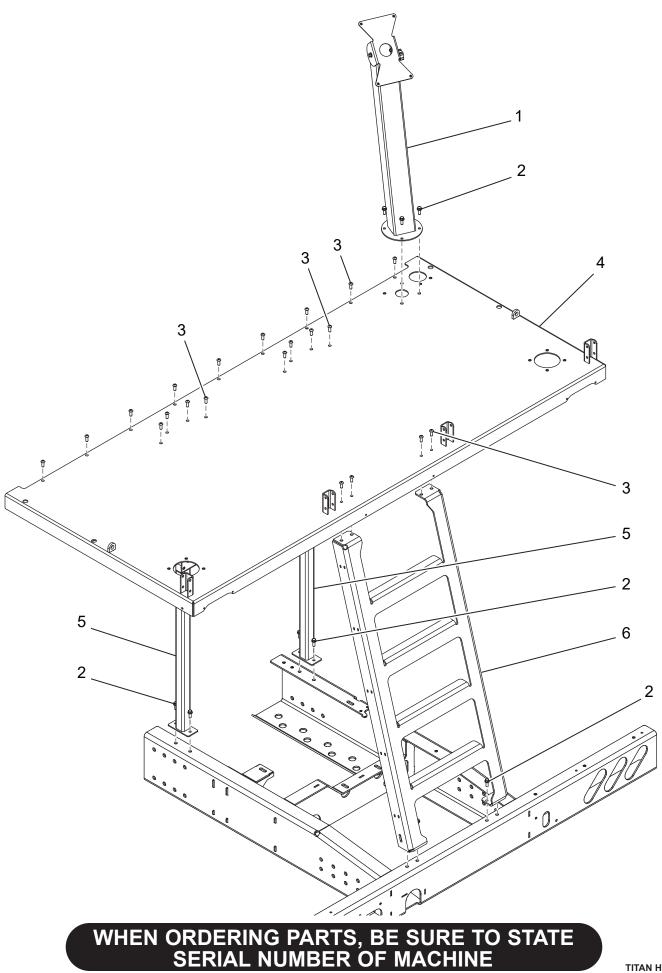
## **PLATFORM SUPPORTS - ENGINE MODULE**

No.	Part Number	Description	No. Req'd
1	A3051-001	Platform Support Strunt Assembly	2
2	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	4

#### KITS AND MARKERS

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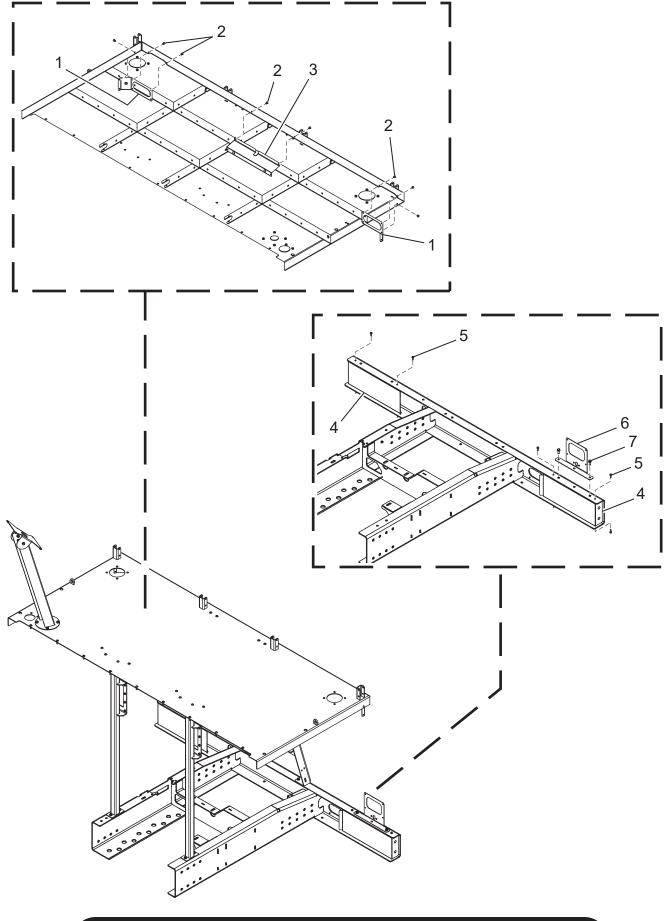


# **PLATFORM STRUCTURE - CONTROL PLATFORM ASSEMBLY**

Ref. No.	Part Number	Description	No. Req'd
1	A3728-001	Control Box Pedestal Assembly	1
2	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	12
3	•	3/8-16 x 1 Hexagon Socket Button Head Cap Screw	21
4	A3689-001	Platform Weldment	1
5	A3769-001	Platform Support Strut Assembly	2
6	A3699-001	HT Platform Ladder	1

#### **KITS AND MARKERS**





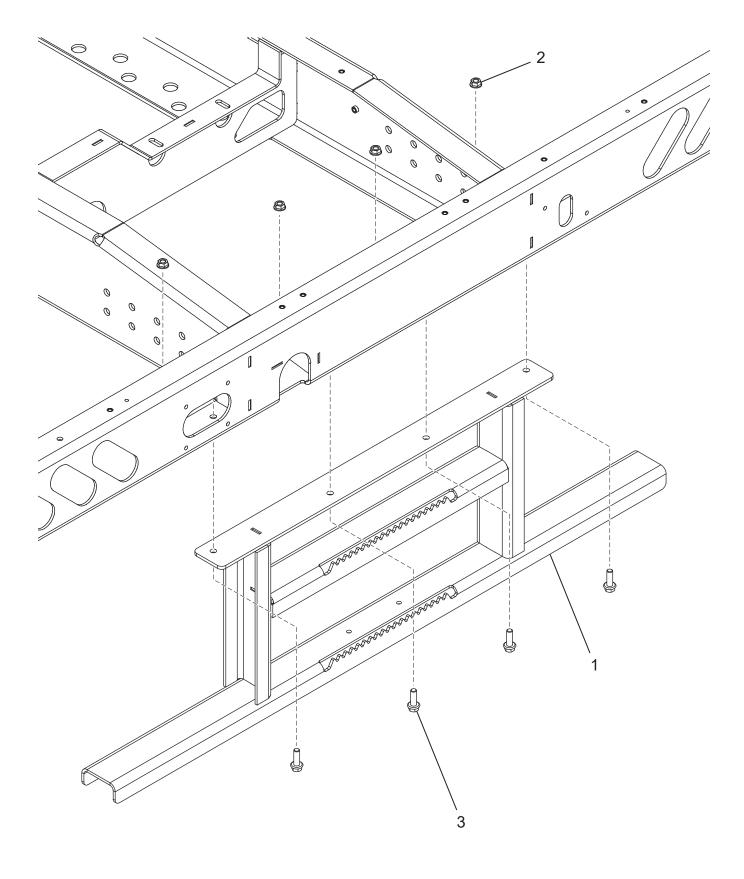
### **PLATFORM STRUCTURE - PLATFORM AND ASSEMBLY**

Ref. No.	Part Number	Description	No. Req'd
1	A3705-001	Warning/Corner Light Bracket	2
2	•	Ø0.25 Rivet, Regular Protruding Head, Pull Through Mandrel, Blind	8
3	A3713-001	ID Light Bar Bracket Assembly	1
4	A3765-001	Wire Cover Assembly, Bumper Lights	2
5	•	1/4-20 UNC x 0.75 Hex Flange Screw - Regular Thread	8
6	A3782-001	License Plate Bracket Assembly	1
7	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	2

#### KITS AND MARKERS

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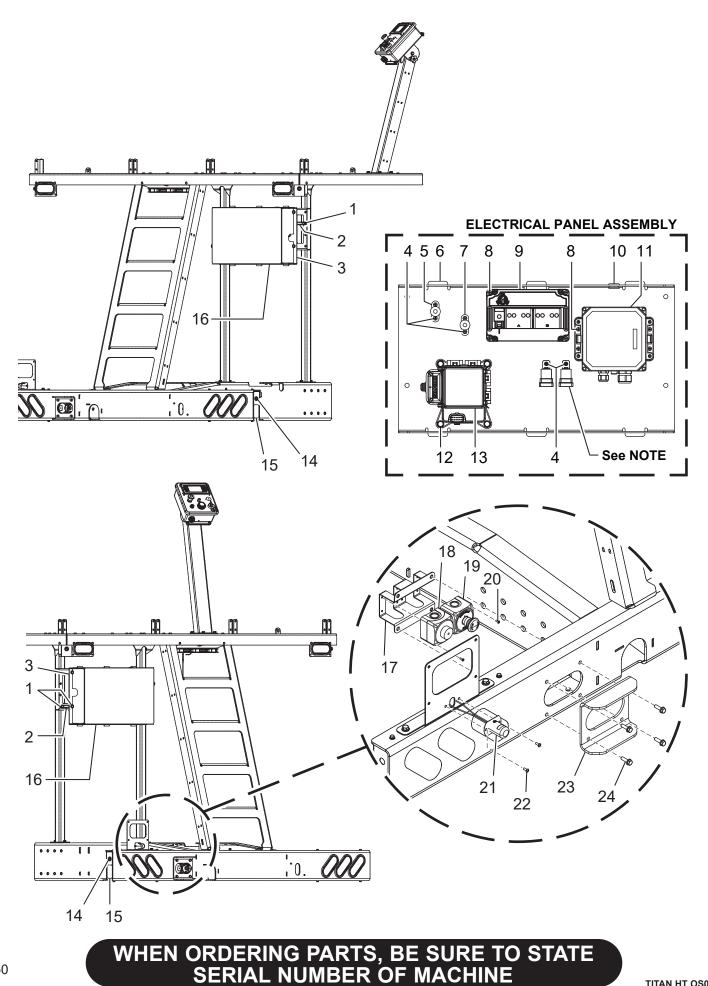
## **PLATFORM STRUCTURE - REAR STEP BUMBER**

Ref. No.	Part Number	Description	No. Req'd
1	A3777-001	Rear Step Bumper Weldment	1
2	•	13 Hex Flange Nut	4
3	•	1/2-13 UNC x 1.5 Hex Flange Screw - Regular Thread	4

#### KITS AND MARKERS

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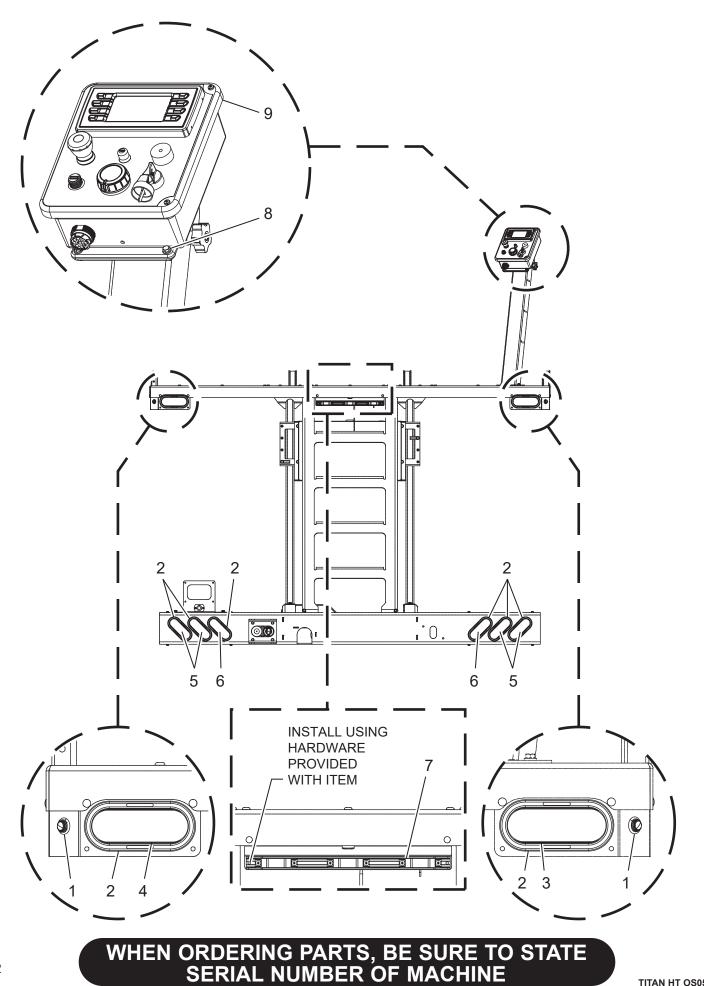
### **PLATFORM SAFETY LIGHTS AND CONTROLS - PART 1**

Ref. No.	Part Number	Description	No. Req'd
1	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	6
2	013111	Cushioned Loop Clamp, 1.25 in. DIA.	2
3	A3786-001	Electrical Panel Assembly	1
4	•	#10-24 - 1/2 Cross Recessed Pan Head Machine Screw	/ 6
5	A2083-001	Junction Block, 3/8 in. Stud, Red	1
6	A3784-001	Bracket Assembly, Electrical Mount	1
7	A2082-001	Junction Block, 3/8 in. Stud, Black	1
8	•	#10-24 - 3/4 Cross Recessed Pan Head Machine Screw	/ 8
9	A4598-001	Controller, Eaton HFX48M, Flashed	1
10	004656	Rubber Grommet 5/8" ID X 7/8" OD	1
11	A2198-001	HT Radio System, 900MHZ	1
12	•	5/16-18 UNC x 1 Hex Flange Screw - Regular Thread	4
13	A4824-001	Electrical Center Assembly, HT with Label	1
14	A1227-002	Light, LED Marker Clearance, 12V DC, Red	2
15	A1304-002	Reflector, Red	2
16	A3788-001	Electrical Center Cover	1
17	A3796-001	Control Box Bracket Assembly	1
18	A3038-001	Engine Start/Stop Push Button Assembly	1
19	A2395-001	E-Stop Station Assembly	1
20	•	#6-32 - 3/8 Cross Recessed Pan Head Machine Screw	8
21	A1220-001	Light, License Plate, LED, 12V DC	1
22	•	#10-24 - 1/2 Cross Recessed Pan Head Machine Screw	2
23	A3798-001	Control Box Guard	1
24	•	5/16-16 UNC x 1 Hex Flange Screw - Regular Thread	4
NOT SHOV	VN		
	A4587-001	Coaxial Cable, Titan HT Radio Antenna	1

#### **KITS AND MARKERS**

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- NOTE: Relays are included in harness and shown for reference only.
- NOTE: Items 4 13 are components of item 3 (Electrical Panel Assembly).



TITAN HT OS0514

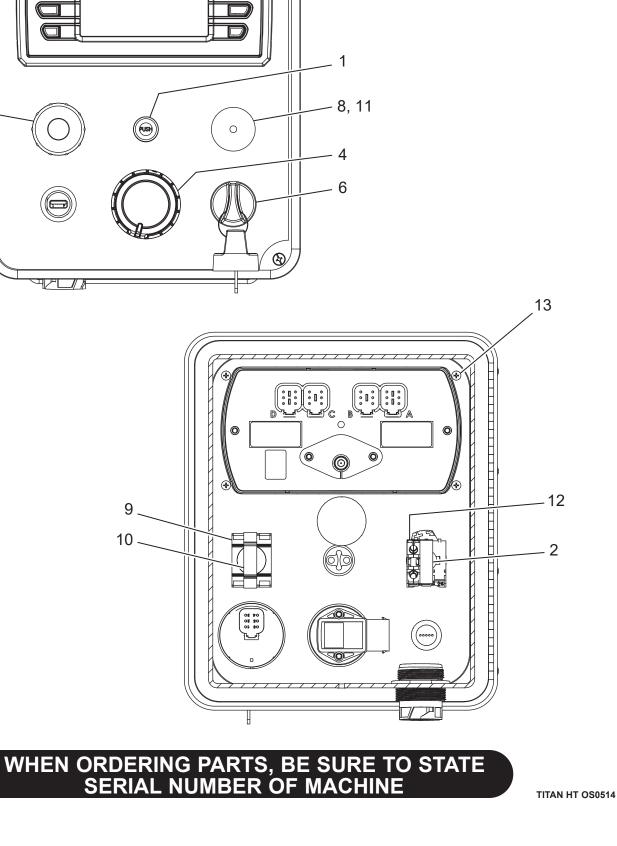
## **PLATFORM SAFETY LIGHTS AND CONTROLS - PART 2**

Ref. No.	Part Number	Description	No. Req'd
1	A1227-002	Light, LED Marker Clearance, 12V DC, Red	2
2	A1296-001	Mounting Grommet, 6 in. Oval Light	8
3	A1295-001	Light, LED Warning, Function 1	1
4	A1295-002	Light, LED Warning, Function 2	1
5	A2647-001	Light, Red, Stop/Turn/Tail, 12V DC	4
6	A2757-001	Light, Back Up (White), 12V DC	2
7	005944	LED Identification Light	1
8	•	1/4-20 UNC x 0.75 Hex Flange Screw - Regular Thread	4
9	A4708-001	HT Control Box Assembly	1
NOT SHOW	/N		
	A4587-001	Coaxial Cable, Titan HT Radio Antenna	1
KITS AND I	MARKERS		

• Standard Hardware Item - Available at your local hardware store.



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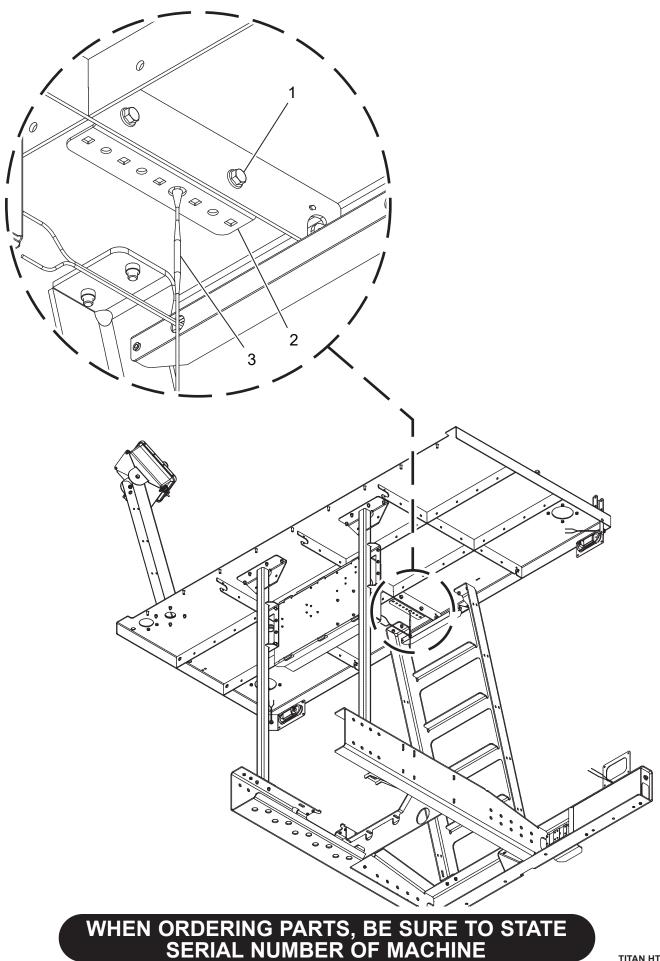
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# **HT CONTROL BOX**

Ref. No.	Kit Ref.	Part Number	Description	No. Req'd
1		020886	Horn Button	1
2		366164	Emergency Stop (e-stop), 1 Yellow NC Block	1
3		A3905-001	Enclosure, HT Control Box	1
4		A4707-001	Rotary Throttle Control, Dual Analog Output	1
5		A4312-001	Display, Eaton VFX40M, Flashed	1
6		055851	Ignition Switch, 2-Position with Key	1
7		A3911-001	Control Box Decal	1
8		A4709-001	Push Button, Flush, Momentary, Black, Metal	1
9		A4561-001	Mounting Adapter, Metal	1
10		A4560-001	Contact Block, Metal	1
11		A4710-001	Boot, Flush Push Button, IP66, Transparent	1
12		080784	Contact Block, Green	1
13		•	No. 6-32-1/4 Cross Recessed Pan Head Machine Screw - Type I	4
NOT S	HOWN			
		A4311-001	Wire Harness, VFX40M Display USB	1
		A4585-001	Wiring Harness, TITAN HT Platform Control Box	1
		ARKERS		
		A4708-001	HT Control Box Assembly	
•		Standard Hardw	vare Item - Available at your local hardware store.	





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# **PLATFORM SAFETY LIGHTS AND CONTROLS - PART 3**

Ref. No.	Part Number	Description	No. Req'd
1	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	2
2	A3791-001	Work Light Bracket Assembly	1
3	A3243-002	Antenna	1
NOT SHO	WN		
	A4587-001	Coaxial Cable, Titan HT Radio Antenna	1
KITS AND	MARKERS		



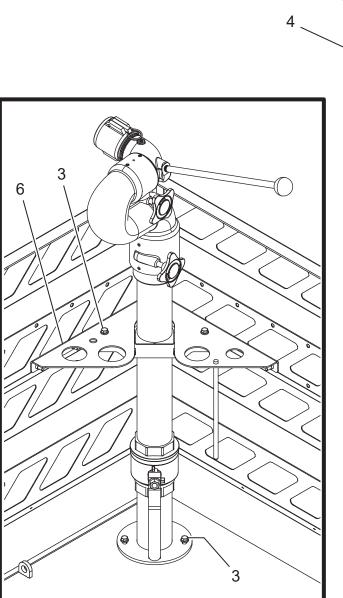


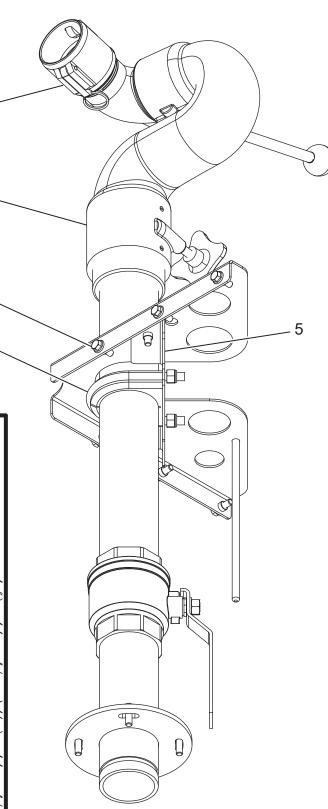
WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE

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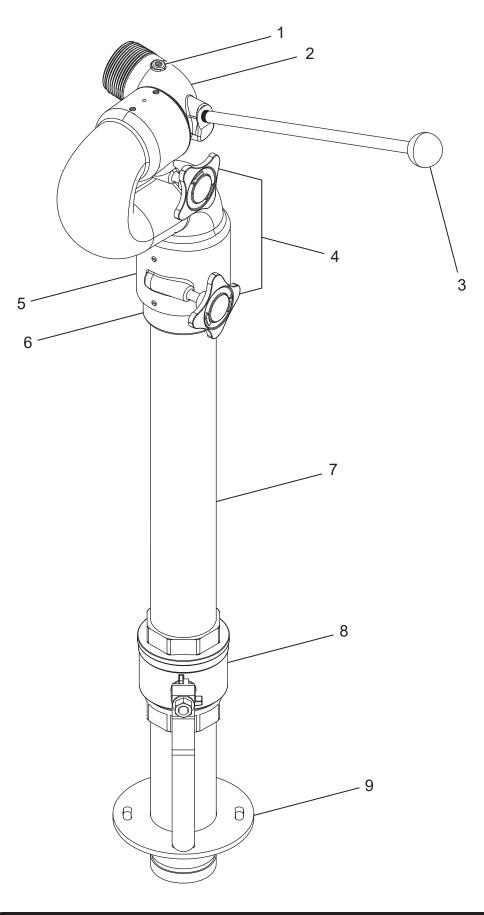
## PLATFORM BOOM ASSEMBLY

Ref. No.	Part Number	Description	No. Req'd
1	A4166-001	Camlock Adapter, Aluminum	1
2	A4760-001	Boom Assembly	1
3	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	12
4	A1316-012	U-Bolt, Cushioned, Steel, 3.5 in. I.D.	1
5	A4762-001	Boom Clamp Bracket Assembly	1
6	A4763-001	Boom Support Bracket Weldment	1

#### KITS AND MARKERS

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# WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE

### **BOOM ASSEMBLY**

Ref. No.	Kit Ref.	Part Number	Description	No. Req'd
1		•	1/8 NPT Recessed Hex Pipe Plug, Brass	1
2		A4603-001	Monitor Elbow Discharge	1
3		A4604-001	Monitor Tiller Handle	1
4		A4605-001	Knob, Friction Lock	2
5		A4602-001	Monitor Inlet Body	1
6		A4601-001	3 in. NPT Monitor Base	1
7		A4112-001	Pipe, 3 in. SCH 40 x 22 Long, TBE	1
8		A3825-001	3 NPT Full Port Ball Valve, Brass	1
9		A3678-001	Pipe Weldment, Boom Mtg. Flange	1

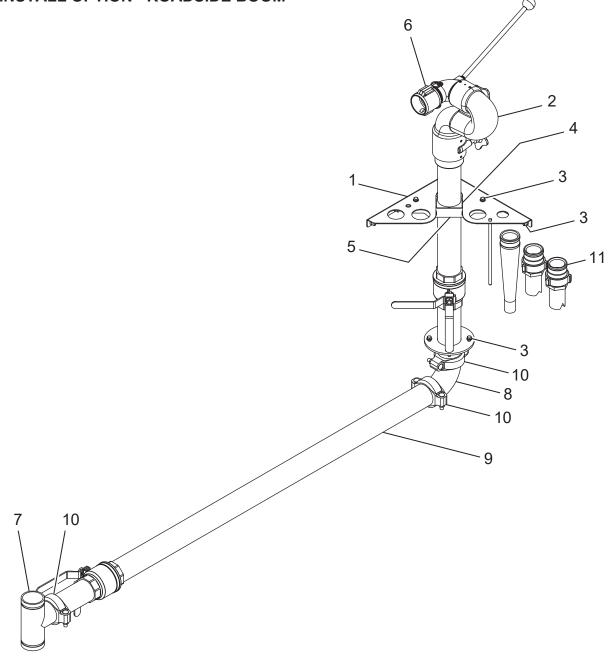
#### KITS AND MARKERS

▲ A4600-001	Monitor Assembly
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A4760-001 Boom Assembly

A4666-001 Monitor Rebuild Kit





#### **INSTALL OPTION - NO ROADSIDE BOOM**



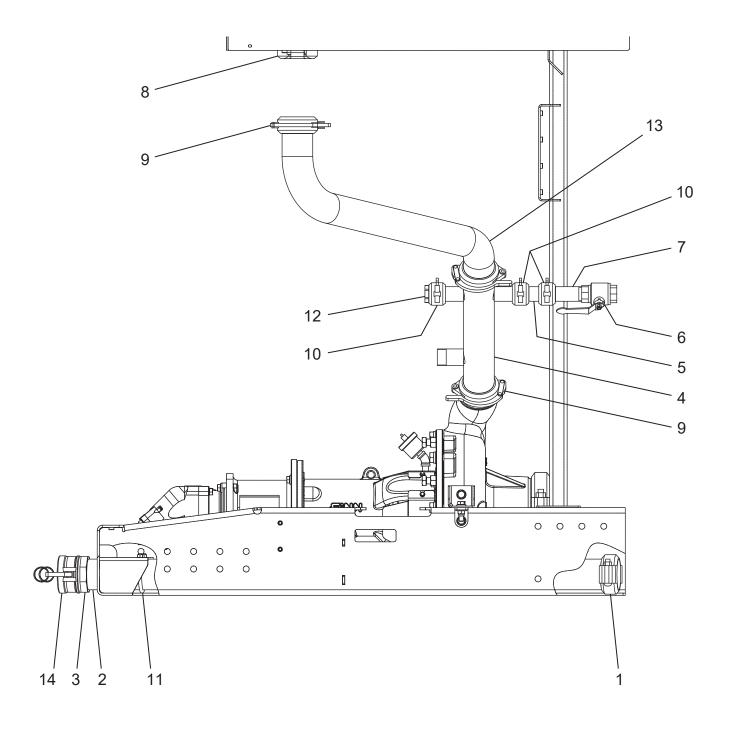
### **OPTIONAL ROADSIDE PLATFORM BOOM**

Ref. No.	Part Number	Description	No. Req'd
1	A4763-001	Bracket Weldment, Boom Support	1
2	A4760-001	Boom Assembly	1
3	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	12
4	A1316-012	U-Bolt, Cushioned, Steel, 3.5 in. I.D.	1
5	A4762-001	Bracket Assembly, Boom Clamp	1
6	A4166-001	Camlock Adapter, Al, 2.5 in. to 2.5-7.5 NH	1
7	011982	Fitting, IPS, Grooved Tee #20, 3.00 in.	1
8	002868	Fitting, IPS, Grooved, 90° ELBOW, 3.00 in.	1
9	A4856-001	Pipe Assembly, Roadside Boom	1
10	A3812-006	Fitting, IPS, Grooved, Rigid Coupling - 3.00 IPS	3
11	A5151-001	Nozzle Kit, HT Roadside Boom	1
12	A4770-001	Pipe, 3 in. SCH 40 x 8.5 Long, GBE	1
13	A3700-001	Cover Plate, Roadside Boom	1
14	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	4

#### KITS AND MARKERS

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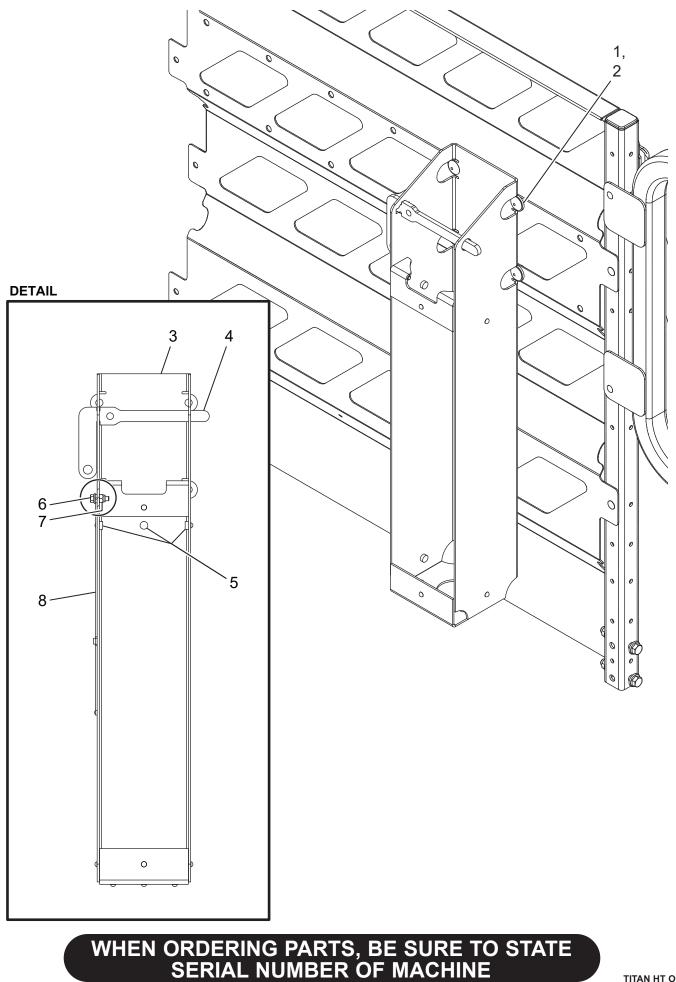




#### **COMMON PIPING**

Ref. No.	Part Number	Description	No. Req'd
1	080366	Fitting, IPS, Grooved, Flex Coupling, 3.00 in. IPS	1
2	A4767-001	Pipe, Sump Drain	1
3	011741	Male Brass Adapter, 3 in.	1
4	A3424-001	Pipe Weldment, Pump Discharge Tree	1
5	A3423-003	Bypass Orifice	1
6	012083	Ball Valve, 1-1/4 in.	1
7	A3843-001	Pipe, 1.25 in. SCH 40 x 4.6 Lg, TOE-GOE	1
8	A3812-006	Fitting, IPS, Grooved, Rigid Coupling - 3.00 IPS	1
9	002438	Fitting, IPS, Grooved, Hinge Coupling, 3.00 in.	3
10	006721	Fittiing, IPS, Grooved, Hinge Coupling, 1.25 in.	3
11	A4358-014	U-Bolt, 3/8-16 UNC, Zinc Steel 3 IPS	1
12	A4768-001	Cleanout Cap, Recirc. Nozzle	1
13	A4772-001	Pipe Bend, Boom	1
14	041371	Dust Cap, 3 in. Cam and Groove, Brass	1





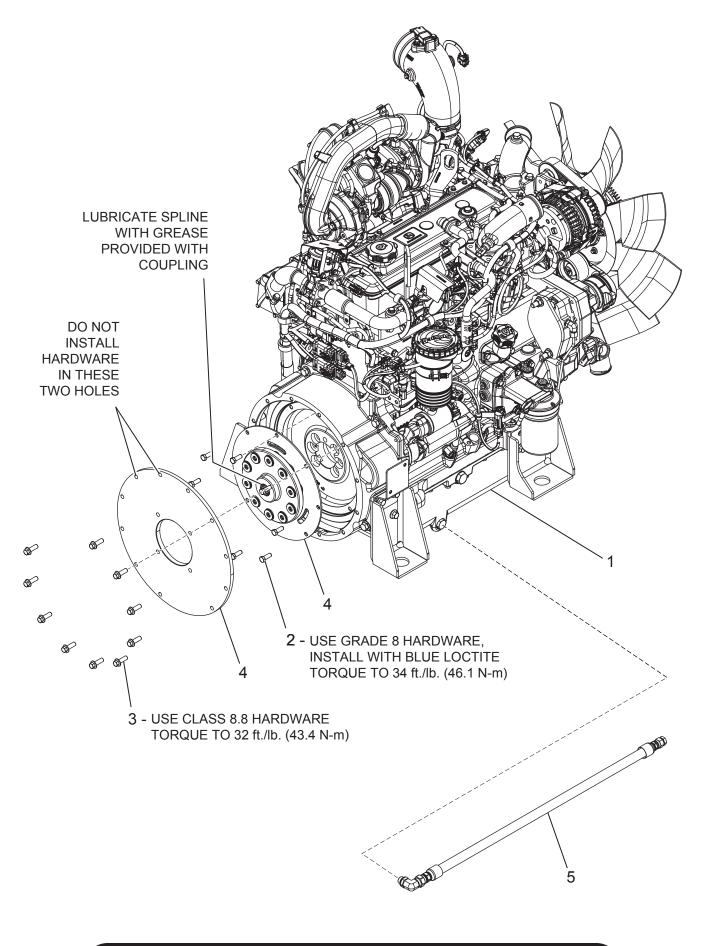
# LONGSHOT NOZZLE HOLDER

Ref. No.	Kit Ref.	Part Number	Description	No. Req'd
1		A2487-005	Lock Bolt, 3/8	4
2		A2484-004	Lock Bolt Collar, 3/8	4
3		A4841-001	Nozzle Holder, Longshot	1
4		A4842-001	Lock Bar, Nozzle Holder	1
5		A4753-001	Bumper, Rubber Push-In, 1/4 in. Hole	11
6		•	1/4-20 UNC x 0.75 Hex Flange Screw - Regular Thread	1
7		•	1/4-20 Top Insert Type Prevailing Torque Type Hex Nut	1
8		005700	Nylon Lanyard, 8 in. U-Lock Style	1

#### KITS AND MARKERS

▲ A4845-001 Holder Assembly, Longshot Nozzle





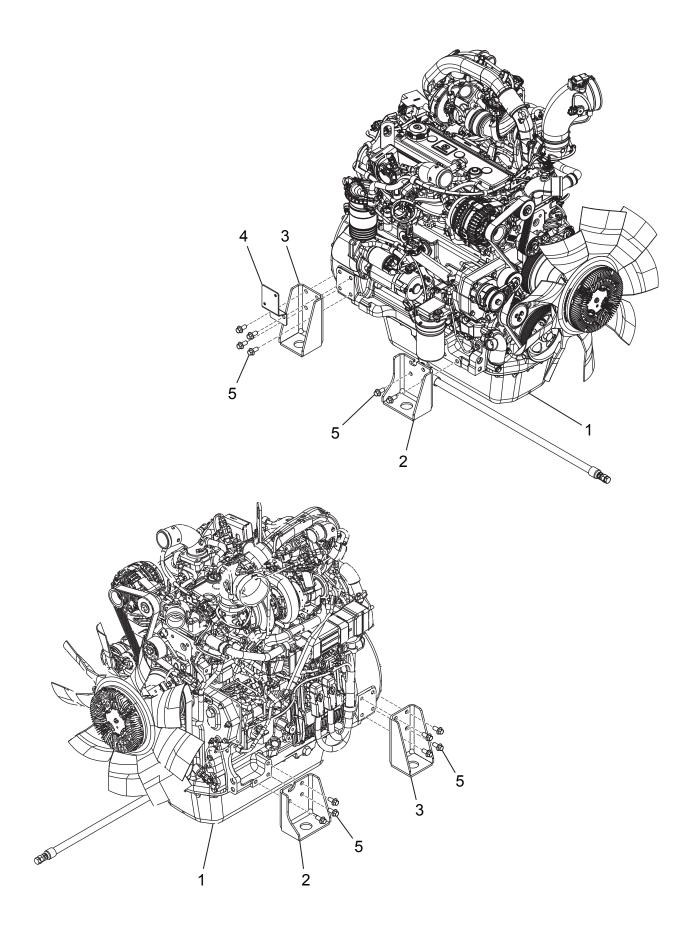


# **ENGINE COMPONENTS**

Ref. No.	Part Number	Description	No. Req'd
1	A1923-001	Engine, Diesel, JD 4045HFC09, 173HP	1
2	•	3/8-16 UNC - 1 Hex Cap Screw	8
3	•	M10 x 1.5 x 30 Metric Hex Flange Screws	10
4	A3559-001	Flywheel Coupling and Plate Kit, SAE 4 x SAE C	1
	A2399-001	Pump Flywheel Mounting Plate, SAE 4 x SAE C	1
	A2398-001	Flywheel Coupling, SAE 10 x SAE C Spline	1
5	A4500-001	Remote Oil Drain Hose Assembly	1

#### KITS AND MARKERS



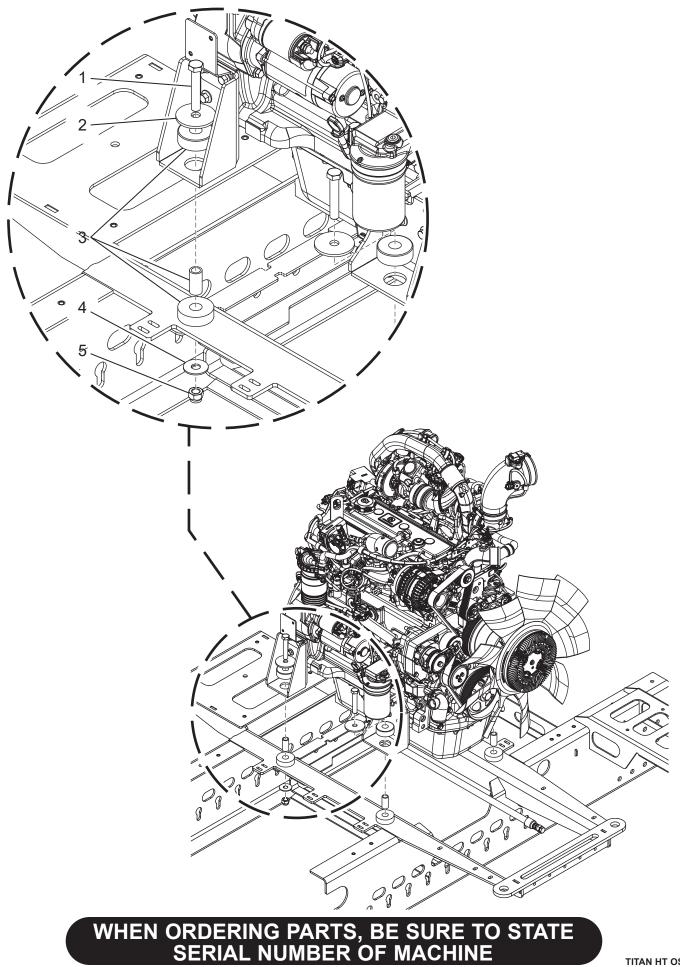


# **ENGINE FOOT MOUNTING**

Part Number	Description	No. Req'd
A1923-001	Engine, Diesel, JD 4045HFC09, 173HP	1
A2680-001	Engine Mounting Foot, Front	2
A2681-001	Engine Mounting Foot, Rear	2
A3428-001	Starter Relay Bracket Assembly	1
•	M12 x 1.75 x 25 Metric Hex Flange Screws	13
	A1923-001 A2680-001 A2681-001	A1923-001Engine, Diesel, JD 4045HFC09, 173HPA2680-001Engine Mounting Foot, FrontA2681-001Engine Mounting Foot, RearA3428-001Starter Relay Bracket Assembly

#### KITS AND MARKERS



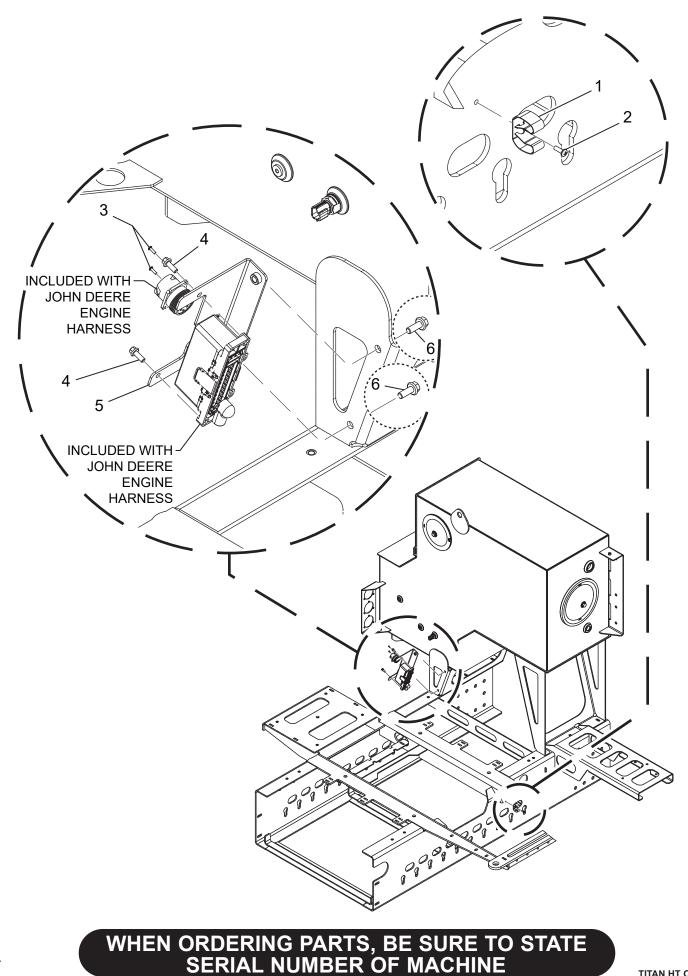


# **ENGINE FOOT ISOLATORS**

Ref. No.	Part Number	Description	No. Req'd
NO.	Fart Number	Description	NO. Key u
1	•	5/8-11 UNC - 3.5 Hex Cap Screw	4
2	005861	Zinc Plated Steel Snubbing Washer	4
3	005860-03	Engine Isolator With Wear Plate, Green	4
4	•	5/8 Regular - Type B Plain Washer	4
5	•	5/8-11 Metal Type Prevailing Torque Type Hex Nut	4

#### KITS AND MARKERS



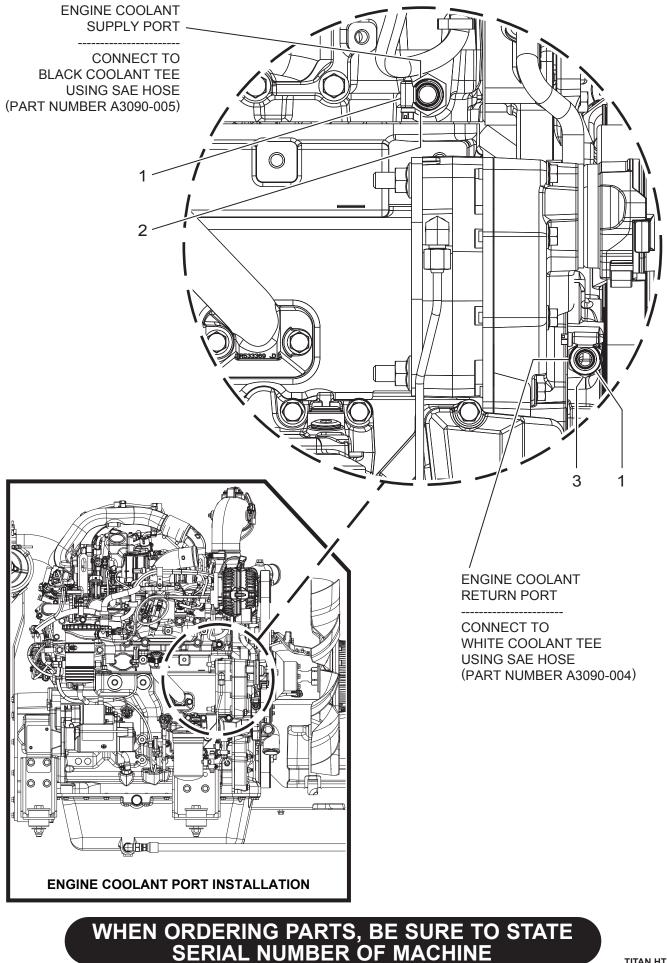


### **ENGINE FUSE BLOCK MOUNTING**

Ref. No.	Part Number	Description	No. Req'd
1	A3397-001	Spring Clip, Vinyl Coated Steel, 0.75 - 1.125 in. DIA.	1
2	•	#8 - 32 - 1/2 Cross Recessed Pan Head Machine Screw - Type I	1
3	•	#4 - 40 - 3/8 Cross Recessed Pan Head Machine Screw - Type I	2
4	•	M6 x 1 x 16 Hex Flange Head Machine Screw	2
5	A3426-001	Fuse Holder Bracket Assembly	1
6	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	2

#### KITS AND MARKERS

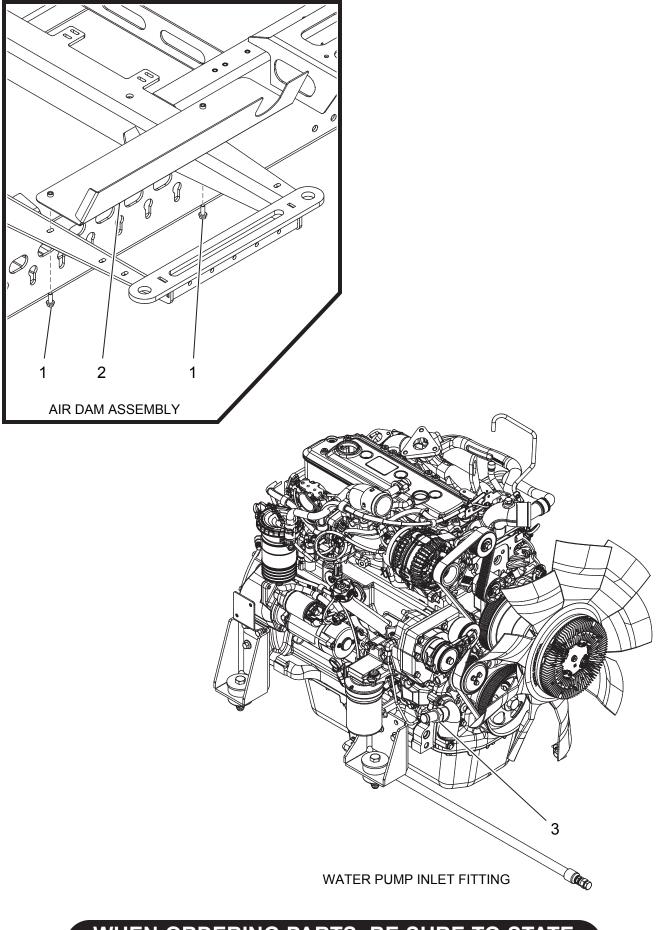




# **ENGINE COOLANT PORT**

Ref. No.	Part Number	Description	No. Req'd
1	A4566-001	Hose Clamp, Worm Gear, SAE J1508 Type MX, Size 6	2
2	A2639-016	Adapter Fitting, M22 ORS x 0.625 I.D. Hose, Short	1
3	A2639-009	Adapter Fitting, M18 ORS X 0.5 I.D. Hose, Short	1
NOT SHO	WN		
	A3090-004	Hose, SAE J20 R3 Class A, 0.5 in. I.D.	
	A3090-005	Hose, SAE J20 R3 Class A, 0.63 in. I.D.	



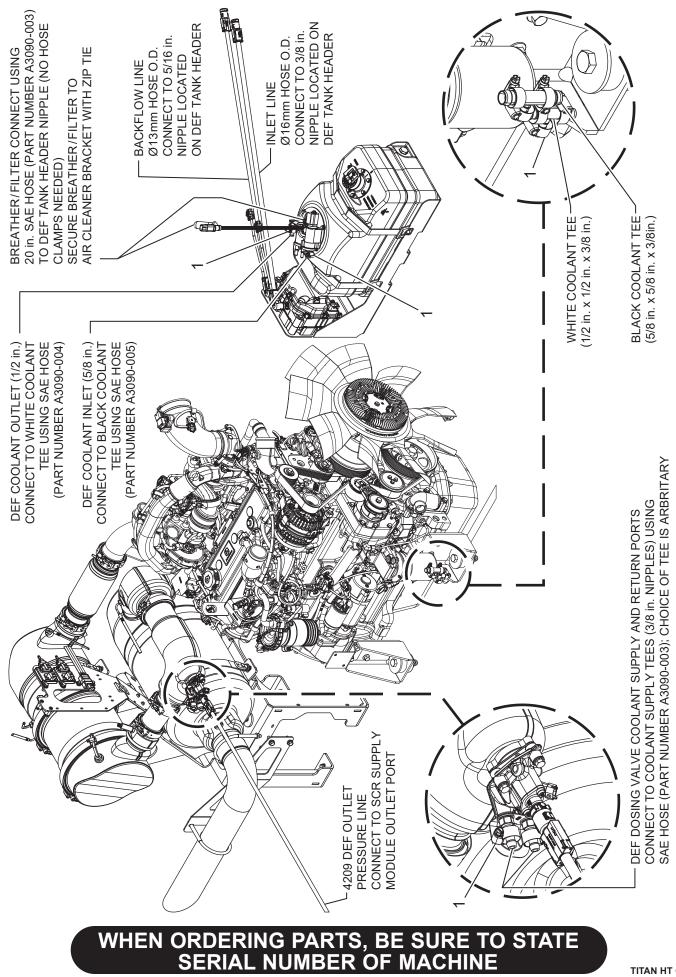


### AIR DAM ASSEMBLY AND WATER PUMP INLET FITTING

Ref. No.	Part Number	Description	No. Req'd
1	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	2
2	A3286-001	Air Dam Assembly, Cooling Package	1
3	A2639-034	Adapter Fitting, M30 ORS x 1 I.D. HOSE	1

#### KITS AND MARKERS





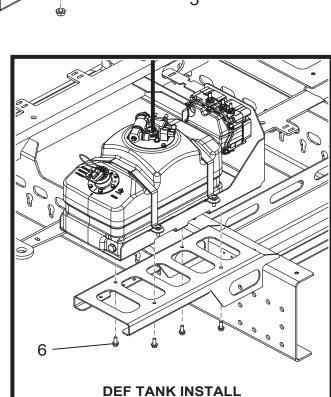
TITAN HT OS0514

### COMPLETE AFTERTREATMENT AND EXHAUST SYSTEM

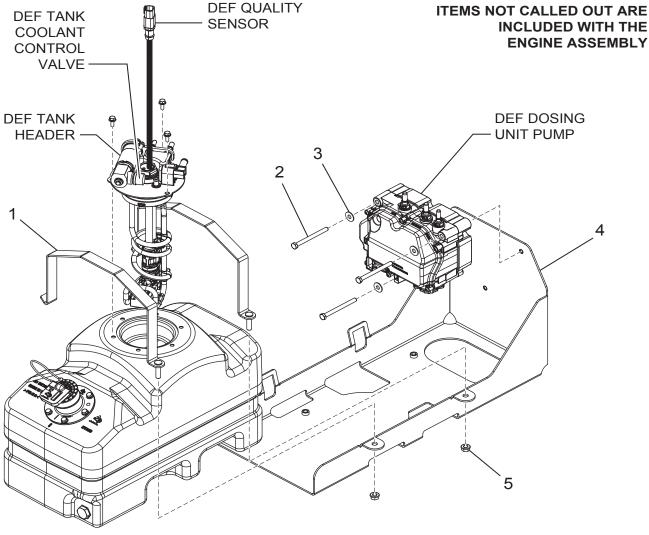
Ref. No.	Part Number	Description	No. Req'd
1	A4566-001	Hose Clamp, Worm Gear, SAE J1508 TYPE MX, SIZE 6	10



## WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE



**DEF TANK ASSEMBLY** 

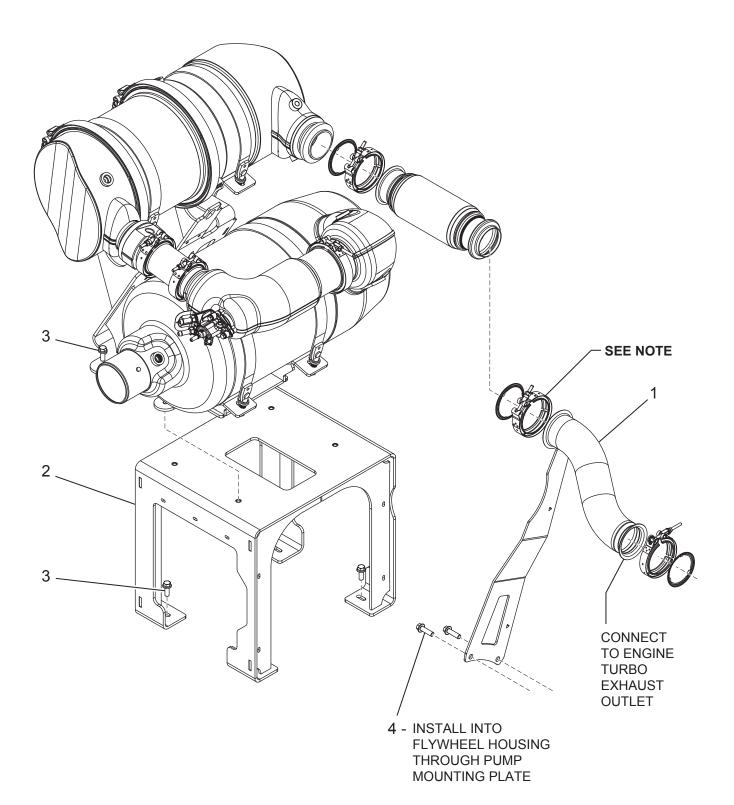


### DEF TANK ASSEMBLY AND INSTALLATION

Ref. No.	Part Number	Description	No. Req'd
1	A2964-001	Strap Assembly, DEF Tank	2
2	•	5/16-18 UNC - 3.5 Hex Cap Screw	3
3	•	5/16-Regular - Type B Plain Washer	3
4	A2969-001	Tray Assembly, DEF Tank And Supply Module	1
5	•	16 Hex Flange Nut	2
6	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	4
NOT SHOW	WN		
	A1999-001	DEF Filter	

#### KITS AND MARKERS





AFTERTREATMENT CRADLE INSTALL ITEMS NOT CALLED OUT ARE INCLUDED WITH THE ENGINE ASSEMBLY

## AFTERTREATMENT CRADLE INSTALLATION

Ref.			
No.	Part Number	Description	No. Req'd
1	A2502-001	Exhaust Pipe Weldment	1
2	A2787-001	Aftertreatment Support Mount	1
3	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	8
4	•	M10 x 1.5 x 35 Metric Hex Flange Screws	2

#### **KITS AND MARKERS**

• Standard Hardware Item - Available at your local hardware store.

**NOTE:** For V-band clamp installation, ensure proper alignment of flanges. The clamp should not be required to force or pull the connection into alignment.

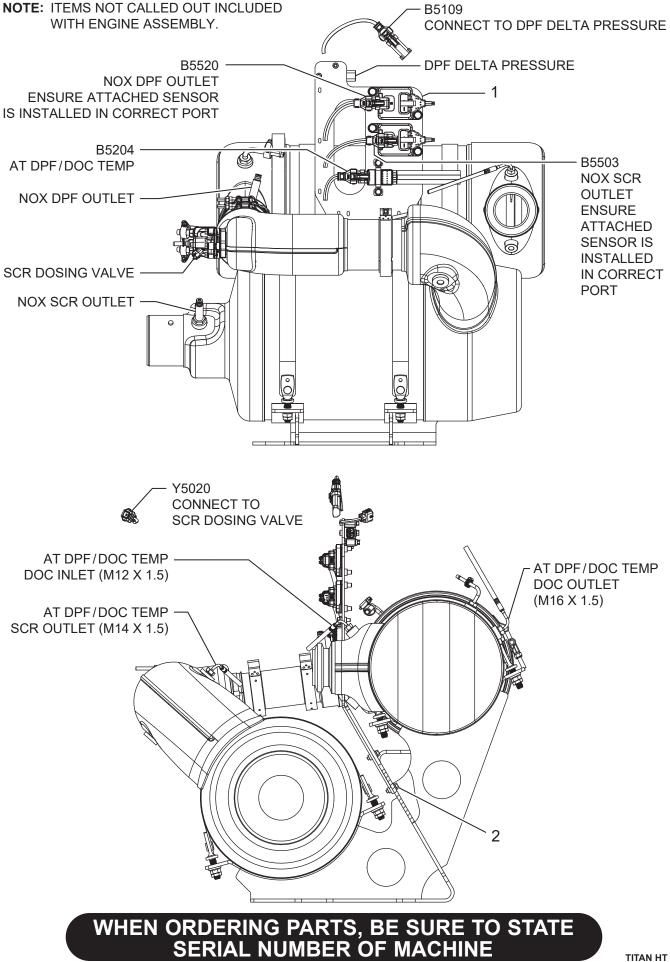
Inspect clamp threads and clean if necessary. Tighten the nut down to 7 ft./lb. (9.5 N-m). Do not exceed 200 RPM. Do not install clamp with impact wrench as this may damage clamp and strip threads.

Gently tap around the perimeter of the clamp during tightening to ensure proper seating of the clamp onto the flange.

Retighten clamp to  $15 \pm 2$  ft./lb. (20.3  $\pm 2.7$  N-m) and inspect the joint after assembly to ensure proper alignment of the flanges and that the clamp is properly seated.

Verify that the two band loops are not touching.





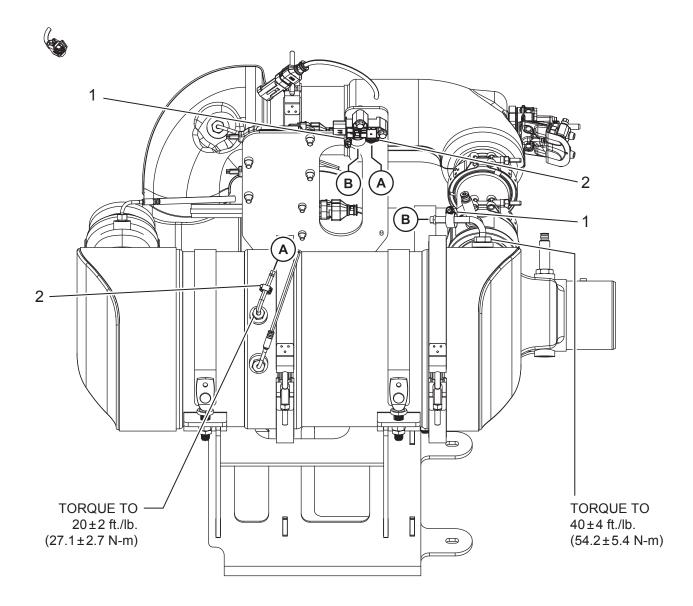
# AFTERTREATMENT AND EXHAUST COMPONENTS

Part Number	Description	No. Req'd
A2833-001	Aft Sensors Bracket Assembly	1
•	1/4-20 UNC x 0.75 Hex Flange Screw - Regular Thread	5
		A2833-001 Aft Sensors Bracket Assembly

#### KITS AND MARKERS

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A-A CONNECT THESE TWO HOSE BARBS USING SAE HOSE (PART NUMBER A3090-001)

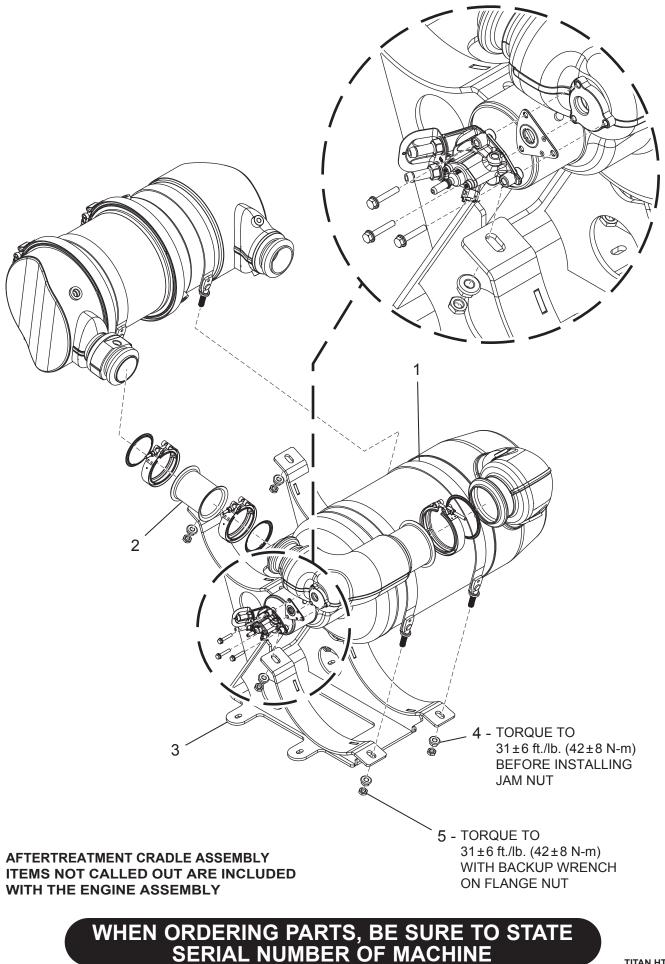
**B-B** CONNECT THESE TWO HOSE BARBS USING SAE HOSE (PART NUMBER A3090-003)



# AFTERTREATMENT AND EXHAUST HOSE INSTALLATION

Ref. No.	Part Number	Description	No. Req'd
1	A4566-001	Hose Clamp, Worm Gear, SAE J1508 TYPE MX, Size 6	2
2	010321	5/8 in. Clamp Worm Gear	2
NOT SHOWN	1		
	A3090-001	Hose, SAE J20 R3 Class A, 0.25 in. I.D.	
	A3090-003	Hose, SAE J20 R3 Class A, 0.38 in. I.D.	





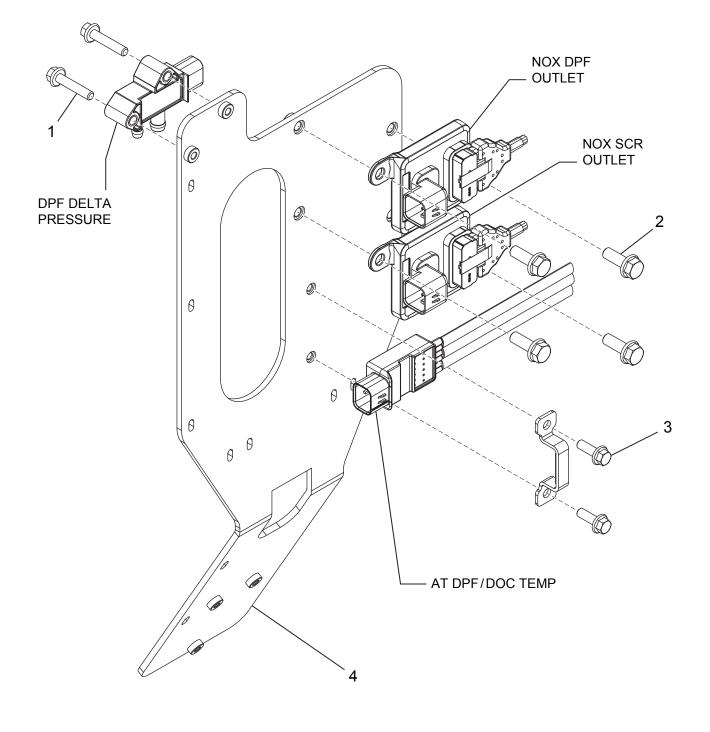
# AFTERTREATMENT CRADLE ASSEMBLY

Ref.			
No.	Part Number	Description	No. Req'd
1	A2766-003	Aftertreatment Strap, Size 3/4 SCR	2
2	A2824-001	Exhaust Pipe, Connector	1
3	A2658-001	Mount, Aftertreatment, Size 4 DOC/4 SCR	1
4	•	M12 x 1.75 Metric Hex Flange Nuts	8
5	•	M12 x 1.75 Hex Jam Nut	8

#### KITS AND MARKERS



SENSOR MASTER ASSEMBLY ITEMS NOT CALLED OUT ARE INCLUDED WITH THE ENGINE ASSEMBLY

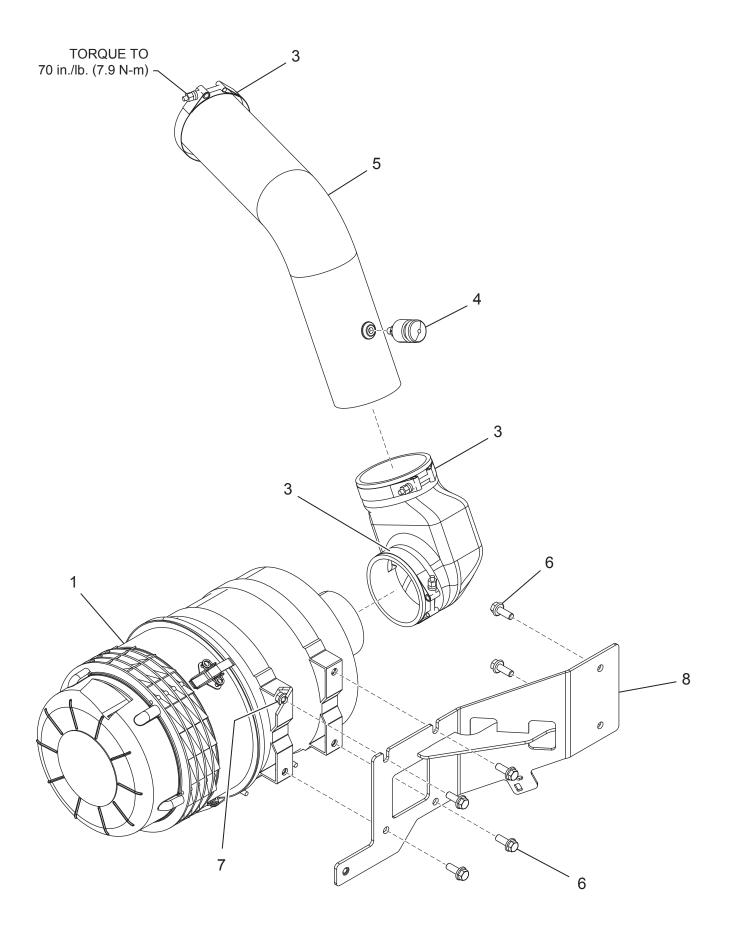


# AFTERTREATMENT SYSTEM SENSOR MASTER ASSEMBLY

Ref.			
No.	Part Number	Description	No. Req'd
1	•	1/4-20 UNC x 1.25 Hex Flange Screw - Regular Thread	2
2	•	5/16-18 UNC x 0.875 Hex Flange Screw - Regular Thread	4
3	•	1/4-20 UNC x 0.75 Hex Flange Screw - Regular Thread	2
4	A2833-001	Aft Sensors Bracket Assembly	1

#### **KITS AND MARKERS**





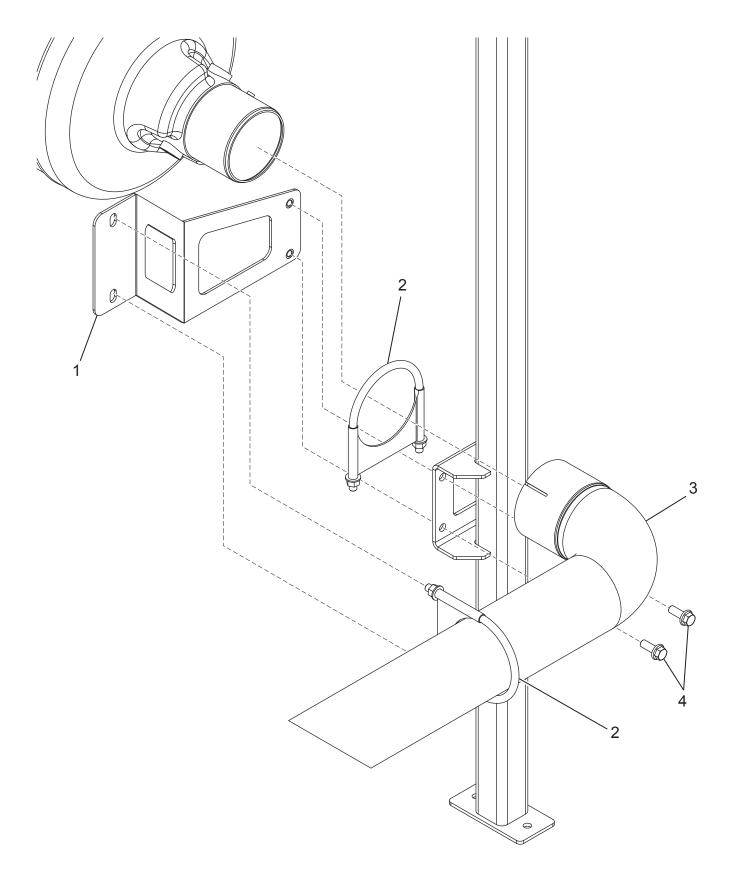
### **AIR INTAKE SYSTEM**

Ref. No.	Part Number	Description	No. Req'd
1	A3005-001	Air Cleaner Assembly	1
	A3002-001	Primary Air Filter	1
	A3284-001	Secondary Air Filter	1
2	075247	4 in. 90° Cobra Elbow	1
3	055335	T-Bolt Band Clamp, 4.5 in. Nom. Dia.	3
4	A3041-001	Dust Load Indicator, 1/8 in. MNPT, 20 in.	1
5	A3061-001	Elbow Assembly, Air Intake Tube	1
6	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	6
7	•	16 Hex Flange Nut	4
8	A3288-001	Bracket Assembly, Air Cleaner Mount	1

#### KITS AND MARKERS

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EXHAUST PIPE INSTALL ITEMS NOT CALLED OUT ARE FOR REFERENCE ONLY

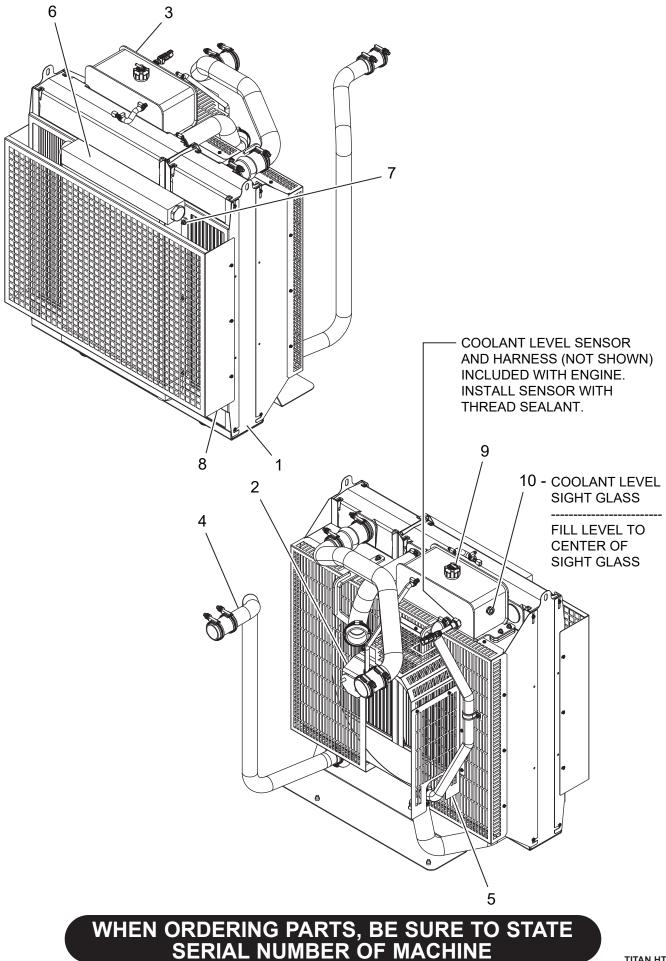


# **EXHAUST PIPE**

Ref. No.	Part Number	Description	No. Req'd
1	A3294-001	Exhaust Pipe Support Bracket Assembly	1
2	055336	Muffler Clamp, 4 in.	2
3	A2829-001	Exhaust Tailpipe, 4 in.	1
4	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	2

#### KITS AND MARKERS

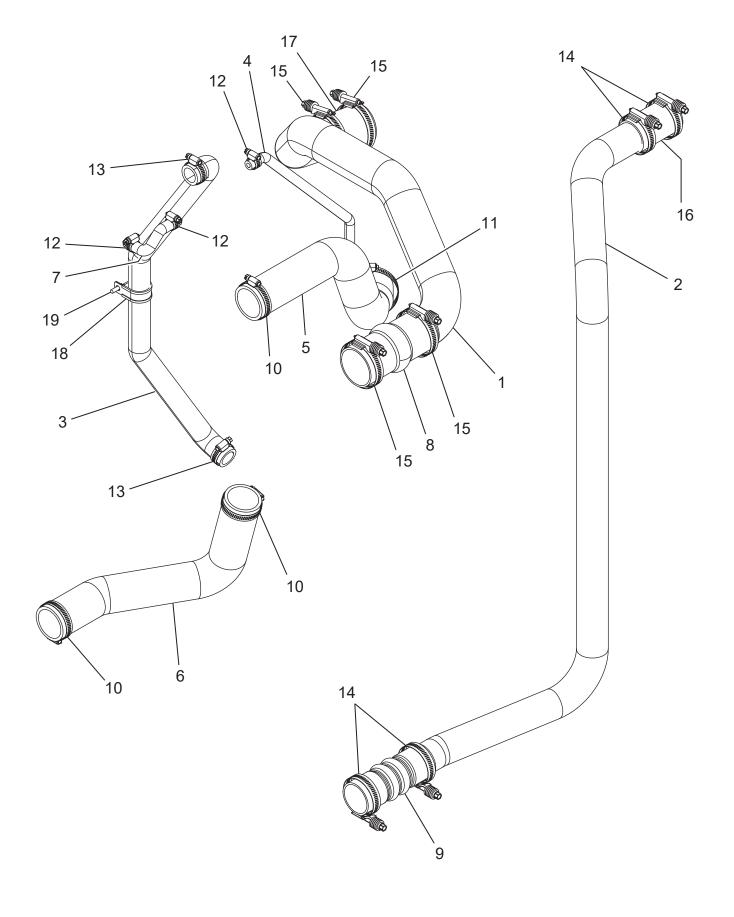




### **COOLING SYSTEM COMPONENTS**

Ref. No.	Part Number	Description	No. Req'd
1	A3350-001	Cooling Package, JD4045HFC09, CAC & RAD	1
2	A3365-001	Cooling Package Bracket Kit, JD4045HFC09	1
3	A3362-001	Coolant Degas Tank Assembly, JD4045HFC09	1
4	A3366-001	Hose And Pipe Kit, JD4045HFC09	1
5	A3351-001	Belt Guards Kit, JD4045HFC09	1
6	A2625-001	Hydraulic Oil Heat Exchanger	1
7	•	M8 x 1.25 x 16 Indented Hex Flange Head Machine Screw	6
8	A3364-001	Cooling Package Stone Guard Kit, JD4045HFC09	1
9	A2614-001	Radiator Cap, 1.00 Bar	1
10	A4693-001	Sight Glass, 1/2 NPT	1
NOT SHO	WN		
	A4470-001	Coolant Level Sensor	1
KITS AND	MARKERS		





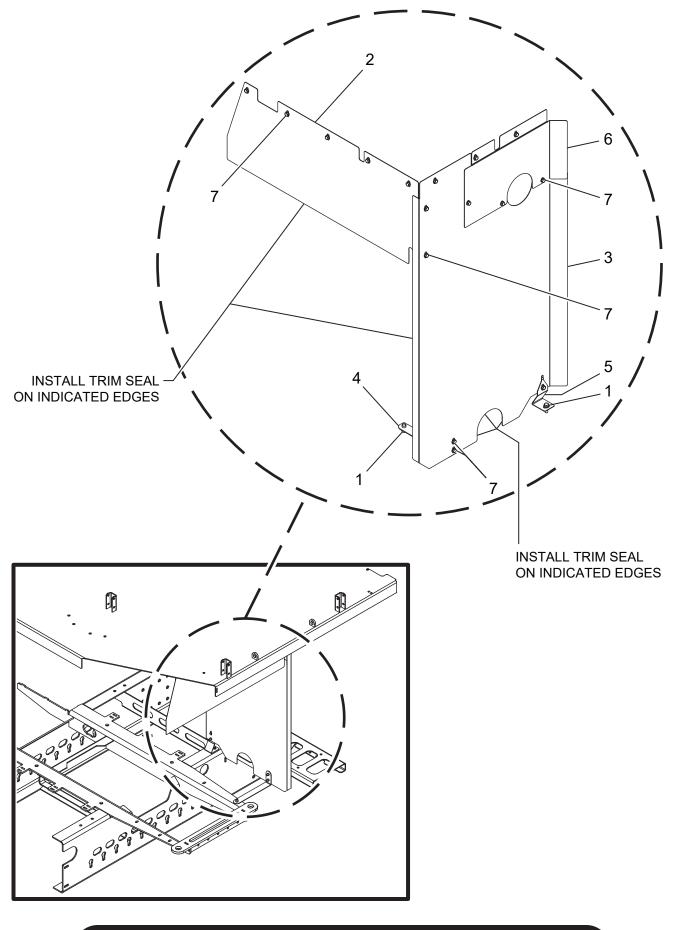
#### **COOLING SYSTEM HOSE AND PIPE KIT COMPONENTS**

Ref. No.	Kit Ref.	Part Number	Description	No. Req'd
1		A3352-001	CAC Pipe, Cold Side	1
2		A3353-001	CAC Pipe, Hot Side	1
3		A3354-001	Hose, Degas Return	1
4		A3355-001	Hose, Degas Vent to Thermostat Housing	1
5		A3356-001	Radiator Hose, Upper	1
6		A3357-001	Radiator Hose, Lower	1
7		A3358-001	Hose, Degas Vent to Radiator	1
8		A3359-001	Pipe Coupling, Hump, CAC, Cold Side 2.5 in.	1
9		A3360-001	Pipe Coupling, CAC, Hot Side 2.0 in.	1
10		A2182-006	Hose Clamp, Worm Gear, SAE J1508 Type F, Size 32	3
11		A2182-008	Hose Clamp, Worm Gear, SAE J1508 Type F, Size 48	1
12		A2182-001	Hose Clamp, Worm Gear, SAE J1508 Type F, Size 6	4
13		A2182-004	Hose Clamp, Worm Gear, SAE J1508 Type F, Size 16	2
14		A2605-003	Hose Clamp, CT, SAE J1508 SLHD, Size 262	4
15		A2605-004	Hose Clamp, CT, SAE J1508 SLHD, Size 312	4
16		A2603-001	Pipe Coupling, CAC, Hot Side	1
17		A2604-001	Pipe Coupling, CAC, Cold Side	1
18		A2623-001	Loop Clamp, Cushioned, 1.375 in. Dia.	1
19		•	M6 x 1 x 16 Indented Hex Flange Head Machine Screw	1

#### KITS AND MARKERS

A3366-001 Hose And Pipe Kit, JD4045HFC09





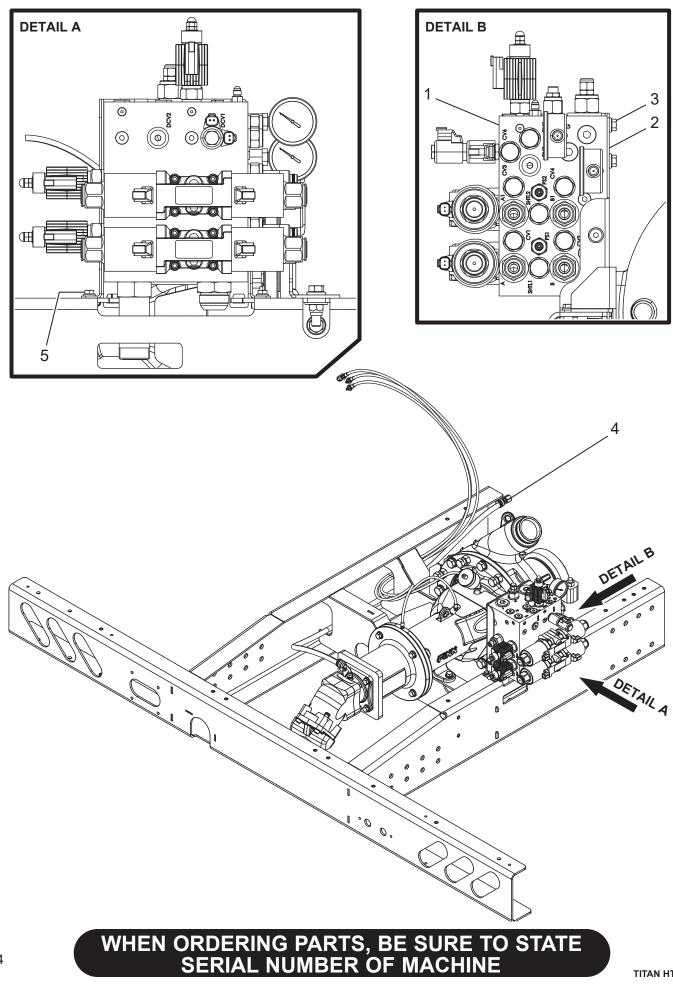
# **RADIATOR SHROUD**

Ref. No.	Part Number	Description	No. Req'd
1	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	2
2	A4389-001	Shroud Assembly, Upper Radiator	1
3	A4393-001	Shround Assembly, Radiator Side	1
4	A4395-001	Bracket Assembly, Radiator Shroud Stay	1
5	A4392-001	Bracket, Shroud Flex	1
6	A4400-001	Shroud, Air Piping	1
7	•	5/16-18 UNC x 0.75 Hex Flange Screw - Regular Thread	16
NOT SHOW	VN		
	A4658-001	Trim Seal, 0.039 - 0.078 Edge x 0.256 Bulb x 80.0 in	
KITS AND	MARKERS		

• Standard Hardware Item - Available at your local hardware store.



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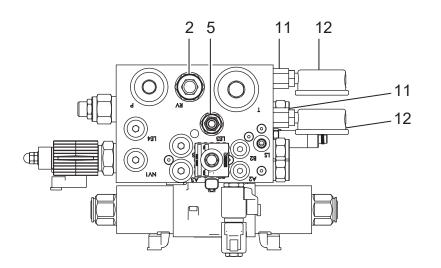


## HYDRAULIC MANIFOLD ASSEMBLY

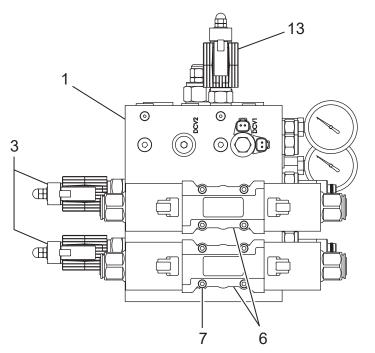
Part Number	Description	No. Req'd
A3180-001	Hydraulic Manifold Assembly, HT330/HT400 System	1
A3506-001	Hydraulic Valve Stand, HT Pump Module	1
•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	4
A4800-001	Hydraulic Hose and Fitting Kit, HT Pump Module	1
•	5/16-18 UNC x 1 Hex Flange Screw - Regular Thread	4
	A3180-001 A3506-001 ●	A3180-001Hydraulic Manifold Assembly, HT330/HT400 SystemA3506-001Hydraulic Valve Stand, HT Pump Module•3/8-16 UNC x 1 Hex Flange Screw - Regular ThreadA4800-001Hydraulic Hose and Fitting Kit, HT Pump Module

#### KITS AND MARKERS

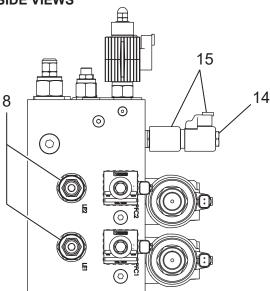


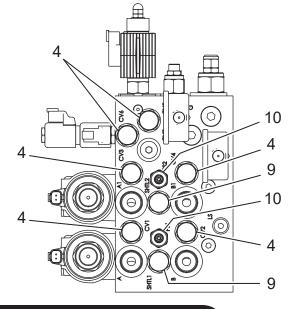


**FRONT VIEW** 



SIDE VIEWS





TITAN HT OS0514

#### HYDRAULIC MANIFOLD ASSEMBLY

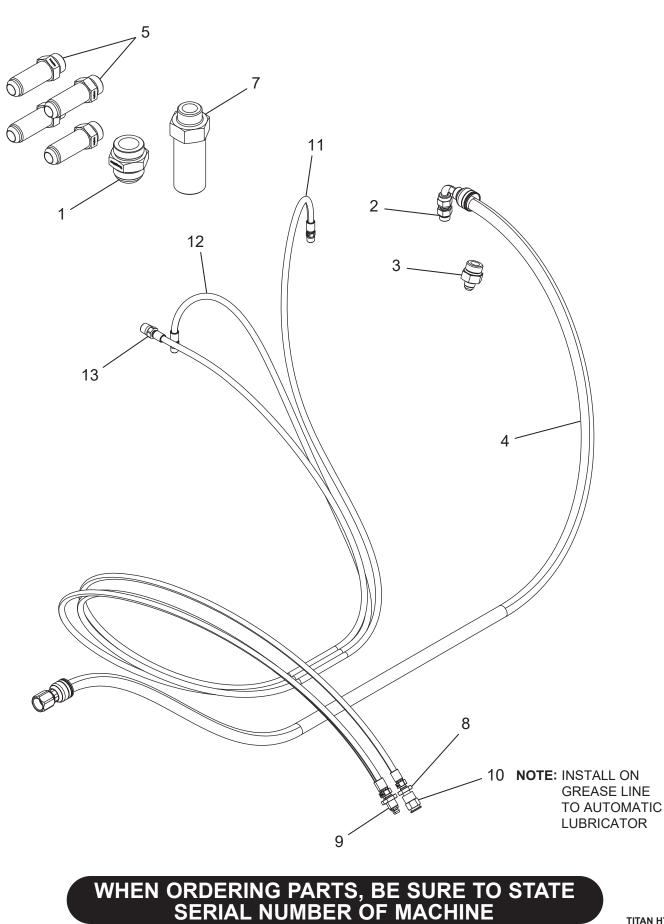
Ref. No.	Kit Ref.	Part Number	Description	No. Req'd
1		A3165-001	Hydraulic Manifold, HT330/400 System	1
2		A1356-001	Relief Valve, Pilot Operated	1
3		A3167-001	PFC Valve Cartridge	2
4		A3170-001	Check Valve Cartridge	6
5		A3171-001	LCE Cartridge, Spool Type, Pilot to Open, SAE 08	1
6		A3174-001	DC Valve, 4-Way, 3-Position	2
7		•	1/4-20 UNC - 1-3/4 Hexagon Socket Head Cap Screw	8
8		A3175-001	LCE Cartridge, Spool Type, Pilot to Open, SAE 12	2
9		A3176-001	Shuttle Valve Cartridge, 2-Position, 3-Way	2
10		A3177-001	Pressure Transducer, 3000 psi, SAE #4	2
11		A1376-001	Pressure Gauge Snubber	2
12		A1374-001	Pressure Gauge (0-5000 psi)	2
13		A3179-001	PFC Valve Cartridge, NC	1
14		A4946-001	DC Valve Cartridge, 4-Way, 3-Position	1
15		A4947-001	Solenoid Coil	2

#### KITS AND MARKERS

▲ A3180-001 Hydraulic Manifold Assembly, HT330/HT400 System





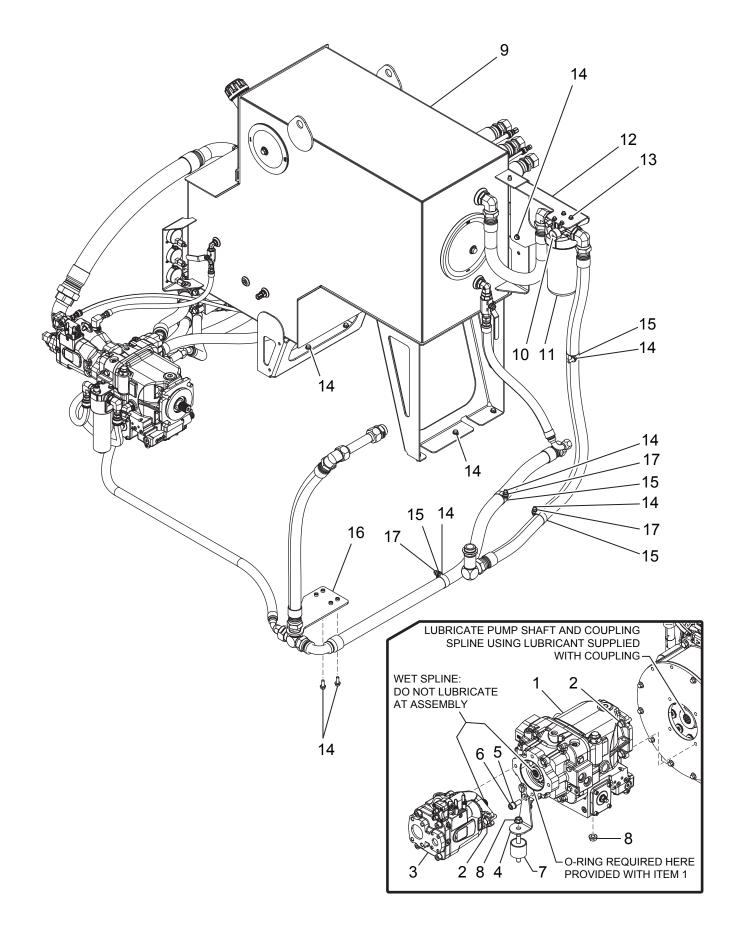


#### HYDRAULIC HOSE AND FITTING KIT, HT PUMP MODULE

	Kit Ref.	Part Number	Description	No. Req'd
1			Fitting, #20 MJIC x #20 MSAE, Steel	1
2			Fitting, #6 MJIC x #6 MSAE, Steel	1
3			Adapter, Straight, #6 SAE #10 ORB, Steel	1
4		A4537-001	3/8 in. 100R4 Hose x 66 in. OAL with #6 FJIC 90° Elbow x #8 FJIC Steel SW	1
5			Fitting, # 12 MJIC x #12 MSAE, Long Steel	4
6			Fitting, #4 MJIC x #4 MSAE, Steel	1
7			Fitting, #20 MORS x #16 MSAE, Steel Long	1
8			Bulkhead Nut (1/8-27 NPSM)	3
9			Zerk 1-4 UNF ST	2
10		A4804-001	Grease Fitting, Button-Head, 1/8 NPTF Female	1
11		A4801-001	1/8 in. 100R7 (31DC) Hose x 86 in. OAL with 1GKCY-2-2 Bulkhead Fitting x 1/8 in. MNPT Straight (101CY-2-2)	1
12		A4802-001	1/8 in. 100R7 (31DC) Hose x 84 in. OAL with 1GKCY-2-2 Bulkhead Fitting x 1/8 in. MNPT Straight (101CY-2-2)	1
13		A4803-001	1/8 in. 100R7 (31DC) Hose x 78.5 in. OAL with 1GKCY-2-2 Bulkhead Fitting x 1/4 in. MNPT Straight (101CY-4-2)	1
	D MA	RKERS		
		A4800-001	Hydraulic Hose and Fitting Kit, HT Pump Module	

A4800-001 Hydraulic Hose and Fitting Kit, HT Pump Module
 Standard Hardware Item Available at your local bardware store





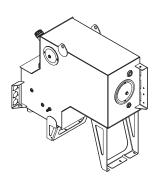
#### HYDRAULIC SYSTEM INSTALLATION COMPONENTS

Ref. No.	Part Number	Description	No. Req'd
1	A2207-001	Hydraulic Pump, Closed Loop	1
2	•	1/2-13 UNC x 1.25 Hex Flange Screw - Regular Thread	6
3	A2208-001	Hydraulic Pump, Open Loop	1
4	A2682-001	Bracket, Pump Tail Support	1
5	•	1/2 Regular Helical Spring Lock Washers	1
6	•	1/2-13 UNC - 1 1/4 HS HCS Hex. Socket Head Cap Scre	w 1
7	A2683-001	Isolator, Stud Mount, Type SS, 1/2-13	1
8	•	13 Hex Flange Nut	2
9	A2936-001	Hydraulic Reservoir Assembly, 82 Gallon	1
10	A3058-001	Clogging Indicator, Hydraulic Filter	1
11	A3056-001 A3055-001	Filter Assembly, Hydraulic, 77 GPM, 10 Micron Hydraulic Filter Element	1
12	A3285-001	Bracket, Hydraulic Return Filter Mount	1
13	•	M8 x 1.25 x 16 Metric Hex Flange Screws	4
14	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	15
15	005650	Cushioned Loop Clamp	4
16	A3258-001	Bracket Assembly, Hydraulic Cooler Bulkhead	1
17	•	16 Hex Flange Nut	3

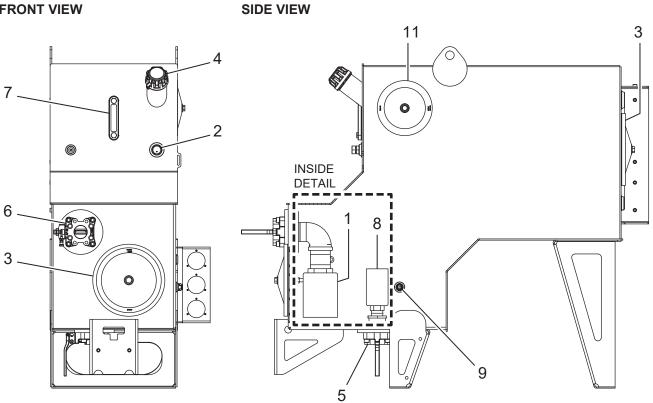
#### KITS AND MARKERS

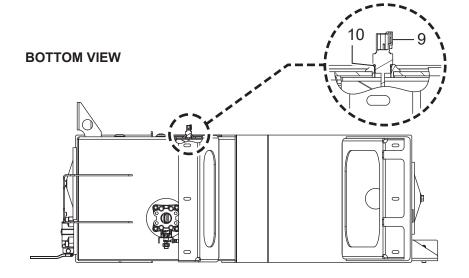
A4649-001	Hydraulic Hose and	d Fittings Kit, HT EM
714040-001	riyuruuno riose and	





**FRONT VIEW** 





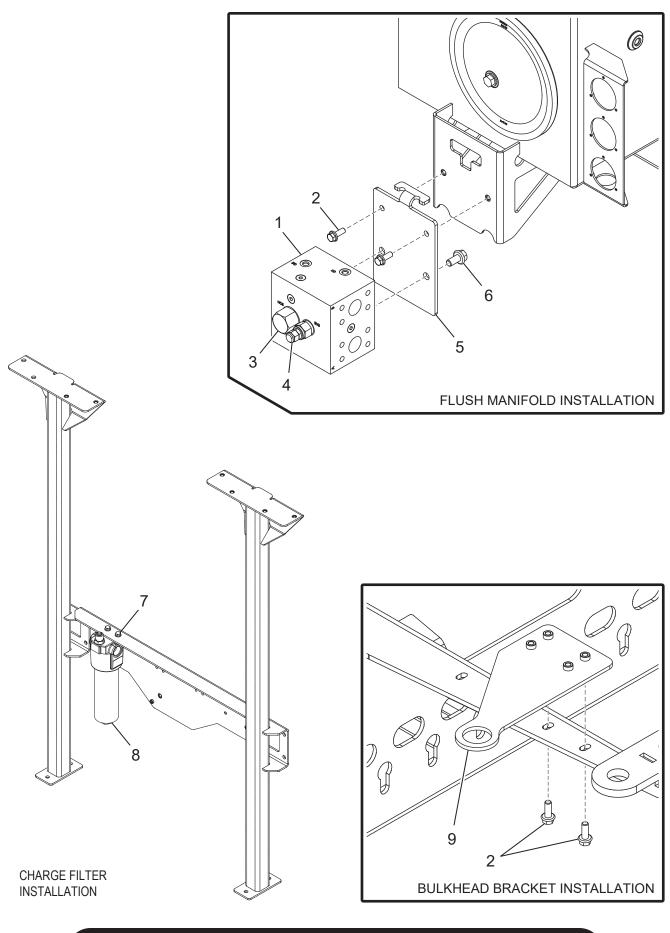
## HYDRAULIC RESERVOIR ASSEMBLY

Ref. No.	Kit Ref.	Part Number	Description	No. Req'd
1		A1119-001	75 GPM Suction Strainer, 100 Mesh, 3 psi Bypass	1
2		A1003-001	Level Switch, Side Mount (-10 SAE)	1
3		A0946-003	Cleanout Cover, 10 in.	2
4		A1123-001	RB2 Filler Cap, Snap Ring, Strainer Basket	1
5		A1328-001	Butterfly Flange Plate	1
6		A1328-002	Butterfly Flange Plate	1
7		080329	Sight Gauge with Thermometer	1
8		A1120-001	20 GPM Suction Strainer, 100 Mesh, 3 psi Bypass	1
9		A3515-001	Temperature Sensor, NTC, SAE-08, Deutsch DT04-2P	1
10		A3521-006	#3-908 O-ring, NBR, 90 Shore A	1
11		A0946-002	Cleanout Cover, 8 in.	1

KITS AND N	MARKERS
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A2936-001 Hydraulic Reservoir Assembly, 82 Gallon

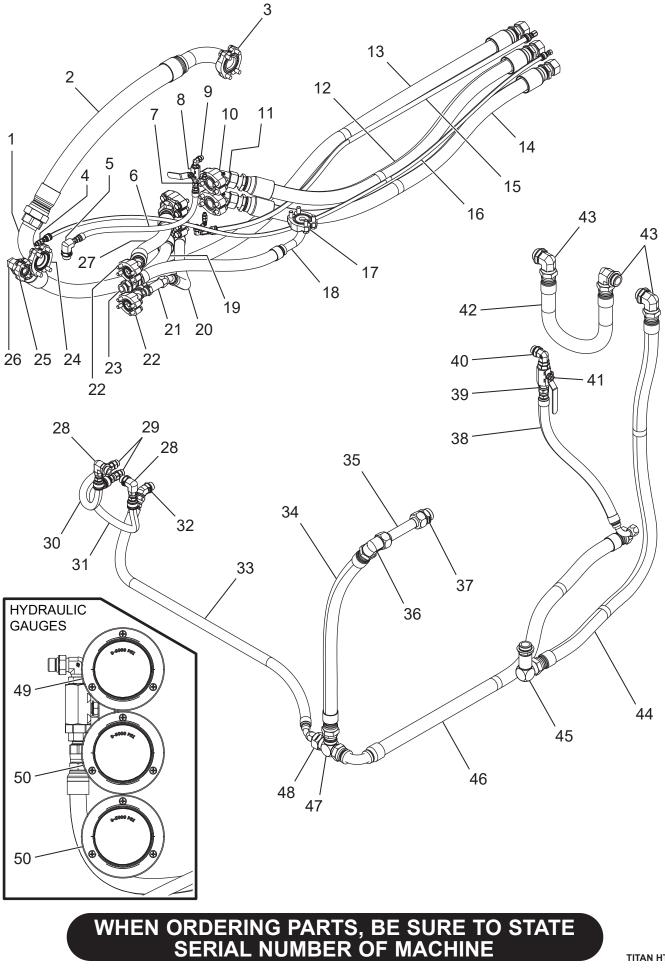




## ADDITIONAL HYDRAULIC SYSTEM INSTALLATION COMPONENTS

Ref. No.	Part Number	Description	No. Req'd
1	A3088-001	Manifold Assembly, Closed Loop Flush	1
2	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	4
3	A3086-001	Cartridge Valve, Hot Oil Shuttle	1
4	A3087-001	Cartridge Valve, Pilot Operated Relief, 50-1500 psi	1
5	A4434-001	Bracket, Manifold Drop	1
6	•	1/2-13 UNC x 1 Hex Flange Screw - Regular Thread	2
7	•	5/16-18 UNC x 0.625 Hex Flange Screw - Regular Threa	d 2
8	075747	Filter Assembly, High Pressure Hydraulic	1
	075747-C	Filter Element	1
	A3588-001	Filter Indicator	1
9	A3258-001	Hydraulic Cooler Bulkhead Bracket Assembly	1





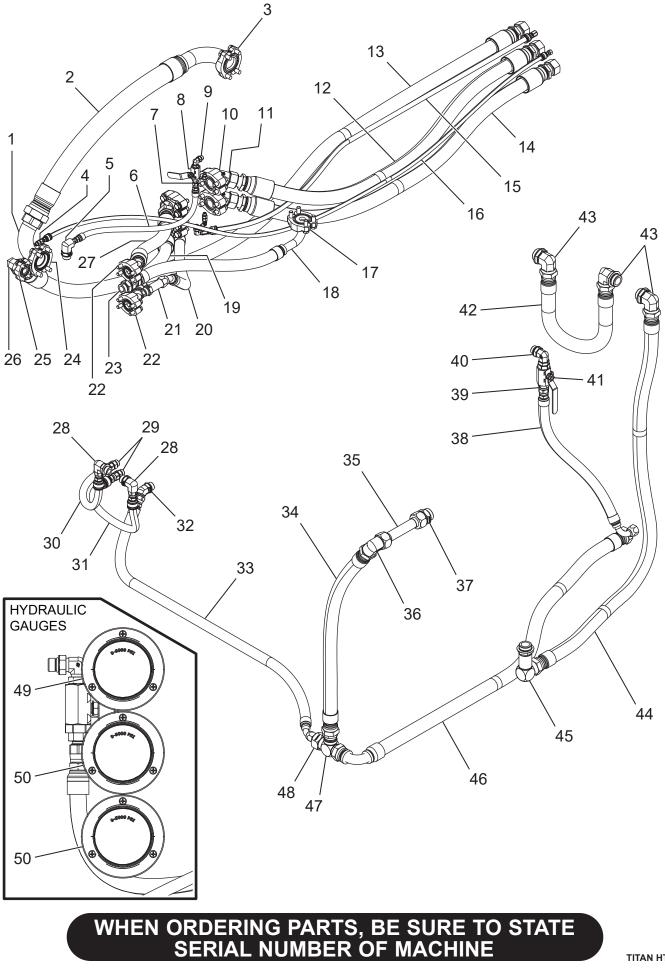
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#### HYDRAULIC SYSTEM HOSES AND FITTINGS

Ref. No.	-	Part Number	Description	No. Req'd
1			Fitting, #32 MJIC x #32 C61 Flange, 90° Elbow	1
2		A4627-001	2 in. 100R4 Hose x 35 in. OAL with #32 C61 90° Elbow x #32 FJIC ST SW	1
3			#32 C61 Split Flange Kit, Metric	1
4			Fitting, #4 MJIC x #4 MSAE, ST	4
5			Fitting, #6 MJIC x #12 MSAE ADJ, 90° Elbow	1
6		A4632-001	3/8 in. 100R1s Hose x 26 in. OAL with #6 FJIC ST x #6 FJIC ST	1
7			Fitting, #6 MJIC x #6 MSAE, ST	1
8		A3896-006	Ball Valve, #6 SAE, Full-Port, Steel	1
9			Fitting, #6 MSAE ADJ x #6 MSAE ADJ, 90° Elbow	1
10			#20 C62 Split Flange Kit	4
11			Fitting, #20 C62 Flange x #20 MORS, 45° Elbow	4
12		A4643-001	1-1/4 in. 100R13 Hose x 55.75 in. OAL with #20 FORS ST SW x #20 FORS ST SW	1
13		A4644-001	1-1/4 in. 100R13 Hose x 95.25 in. OAL with #20 FORS ST SW x #20 FORS ST SW	1
14		A4642-001	1-1/4 in. 100R13 Hose x 55.75 in. OAL with #20 FORS ST SW x #20 FORS ST SW	1
15		A4646-001	3/8 in. 100R17 Hose x 62 in. OAL with #6 FJIC ST SW x #6 FJIC ST SW	1
16		A4645-001	1/4 in. 100R17 Hose x 96 in. OAL with #4 FJIC ST SW x #4 FJIC ST SW	1
17			#24 C61 Split Flange Kit, Metric	1
18		A4626-001	1 in. 100R4 Hose x 30.5 in. OAL with #24 C61 90° Elbow x #16 FJIC ST SW	1
19		A4625-001	1 in. 100R13 Hose x 25 in. OAL with #16 C62 45° Elbow x #20 FORS ST SW	1
20		A4628-001	3/4 in. 100R4 Hose x 35 in. OAL with #12 FJIC ST x #12 FJIC 45° Elbow	1
21			Fitting, # 12 MJIC x #12 MSAE, Long ST	1
22			#16 C62 Split Flange Kit	2
23			Fitting, #16 MJIC x #16 MSAE, ST	1
24			#32 C61 Split Flange Kit, Standard	1
25			#16 C61 Split Flange Kit, Standard	1
26			Adapter Fitting, #16 C61 Flange x #20 MORS, 90° Elbow	1
27		A4624-001	1 in. 100R13 Hose x 25.5 in. OAL with #16 C62 45° Elbow x #20 FORS ST SW	1

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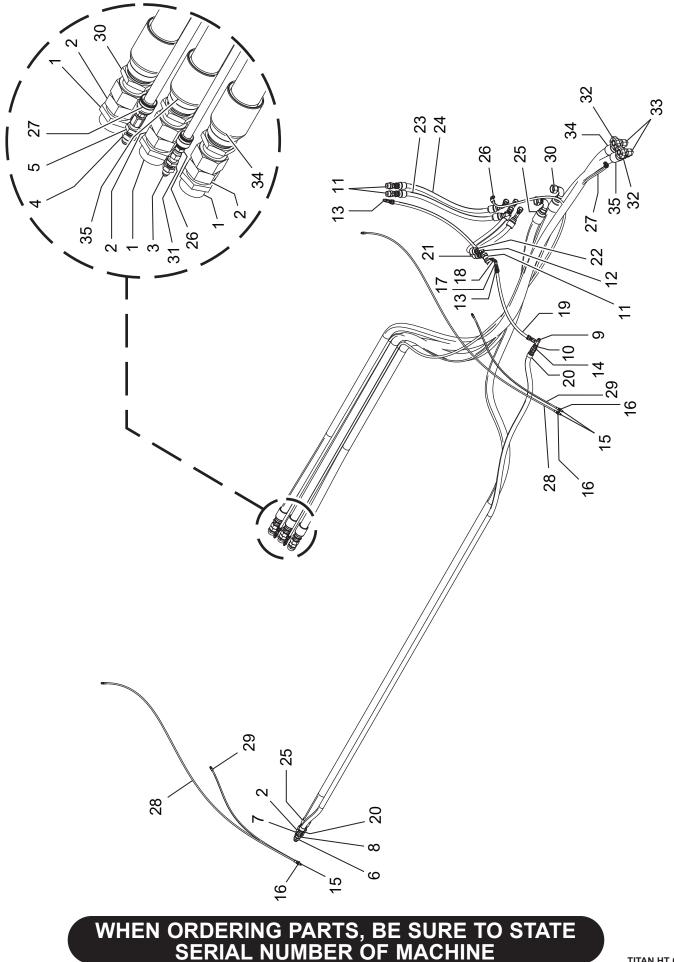
#### HYDRAULIC SYSTEM HOSES AND FITTINGS

Ref. No.	-	Part Number	Description	No. Req'd
28			Fitting, #10 MJIC x #12 MSAE ADJ, 90° Elbow	2
29			Fitting, #10 MJIC X #10 MSAE, ST	2
30		A4629-001	5/8 in. 100R17 Hose x 26 in. OAL with #10 FJIC ST x #10 FJIC ST	1
31		A4630-001	5/8 in. 100R17 Hose x 33 in. OAL with #10 FJIC ST x #10 FJIC ST	1
32			Fitting, #12 MJIC x #12 MSAE, 45° Elbow	1
33		A4631-001	3/4 in. 100R4 Hose x 55 in. OAL with #12 FJIC ST x #12 FJIC 45° Elbow	1
34		A4637-001	1-1/4 in. 100R4 Hose x 34.5 in. OAL with #20 FJIC ST SW x #20 FJIC ST SW	1
35		A4639-001	Hydraulic Tube Assembly	1
36			Fitting, #20 MJIC x #20 MJIC, 90° Elbow	1
37			Fitting, #20 MJIC x #20 MSAE, ST	1
38		A4640-001	3/4 in. 100R4 Hose x 26 in. OAL with #12 FJIC ST SW x #12 FJIC 90 SW	1
39			Fitting, #12 MJIC x #12 MSAE, ST	1
40			Fitting, #12 MSAE ADJ x #12 MSAE ADJ, 90° Elbow	1
41		A3896-012	Ball Valve, #12 SAE, Full-Port, Steel	1
42		A4634-001	1-1/4 in. 100R4 Hose x 26 in. OAL with #20 FJIC ST SW x #20 FJIC ST SW	1
43			Fitting, #20 MJIC x #20 MSAE ADJ, 90° Elbow	3
44		A4635-001	1-1/4 in. 100R4 Hose x 74 in. OAL with #20 FJIC ST SW x #20 FJIC ST SW	1
45			Fitting, #20 Mjic x #20 MSAE ADJ, Extra Long ST	1
46		A4641-001	1-1/4 in. 100R4 Hose x 63 in. OAL with #20 FJIC ST SW x #20 FJIC 90 SW	1
47			Fitting, #20 MJIC Bulkhead Branch Tee	1
48			Fitting, Reducing Adapter, #20 FJIC x #13 MJIC	1
49		A4647-001	Panel Guage and Hose Assembly, 0-1500 psi	1
50		A4647-002	Panel Guage and Hose Assembly, 0-5000 psi	2
NOT S	HOWN			
			Fitting, #12 MJIC X #12 MSAE ADJ, 90° Elbow	1
			Fitting, #6 MJIC X #6 MSAE ADJ, 90° Elbow	1
			Fitting, #4 MJIC x #4 FJIC SW, 90° Elbow	1

#### **KITS AND MARKERS**

▲ A4649-001

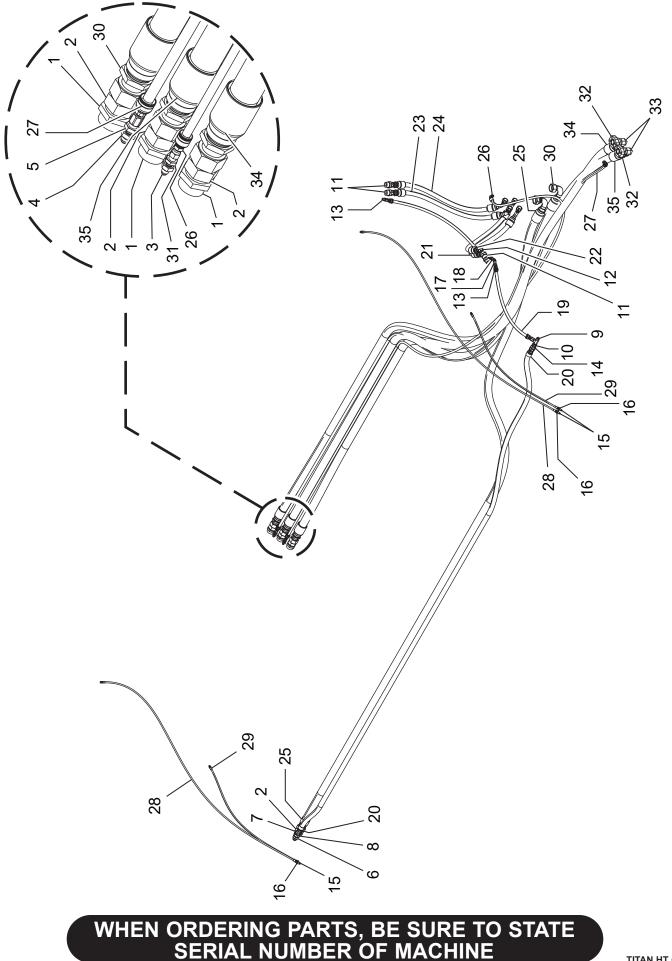
Hydraulic Hose and Fittings Kit, HT EM



# **HYDRAULIC SYSTEM HOSES AND FITTINGS - HT330**

Ref. No.	Kit Ref.	Part Number	Description	No. Req'd
1			#20 ORFS Adapter, Straight Bulkhead	3
2			JIC Bulkhead Nut, -20	4
3			JIC Bulkhead Union 4-4	1
4			JIC Bulkhead Union 6-6	1
5			JIC Bulkhead Nut, -06	1
6			JIC Bulkhead Union 12-12	1
7			JIC Bulkhead Union 20-20	1
8			JIC Bulkhead Nut, -12	1
9			Bulkhead Run Tee	1
10			Bulkhead Nut, -08, 3/4-16	1
11			3/4 in. Flare Tube End x 1-5/16 in 12 SAE Male Flare Connector	4
12			3/4 in. JIC Swivel Nut x 3/4 in. Flare Tube End Swivel Nut 45 Degree Elbow	2
13			3/8 in. Flare Tube End x 7/16 in 20 SAE Male Flare Connector	2
14			Reducer, Straight, #8 SAE #12 SAE, Steel	1
15			Zerk 1-4 UNF ST	4
16			Bulkhead Nut (1/8-27 NPSM)	4
17			3/8 in. Flare Tube Side Outlet x 3/8 in. JIC Swivel Nut x 3/8 in. Flare Tube End Swivel Nut Run Tee	1
18		A4528-001	3/8 in. 100R4 x 38 in. OAL with #6 FJIC Straight x #6 FJIC 45	1
19		A4529-001	3/8 in. 100R4 x 26 in. OAL with #6 FJIC Straight x #8 FJIC Straight	1
20		A4530-001	3/4 in. 100R4 x 168 in. OAL with #12 FJIC Straight x #12 FJIC Straight	1
21		A4539-001	3/4 in. 100R17 x 25 in. OAL with #12 FJIC Straight x #12 FJIC 45 Elbow	1
22		A4538-001	3/4 in. 100R17 x 28 in. OAL with #12 FJIC Straight x #12 FJIC 45 Elbow	1
23		A4541-001	3/4 in. 100R17 x 36 in. OAL with #12 FJIC Straight x #12 FJIC 45 Elbow	1
24		A4540-001	3/4 in. 100R17 x 36 in. OAL with #12 FJIC Straight x #12 FJIC 45 Elbow	1
25		A4533-001	1-1/4 in. 100R4 x 211 in. OAL with #20 FJIC Straight x #20 FJIC 90	1
26		A4535-001	1/4 in. 100R17 x 173 in. OAL with #4 FJIC Straight x #4 FJIC Straight	1

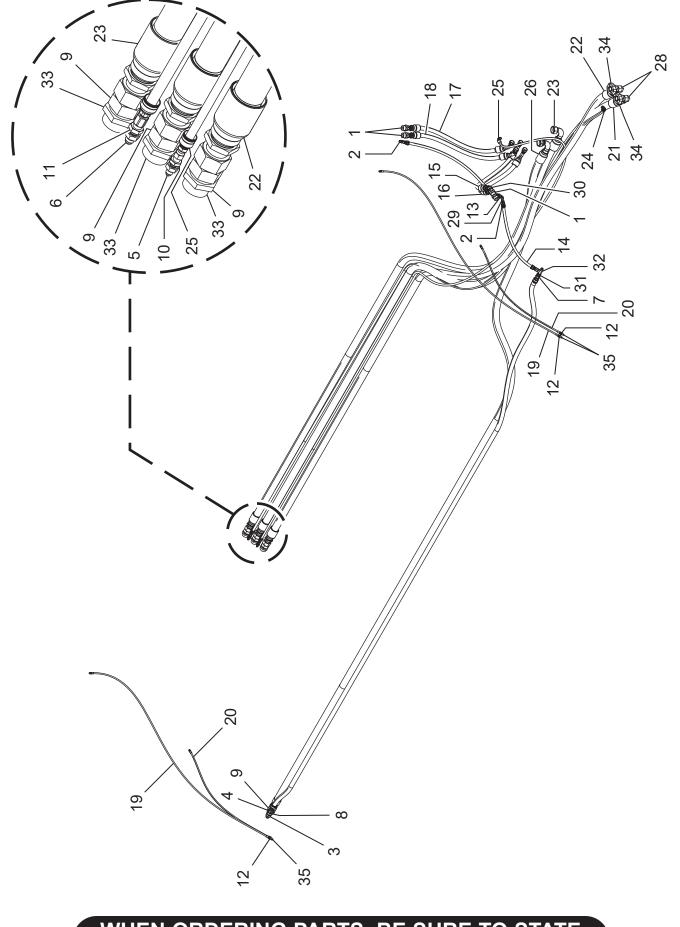
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# **HYDRAULIC SYSTEM HOSES AND FITTINGS - HT330**

Ref. No.		Part Number	Description	No. Req'd
27		A4536-001	3/8 in. 100R17 x 171 in. OAL with #6 FJIC Straight x #6 FJIC 45	1
28		A4545-001	1/8 in. 100R7 (31DC) Hose x 75.5 in. OAL with 1GKCY-2-2 Bulkhead Fitting x 1/8 in. MNPT Straight (101CY-2-2)	2
29		A4547-001	1/8 in. 100R7 (31DC) Hose x 38.5 in. OAL with 1GKCY-2-2 Bulkhead Fitting x 1/8 in. MNPT Straight (101CY-2-2)	2
30		A4555-001	1-1/4 100R13 (E-Z BEND 4SK) x 148 in. OAL with #20 Female ORS Straight Swivel x #20 Female ORS 90 Swivel	1
31		2700-4-4	JIC Bulkhead Nut, -04	1
32			Adapter, Code 62 to ORB, #16 to #16, M12 Metric Hardware	2
33			90° #20 MORS x #16 MSAE Adapter	2
34		A4557-001	1-1/4 100R13 (E-Z BEND 4SK) x 171 in. OAL with #20 Female ORS Straight Swivel x #20 Female ORS Straight Swivel	1
35		A4556-001	1-1/4 100R13 (E-Z BEND 4SK) x 172 in. OAL with #20 Female ORS Straight Swivel x #20 Female ORS Straight Swivel	1
	AND MA	ARKERS		
		A4567-001	HT330 Tank Hydraulic Installation Kit	

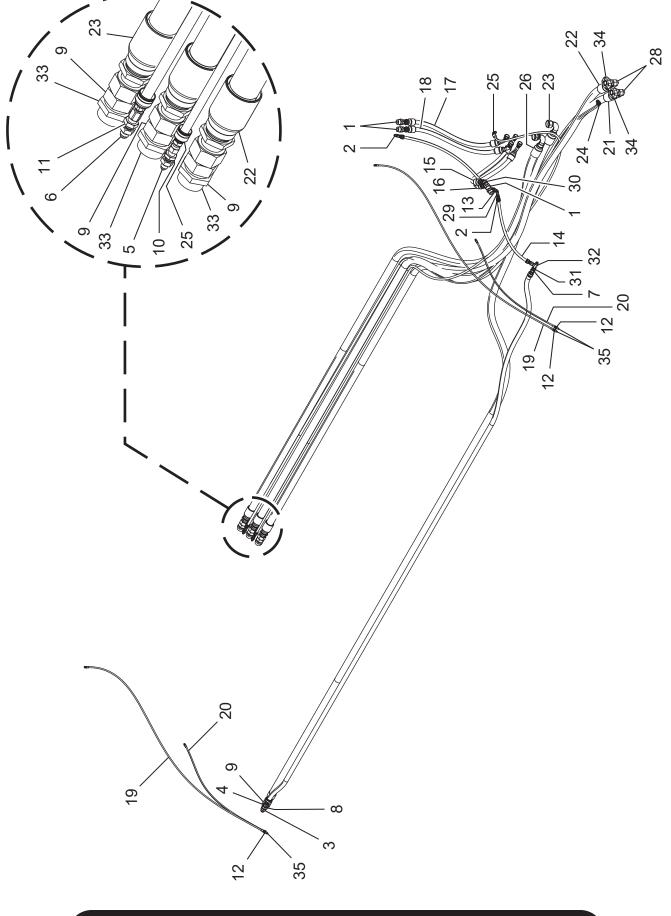




#### **HYDRAULIC SYSTEM HOSES AND FITTINGS - HT400**

Ref. No.	Kit Ref.	Part Number	Description	No. Req'd
1	•		3/4 in. JIC Swivel Nut x 3/4 in. Flare Tube End Swivel Nut 45 Degree Elbow	4
2	•		3/8 in. Flare Tube End x 7/16 in 20 SAE Male Flare Connector	2
3			JIC Bulkhead Union 12-12	1
4			JIC Bulkhead Union 20-20	1
5			JIC Bulkhead Union 4-4	1
6			JIC Bulkhead Union 6-6	1
7			Reducer, Straight, #8 SAE #12 SAE, Steel	1
8			JIC Bulkhead Nut, -12	1
9			JIC Bulkhead Nut, -20	4
10			JIC Bulkhead Nut, -04	1
11			JIC Bulkhead Nut, -06	1
12			Bulkhead Nut (1/8-27 NPSM)	4
13	•	A4528-001	3/8 in. 100R4 x 38 in. OAL with #6 FJIC Straight x #6 FJIC 45	1
14	•	A4529-001	3/8 in. 100R4 x 26 in. OAL with #6 FJIC Straight x #8 FJIC Straight	1
15	•	A4538-001	3/4 in. 100R17 x 28 in. OAL with #12 FJIC Straight x #12 FJIC 45 Elbow	1
16	•	A4539-001	3/4 in. 100R17 x 25 in. OAL with #12 FJIC Straight x #12 FJIC 45 Elbow	1
17	•	A4540-001	3/4 in. 100R17 x 36 in. OAL with #12 FJIC Straight x #12 FJIC 45 Elbow	1
18	•	A4541-001	3/4 in. 100R17 x 36 in. OAL with #12 FJIC Straight x #12 FJIC 45 Elbow	1
19	•	A4545-001	1/8 in. 100R7 (31DC) Hose x 75.5 in. OAL with 1GKCY-2-2 Bulkhead Fitting x 1/8 in. MNPT Straight (101CY-2-2)	2
20	•	A4547-001	1/8 in. 100R7 (31DC) Hose x 38.5 in. OAL with 1GKCY-2-2 Bulkhead Fitting x 1/8 in. MNPT Straight (101CY-2-2)	2
21	•	A4548-001	1-1/4 100R13 (E-Z BEND 4SK) x 207 in. OAL with #20 Female ORS Straight Swivel x #20 Female ORS Straight Swivel	1
22	•	A4549-001	1-1/4 100R13 (E-Z BEND 4SK) x 206 in. OAL with #20 Female ORS Straight Swivel x #20 Female ORS Straight Swivel	1
23	•	A4550-001	1-1/4 100R13 (E-Z BEND 4SK) x 183 in. OAL with #20 Female ORS Straight Swivel x #20 Female ORS 90 Swivel	1

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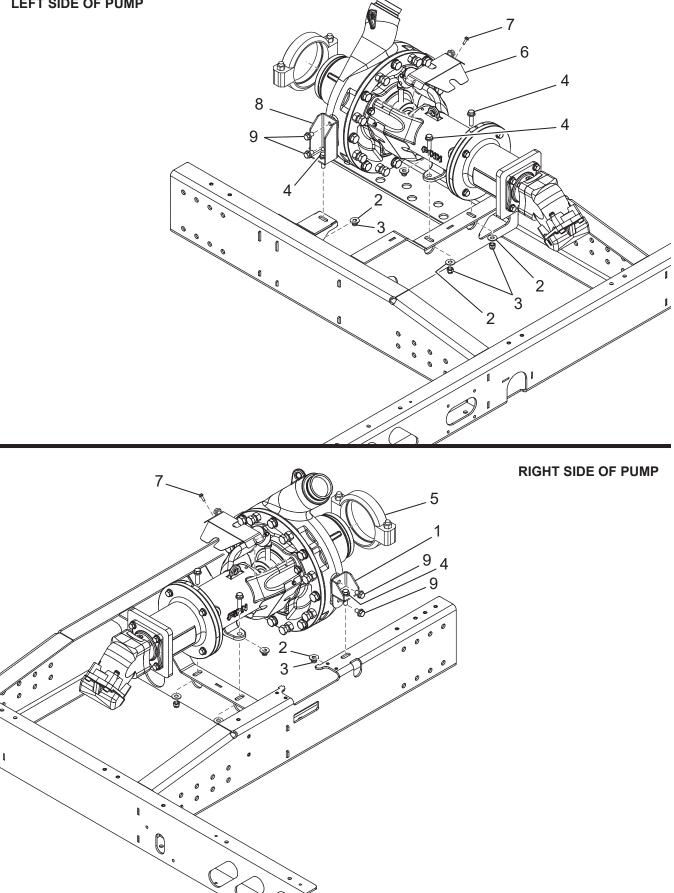
# **HYDRAULIC SYSTEM HOSES AND FITTINGS - HT400**

Ref. No.		Part Number	Description	
24	•	A4551-001	3/8 in. 100R17 X 171 in. OAL with #6 FJIC Straight x #6 FJIC 45	
25	•	A4552-001	1/4 in. 100R17 Hose x 208 in. OAL with #4 FJIC Straight x #4 FJIC Straight	1
26	•	A4553-001	1-1/4 100R4 x 211 in. OAL with #20 FJIC Straight x #20 FJIC 90	1
27	•	A4554-001	3/4 in. 100R4 x 164 in. OAL with #12 FJIC Straight x #12 FJIC Straight	1
28			NWO 90° #20 MORS x #16 MSAE Adapter	2
29	•		3/8 in. Flare Tube Side Outlet x 3/8 in. JIC Swivel Nut x 3/8 in. Flare Tube End Swivel Nut Run Tee	
30	•		3/4 in. JIC Swivel Nut x 3/4 in. Flare Tube End Swivel Nut 45 Degree Elbow	
31			Bulkhead Nut, -08, 3/4-16	1
32			Bulkhead Run Tee	
33			#20 ORFS Adapter, Straight Bulkhead	
34	•		Adapter, Code 62 to ORB, #16 to #16, M12 Metric Hardware	2
35	•		Zerk 1-4 UNF ST	4
		ARKERS		
		A 4560 001	UT400 Tank Hydraulia Installation Kit	

A4569-001

HT400 Tank Hydraulic Installation Kit



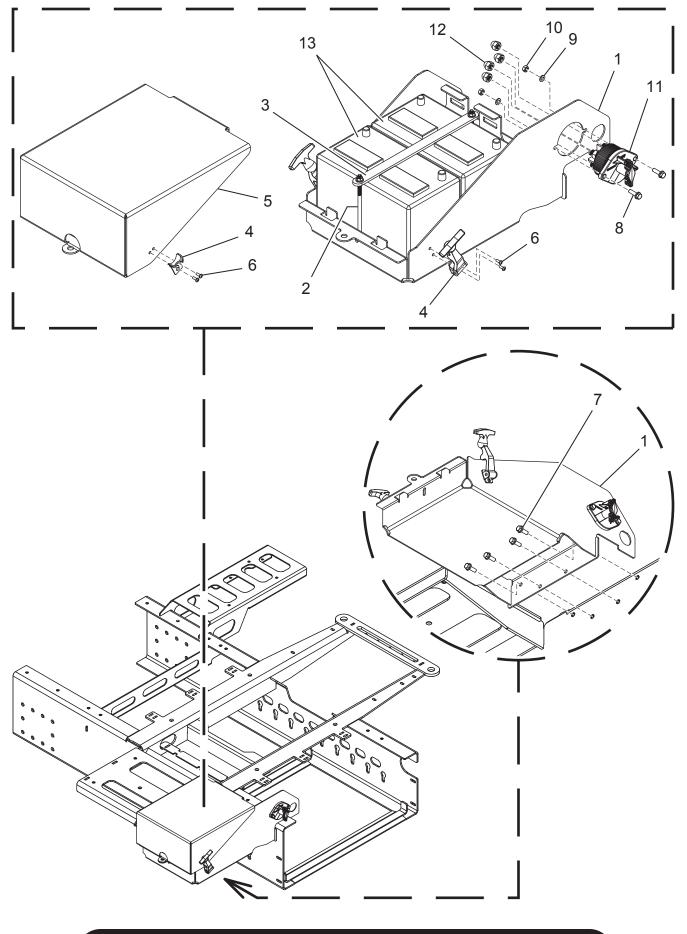


#### **PUMP INSTALLATION**

Ref. No.	Part Number	Description	No. Req'd
1	A3410-001	Pump Mount Bracket, RHS	1
2	•	1/2 Plain Washer, Regular - Type B (Inch )	4
3	•	1/2-13 Top Insert Type Prevailing Torque Type Hex Nut	4
4	•	1/2-13 UNC x 1.75 Hex Flange Screw - Regular Thread	4
5	041368	Fitting, IPS, Grooved, Flex Coupling, 6.00" IPS	1
6	A2204-001	Pump Shaft Guard	3
7	•	1/4-20 UNC x 0.75 Hex Flange Screw - Regular Thread	6
8	A3794-001	Pump Mount Bracket, LHS	1
9	•	1/2-13 UNC x 0.75 Hex Flange Screw - Regular Thread	4

#### KITS AND MARKERS



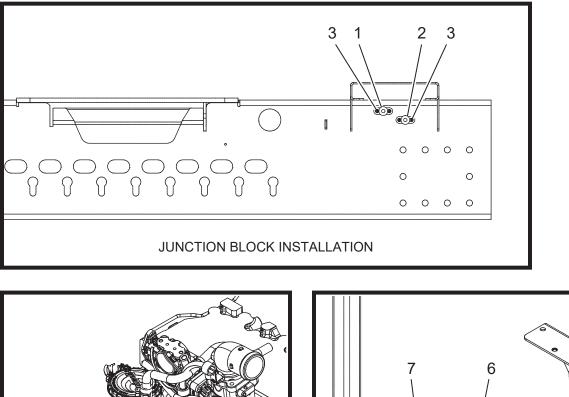


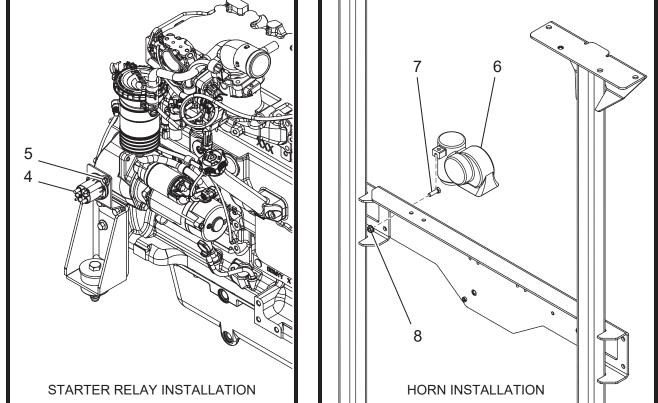
# **BATTERY BOX**

Ref. No.	Part Number	Description	No. Req'd
1	A3023-001	Battery Tray Assembly	1
2	A3024-001	J-Bolt, 0.3125 in 18 UNC x 5.75 OAL	2
3	A3025-001	Battery Hold-Down Strap	1
4	A3040-001	T-Handle Flexible Draw Latch	2
5	A3043-001	Battery Box Lid Assembly	1
6	•	#10-24 - 1/2 Cross Recessed Pan Head Machine Screw	8
7	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	4
8	•	5/16-18 UNC x 1 Hex Flange Screw - Regular Thread	2
9	•	5/16-Type B Plain Washer	2
10	•	5/16-18 Hex Nut	2
11	013250	Battery Disconnect Switch	1
12	013284	Hex Cap Nut, M12 x 1.75, Black Nylon	4
13	011851	Battery, 12V Group 27	2

#### KITS AND MARKERS









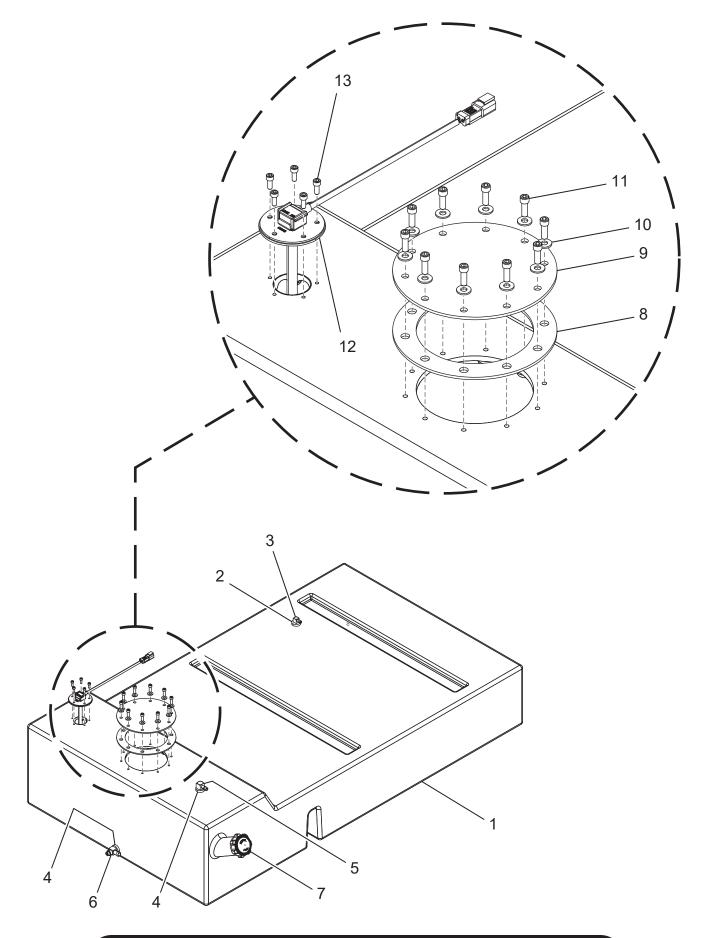
#### **MISCELLANEOUS ELECTRICAL COMPONENTS**

Ref. No.	o. Part Number Description		No. Req'd	
1			1	
2	A2082-001	Junction Block, 3/8 in. Stud, Black	1	
3	•	#10-24 - 3/4 Cross Recessed Pan Head Machine Screw - Type I	4	
4	075893	Starter Relay	1	
5	•	1/4-20 UNC x 0.5 Hex Flange Screw - Regular Thread	2	
6	A4661-001	Horn	1	
7	•	5/16-18 UNC - 1 Hex Cap Screw	1	
8	•	18 Hex Flange Nut	1	
NOT SHOW	'N			
	A4578-001	Cable, HT EM, Alternator	1	
	A4577-001	Cable, HT EM, Junction Negative	1	
	A4576-001	Cable, HT EM Junction Positive	1	
	A4575-001	Cable, HT EM, Engine Block	1	
	A4574-001	Cable, HT EM, Starter	1	
	A4573-001	Cable, HT EM, Battery Negative	1	
	A4572-001	Cable, HT EM, Battery Positive	1	
	A4571-001	Wire Harness, HT EM	1	

KITS AND MARKERS

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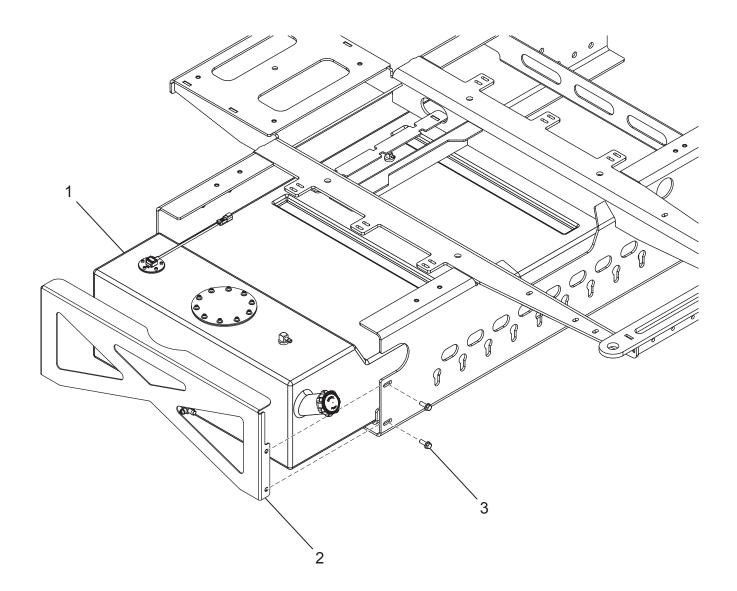
## FUEL TANK ASSEMBLY

Ref. No.	Kit Ref.	Part Number	Description	No. Req'd
1		A2523-001	Fuel Tank, Diesel, 50 Gallon	1
2		A2515-001	Fuel Tank Grommet Fitting, Small	1
3		A2516-001	Fuel Tank Fitting, 3/8	1
4		A2514-001	Fuel Tank Grommet Fitting, Large	2
5		A2517-001	Fuel Tank Fitting, 1/4	1
6		A2518-001	Fuel Tank Drain Valve	1
7		005726	Diesel Fuel Cap	1
8		A2526-001	Fuel Tank Cleanout Cover Gasket	1
9		A2525-001	Fuel Tank Cleanout Cover	1
10		•	1/4 - narrow - Type A Plain Washer (Inch )	10
11		•	1/4-20 UNC - 3/4 HS HCS Hexagon Socket Head Cap Screw	10
12		A2508-001	Fuel Tank Sending Unit, 11 in. with Gasket	1
13		•	#10-24 UNC - 1/2 HS HCS Hexagon Socket Head Cap Screw	5

#### KITS AND MARKERS

- A2524-001
- 1 Fuel Tank Assembly, Diesel, 50 Gallon
- Standard Hardware Item Available at your local hardware store.



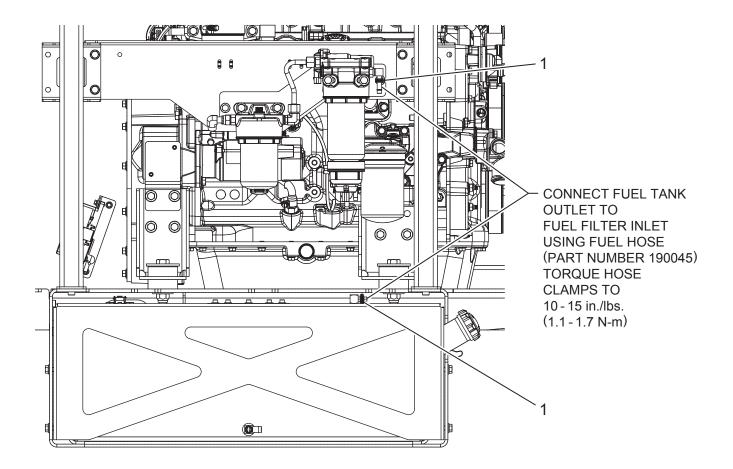


## FUEL TANK INSTALLATION

No.	Part Number	Description	No. Req'd
1	A2524-001	Fuel Tank Assembly, Diesel, 50 Gallon	1
2	A2998-001	Fuel Tank End Cover Plate Assembly	1
3	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	4

#### KITS AND MARKERS

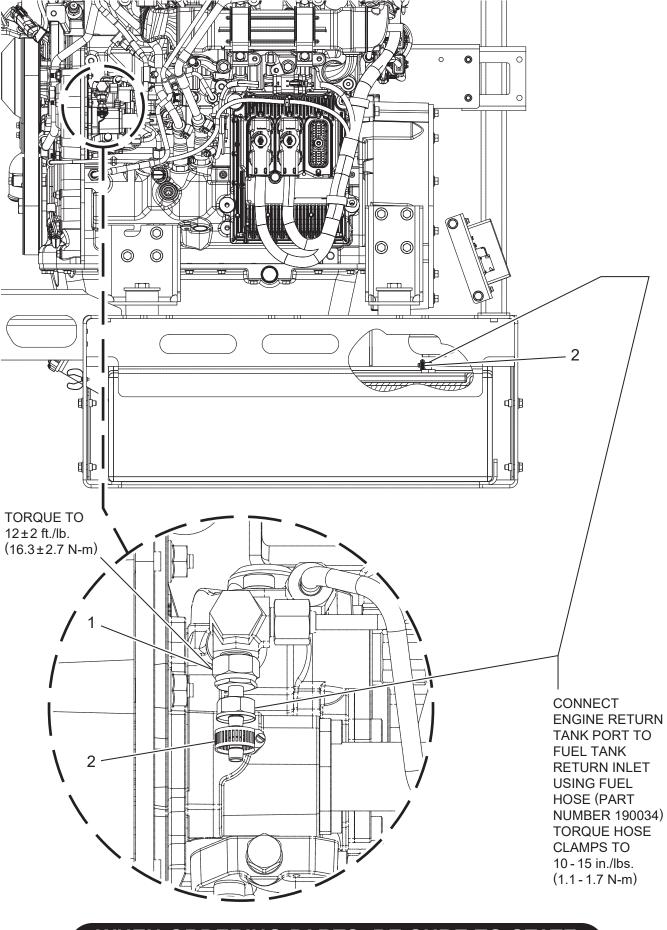
• Standard Hardware Item - Available at your local hardware store.



## **FUEL HOSE CONNECTIONS**

Ref. No.	Part Number	Description	No. Req'd
1	010321	5/8 in. Clamp Worm Gear	2

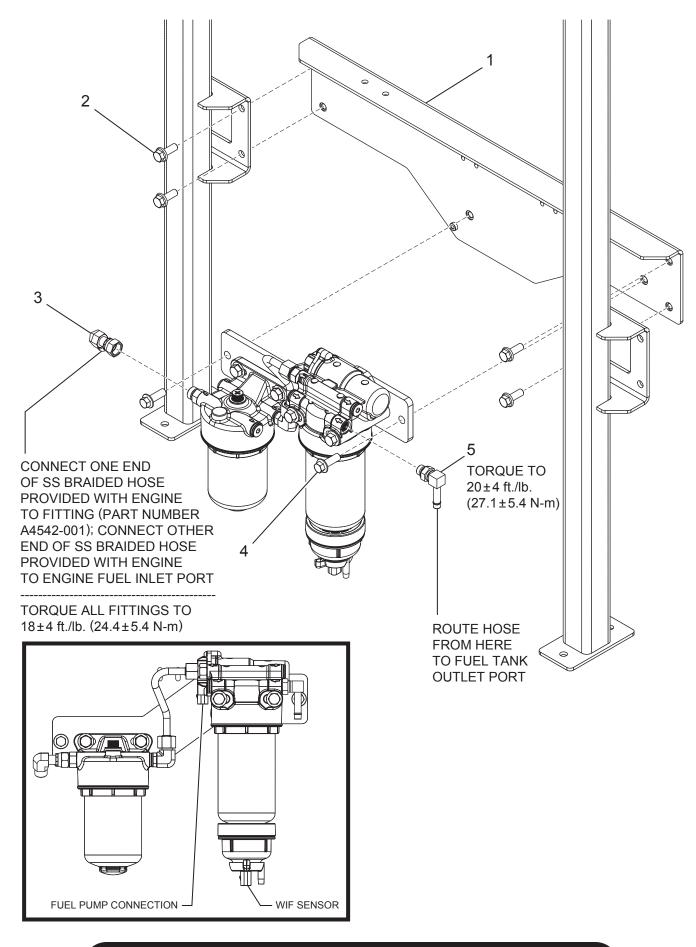




## FUEL TANK RETURN

Ref. No.	Part Number	Description	No. Req'd
1	A3826-001	Hose Fitting, #4 FORS Swivel x #4 Hose Barb	1
2	010321	5/8 in. Clamp Worm Gear	2





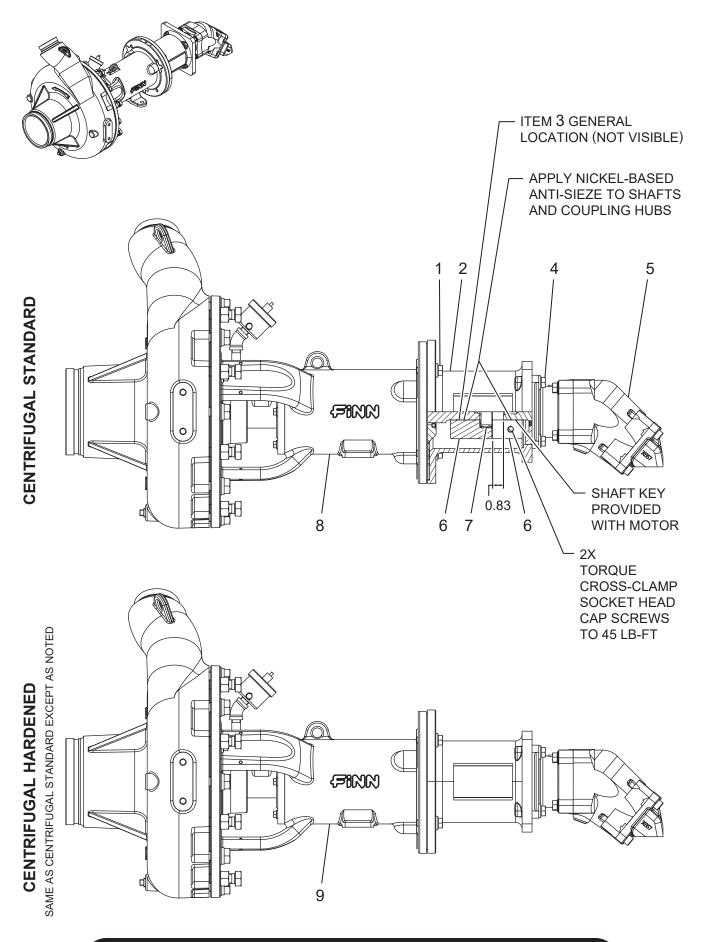
## FUEL PUMP AND FUEL FILTER

Ref. No.	Part Number	Description	No. Req'd
1	A2981-001	Filter Mount Bracket Assembly	1
2	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	4
3	A4542-001	90° Elbow Fitting, -6 MORFS x -6 FORFS Swivel	1
4	•	M10 x 1.5 x 30 Metric Hex Flange Screws	2
5	A3213-001	Elbow Adapter Fitting, M14 ORS x 0.375 I.D. Hose	1

#### KITS AND MARKERS

• Standard Hardware Item - Available at your local hardware store.





## WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE

142

## PUMP DRIVE ASSEMBLY - CENTRIFUGAL

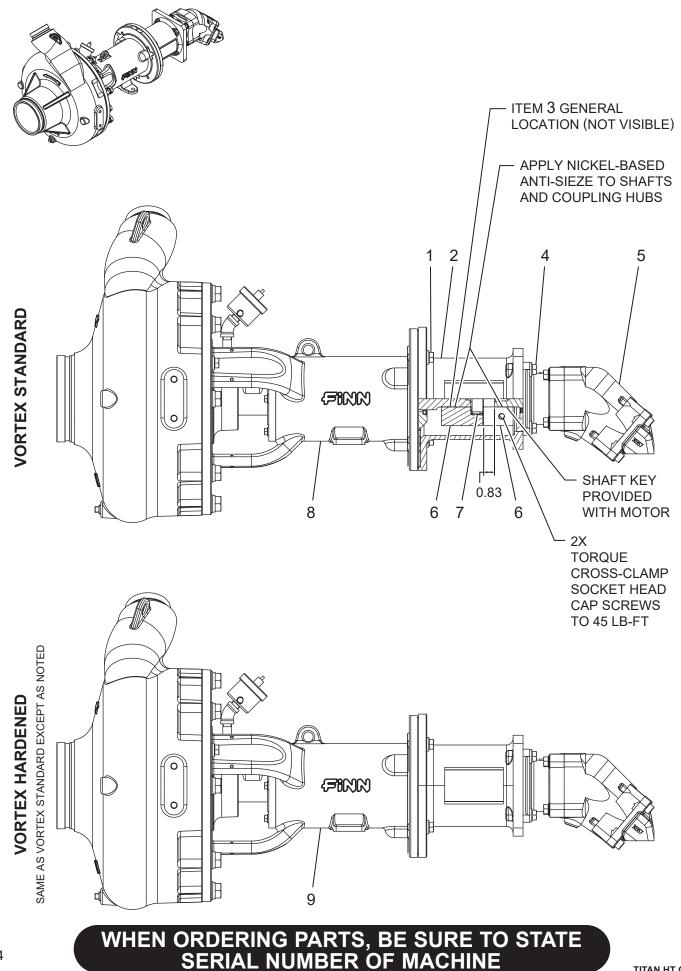
Ref. No.	Part Number	Description	No. Req'd
1	•	1/2-13 UNC x 1.5 Hex Flange Screw - Regular Thread	4
2	A2205-001	Pump Adapter	1
3	190124-32	5/16 x 5/16 x 2 Long Machine Key	1
4	•	1/2-13 UNC x 1.25 Hex Flange Screw - Regular Thread	4
5	A2392-001	Hydraulic Motor	1
6	A2645-001	Coupling Hub, Curve Jaw, 1.25 in. Bore	2
7	A2646-003	Coupling Spider, 48/60 Curved Jaw, Red	1
8	A3542-001	Pump Assembly, Centrifugal Standard	1
9	A3542-002	Pump Assembly, Centrifugal Hardened	1

#### KITS AND MARKERS

D - 6

• Standard Hardware Item - Available at your local hardware store.





TITAN HT OS0514

## PUMP DRIVE ASSEMBLY - VORTEX

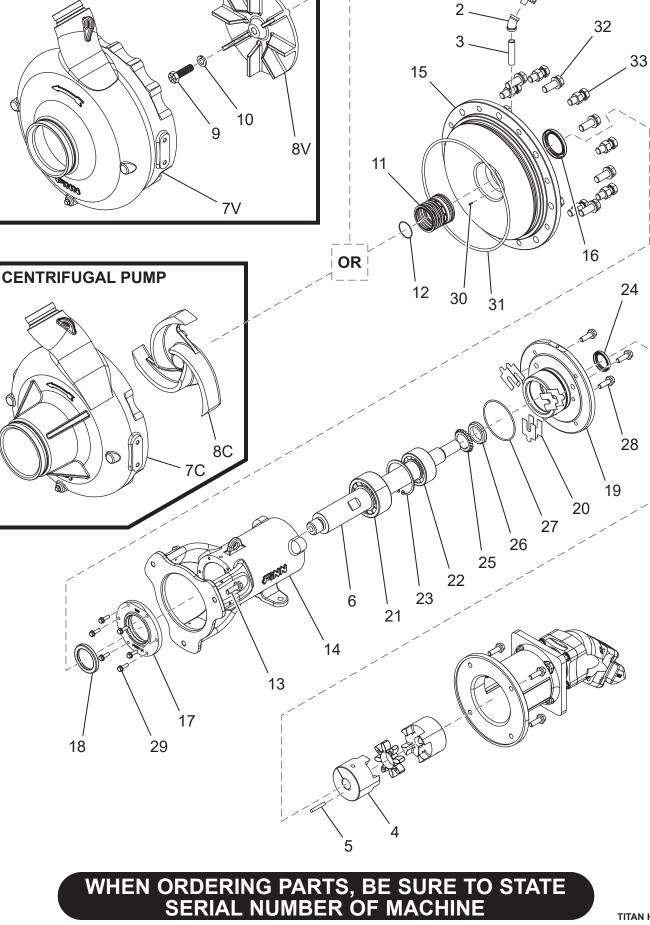
Ref. No.	Part Number	Description	No. Req'd
1	•	1/2-13 UNC x 1.5 Hex Flange Screw - Regular Thread	4
2	A2205-001	Pump Adapter	1
3	190124-32	5/16 x 5/16 x 2 Long Machine Key	1
4	•	1/2-13 UNC x 1.25 Hex Flange Screw - Regular Thread	4
5	A2392-001	Hydraulic Motor	1
6	A2645-001	Coupling Hub, Curve Jaw, 1.25 in. Bore	2
7	A2646-003	Coupling Spider, 48/60 Curved Jaw, Red	1
8	A3542-003	Pump Assembly, Vortex Standard	1
9	A3542-004	Pump Assembly, Vortex Hardened	1

#### KITS AND MARKERS

D . 6

• Standard Hardware Item - Available at your local hardware store.





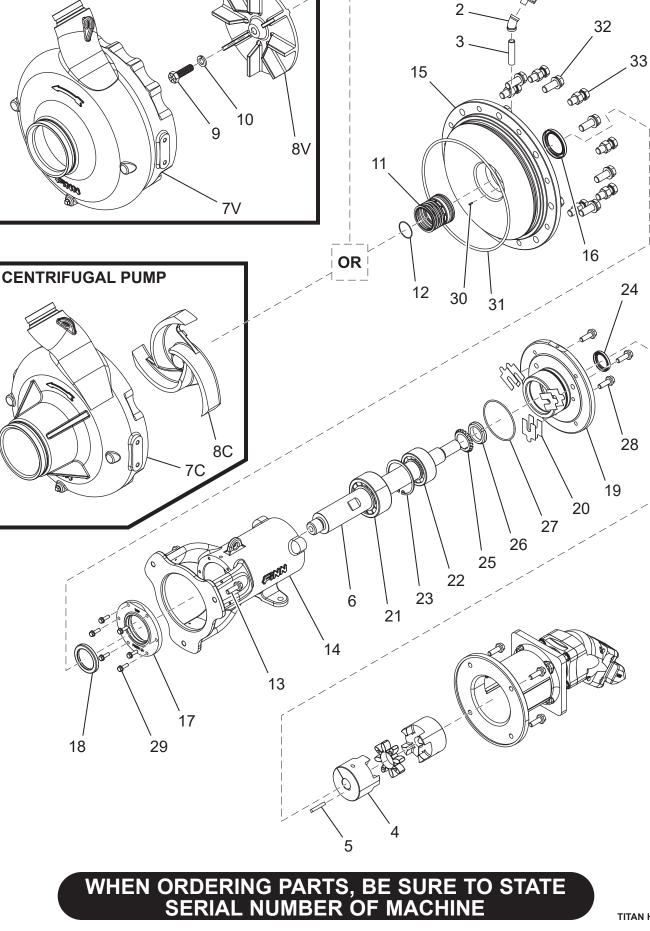
1

**VORTEX PUMP** 

## PUMP ASSEMBLY - COMPONENT BREAKDOWN

Ref. No.	Kit Ref.	Part Number	Description	No. Req'd
1		002383	Automatic Lubricator	1
2	▲■▼◆	160030	Pipe Elbow, 45 Degree, 3/8 Class 150	1
3		160392	Nipple 3/8 x 3 Long SCH 40	1
4		A2645-001	Coupling Hub, Curve Jaw, 1.25 in. Bore	2
5		190124-32	5/16 x 5/16 x 2 Long Machine Key	1
6		A2193-001	Pump Shaft	1
7V	▼	A2113-001	Pump Casing, Vortex	1
	•	A2113-002	Pump Casing, Vortex, Hardened	1
7C		A2104-001	Pump Casing, Centrifugal	1
		A2104-002	Pump Casing, Centrifugal, Hardened	1
8V	▼	A2064-005	Impeller, Vortex	1
	•	A2064-006	Impeller, Vortex, Hardened	1
8C		A2129-025	Impeller, Centrifugal	1
		A2129-026	Impeller, Centrifugal, Hardened	1
9	<b>▼</b> ♦	A3543-001	Impeller Retaining Bolt	1
10	<b>▼</b> ♦	•	Lockwasher	1
11		013131	Mechanical Seal	1
12		A3297-032	O-ring	1
13	▲■▼◆	•	1/2-13 UNC x 1.5 Hex Flange Screw - Regular Thread	3
14		A2197-001	Pump Frame	1
15		A2131-001	Seal Housing	1
		A2131-002	Seal Housing, Hardened	1
16		012733	Oil Seal	1
17		012734	Bearing Retaining Ring	1
18	▲■▼◆	012733	Oil Seal	1
19	▲■▼◆	A2192-001	Bearing Housing, Outboard	1
20	▲■▼◆	A4667-005	Slotted Shim, Size A, 0.005 Thick	3
	▲■▼◆	A4667-010	Slotted Shim, Size A, 0.010 Thick	3
21	▲■▼◆	012731	Bearing	1
22	▲■▼◆	006446	Bearing	1
23	▲■▼◆	A3541-001	Retaining Ring	1
24	▲■▼◆	A2206-001	Oil Seal	1
25	▲■▼◆	007366	Bearing Lockwasher	1
26	▲■▼◆	007367	Bearing Locknut	1
27	▲■▼◆	A3297-247	O-ring	1
28	▲■▼◆	•	1/2-13 UNC x 1.5 Hex Flange Screw - Regular Thread	3

Continued on next page



1

TITAN HT OS0514

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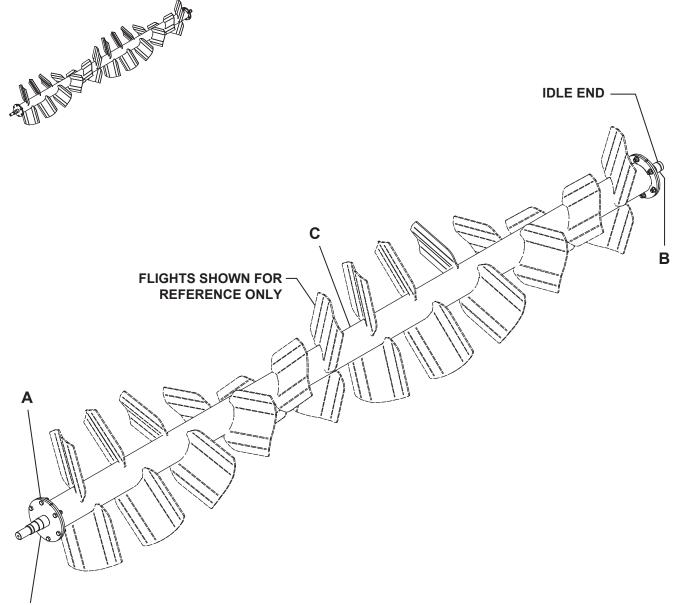
**VORTEX PUMP** 

## PUMP ASSEMBLY - COMPONENT BREAKDOWN

Ref. No.	Kit Ref.	Part Number	Description	No. Req'd
29		•	5/16-18 UNC x 1 Hex Flange Screw - Regular Thread	6
30		•	1/8 in. DIA. x 1/2 in. Roll Pin	1
31		A3297-455	O-ring	1
32		• •	3/4-10 UNC - 2 Hex Cap Screw 3/4 - Narrow - Type B Plain Washer (inch) 3/4 Regular Helical Spring Lock Washers (Inch Series)	8 8 8
33		•	3/4-10 UNC - 2 Hex Cap Screw 3/4-10 Hex Nut (Inch Series)	8 8
KITS /	AND MARK	ERS		

	A3542-001	Pump Assembly, Centrifugal Standard
	A3542-002	Pump Assembly, Centrifugal Hardened
▼	A3542-003	Pump Assembly, Vortex Standard
•	A3542-004	Pump Assembly, Vortex Hardened
•	Standard Har	dware Item - Available at your local hardware store.





**DRIVE END** 



## AGITATORS - HT330 AND HT400 WHOLE ASSEMBLY

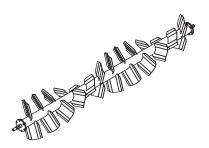
Part Number	Description
A2835-001	Agitator Assembly, 330, Mix, Steel
A2835-002	Agitator Assembly, 330, Mix, Stainless Steel
A2835-003	Agitator Assembly, 330, Grind, Steel
A2835-004	Agitator Assembly, 330, Grind, Stainless Steel
A2835-005	Agitator Assembly, 400, Mix, Steel
A2835-006	Agitator Assembly, 400, Mix, Stainless Steel
A2835-007	Agitator Assembly, 400, Grind, Steel
A2835-008	Agitator Assembly, 400, Grind, Stainless Steel

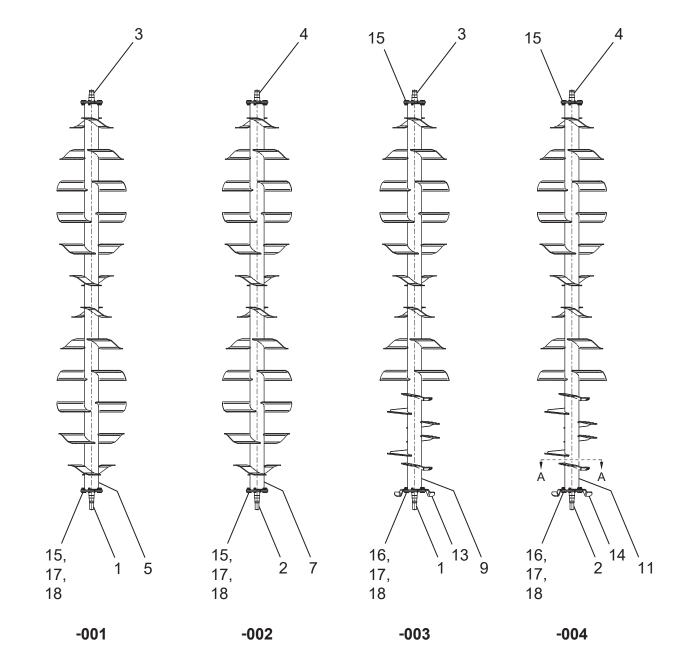
**NOTE:** The section below is the kit reference identification that will be used for the next few pages to identify the component parts in the assembly. The solid symbols are used to represent steel agitator assemblies and the line symbols are used for stainless steel assemblies. This complete list has been added to the manual for convenience and reference use.

	Kit Ref.	Part Number	Description	
кіт	S AND M	IARKERS		
		A2835-001	Agitator Assembly, 330, Mix, Steel	
	$\bigtriangleup$	A2835-002	Agitator Assembly, 330, Mix, Stainless Steel	
		A2835-003	Agitator Assembly, 330, Grind, Steel	
		A2835-004	Agitator Assembly, 330, Grind, Stainless Steel	
	▼	A2835-005	Agitator Assembly, 400, Mix, Steel	
	$\bigtriangledown$	A2835-006	Agitator Assembly, 400, Mix, Stainless Steel	
	•	A2835-007	Agitator Assembly, 400, Grind, Steel	
	$\diamond$	A2835-008	Agitator Assembly, 400, Grind, Stainless Steel	

**NOTE:** The items on this page are complete agitator assemblies. Components of the assembly are located in the Assembly Configuration sections.







## **AGITATORS - HT330 ASSEMBLY CONFIGURATION**

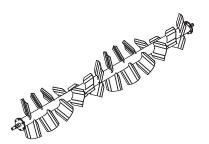
Ref. No.	Kit Ref.	Part Number	Description	No. Req'd -001	No. Req'd -002	No. Req'd -003	No. Req'd -004
1		A2827-001	Agitator Drive Flange Weldment, Steel	1	0	1	0
2	$ \square $	A2827-002	Agitator Drive Flange Weldment, Stainless Steel	0	1	0	1
3		A2827-003	Agitator Idle Flange Weldment, Steel	1	0	1	0
4	$ \square $	A2827-004	Agitator Idle Flange Weldment, Stainless Steel	0	1	0	1
5		A2828-001	Agitator Weldment - 330, Mix, Steel	1	0	0	0
6		A2828-002	Agitator Weldment - 400, Mix, Steel	0	0	0	0
7	$\bigtriangleup$	A2828-003	Agitator Weldment - 330, Mix, Stainless Steel	0	1	0	0
8		A2828-004	Agitator Weldment - 400, Mix, Stainless Steel	0	0	0	0
9		A2828-005	Agitator Weldment - 330, Grind, Steel	0	0	1	0
10		A2828-006	Agitator Weldment - 400, Grind, Steel	0	0	0	0
11		A2828-007	Agitator Weldment - 330, Grind, Stainless Steel	0	0	0	1
12		A2828-008	Agitator Weldment - 400, Grind, Stainless Steel	0	0	0	0
13		A2834-001	Agitator Flight, Bolt On, Steel	0	0	2	0
14		A2834-002	Agitator Flight, Bolt On, Stainless Steel	0	0	0	2
15		•	1/2-13 UNC - 1.5 Hex Cap Screw	12	12	8	8
16		•	1/2-13 UNC - 1.75 Hex Cap Screw	0	0	4	4
17		•	1/2 - Narrow - Type A Plain Washer	12	12	12	12
18		•	1/2-13 Metal Type Prevailing Torque Type Hex Nut	12	12	12	12

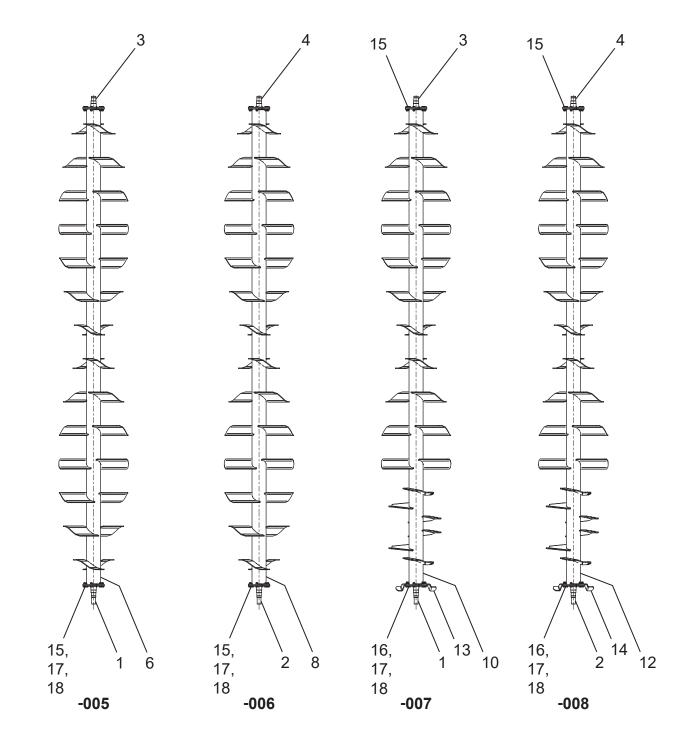
#### KITS AND MARKERS

- A2835-001 Agitator Assembly, 330, Mix, Steel
- △ A2835-002 Agitator Assembly, 330, Mix, Stainless Steel
- A2835-003 Agitator Assembly, 330, Grind, Steel
- A2835-004 Agitator Assembly, 330, Grind, Stainless Steel
- Standard Hardware Item Available at your local hardware store.

**NOTE:** The items on this page are part configurations of the HT330 complete agitator assemblies. Complete assemblies are located in the Whole Assembly section.







## **AGITATORS - HT400 ASSEMBLY CONFIGURATION**

Ref. No.	Kit Ref.	Part Number	Description	No. Req'd -005	No. Req'd -006	No. Req'd -007	No. Req'd -008
1	<b>▼</b> ♦	A2827-001	Agitator Drive Flange Weldment, Steel	1	0	1	0
2	$\bigtriangledown \diamondsuit$	A2827-002	Agitator Drive Flange Weldment, Stainless Steel	0	1	0	1
3	▼◆	A2827-003	Agitator Idle Flange Weldment, Steel	1	0	1	0
4	$\bigtriangledown \diamondsuit$	A2827-004	Agitator Idle Flange Weldment, Stainless Steel	0	1	0	1
5		A2828-001	Agitator Weldment - 330, Mix, Steel	0	0	0	0
6	▼	A2828-002	Agitator Weldment - 400, Mix, Steel	1	0	0	0
7		A2828-003	Agitator Weldment - 330, Mix, Stainless Steel	0	0	0	0
8	$\bigtriangledown$	A2828-004	Agitator Weldment - 400, Mix, Stainless Steel	0	1	0	0
9		A2828-005	Agitator Weldment - 330, Grind, Steel	0	0	0	0
10	•	A2828-006	Agitator Weldment - 400, Grind, Steel	0	0	1	0
11		A2828-007	Agitator Weldment - 330, Grind, Stainless Steel	0	0	0	0
12	$\diamond$	A2828-008	Agitator Weldment - 400, Grind, Stainless Steel	0	0	0	1
13	•	A2834-001	Agitator Flight, Bolt On, Steel	0	0	2	0
14	$\diamond$	A2834-002	Agitator Flight, Bolt On, Stainless Steel	0	0	0	2
15	▼▽◆◇	•	1/2-13 UNC - 1.5 Hex Cap Screw	12	12	8	8
16	$\diamond$	•	1/2-13 UNC - 1.75 Hex Cap Screw	0	0	4	4
17	▼▽◆◇	•	1/2 - Narrow - Type A Plain Washer	12	12	12	12
18	▼▽◆◇	•	1/2-13 Metal Type Prevailing Torque Type Hex Nut	12	12	12	12
KITS		RKERS					

#### KITS AND MARKERS

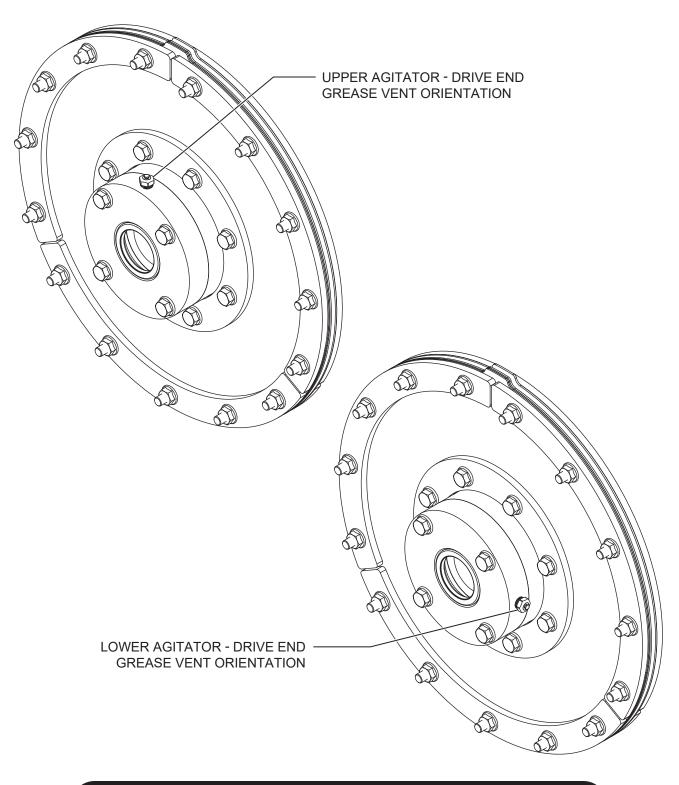
- ▼ A2835-005 Agitator Assembly, 400, Mix, Steel
- $\nabla$  A2835-006 Agitator Assembly, 400, Mix, Stainless Steel
- A2835-007 Agitator Assembly, 400, Grind, Steel
- A2835-008 Agitator Assembly, 400, Grind, Stainless Steel
- Standard Hardware Item Available at your local hardware store.

**NOTE:** The items on this page are part configurations of the HT400 complete agitator assemblies. Complete assemblies are located in the Whole Assembly section.

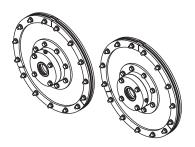


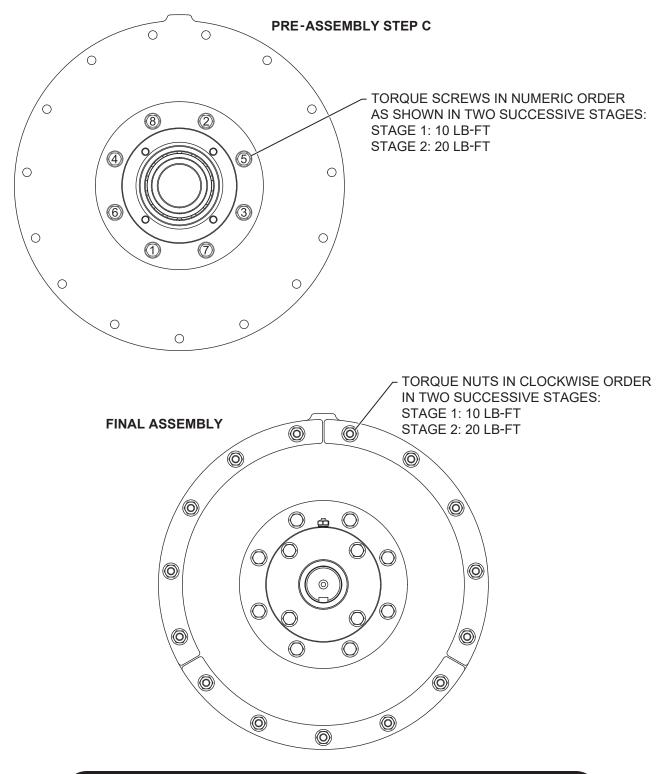
## **AGITATOR BEARING - DRIVE END**

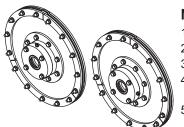




## **AGITATOR BEARING - DRIVE END**

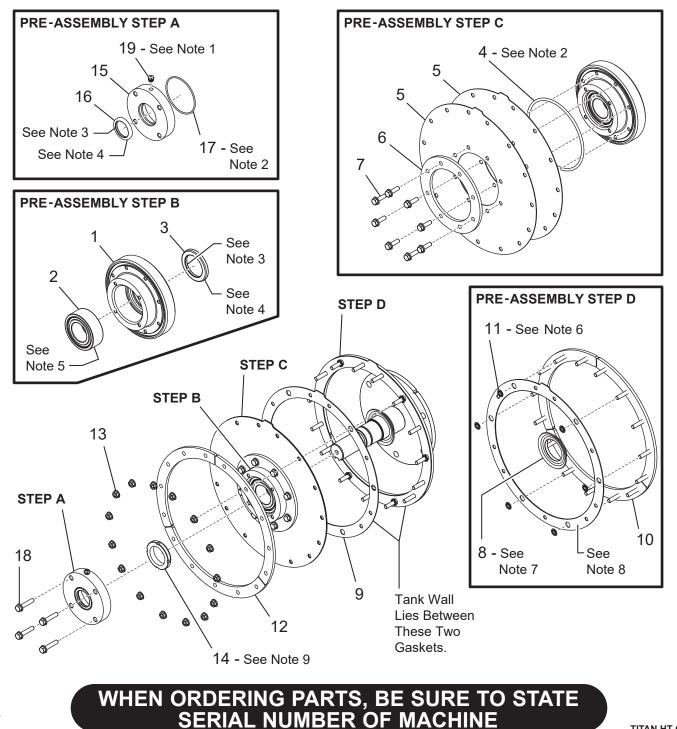






#### NOTES

- 1. APPLY LOCTITE 545 THREAD SEALANT OR SIMILAR PRIOR TO INSTALLATION.
- 2. LUBRICATE O-RING WITH MULTI-PURPOSE GREASE PRIOR TO INSTALLATION.
- 3. LUBRICATE SEAL LIPS WITH MULT-PURPOSE GREASE AFTER INSTALLATION.
- 4. NOTE SEAL ORIENTATION, LEAVE GARTER SPRING INTACT APPLY LOCTITE 640 OR SIMILAR TO SEAL OUTER DIAMETER PRIOR TO INSTALLATION.
- 5. APPLY NICKEL-BASED ANTI-SIEZE TO BEARING OUTER RACE AND HOUSING BORE PRIOR TO INSTALLATION.
- 6. INSTALL PUSH NUTS ON EXTERIOR OF TANK WALL.
- INSTALL EXCLUDER SEAL ON AGITATOR STUB SHAFT. LUBRICATE INSIDE DIAMETER WITH MULT-PURPOSE GREASE PRIOR TO INSTALLATION. LUBRICATE SEAL LIP WITH MULTI-PURPOSE GREASE AFTER INSTALLATION.
- 8. GASKET FACE, THIS SIDE MATES TO INTERIOR OF TANK WALL.
- 9. APPLY NICKEL-BASED ANTI-SIEZE TO NUT AND STUB SHAFT THREAD PRIOR TO INSTALLATION. TORQUE NUT TO 64-90 LB-FT.



## **AGITATOR BEARING - DRIVE END**

Ref. No.	Kit Ref.	Part Number De	No. Req'd escription -005	
1		A2363-001	Bearing Housing, Agitator	1
2		006445	Bearing	1
3		A4517-001	Oil Seal	1
4		A3297-362	O-ring	1
5		A2375-003	Flex Plate, Agitator Bearing, 0.050 in. Thick	2
6		A2372-001	Clamping Ring, Bearing Housing	1
7		•	5/16-18 UNC x 1 Hex Flange Screw - Regular Thread	8
8		A2307-001	Excluder Seal	1
9		A2371-003	Gasket	2
10		A2381-001	Retainer Ring Segment Assembly, Inner	3
11		A4518-001	Push Nut, Round, 5/16 in.	6
12		A2366-001	Retainer Ring Segment, Outer	3
13		•	18 Hex Flange Nut	15
14		007367	Bearing Locknut	1
15		A2359-001	Agitator Bearing Cover, Open End	1
16		A4516-001	Oil Seal	1
17		006595	O-ring	1
18		•	5/16-18 UNC x 1 Hex Flange Screw - Regular Thread	4
19		A4521-003	Grease Vent Fitting	1

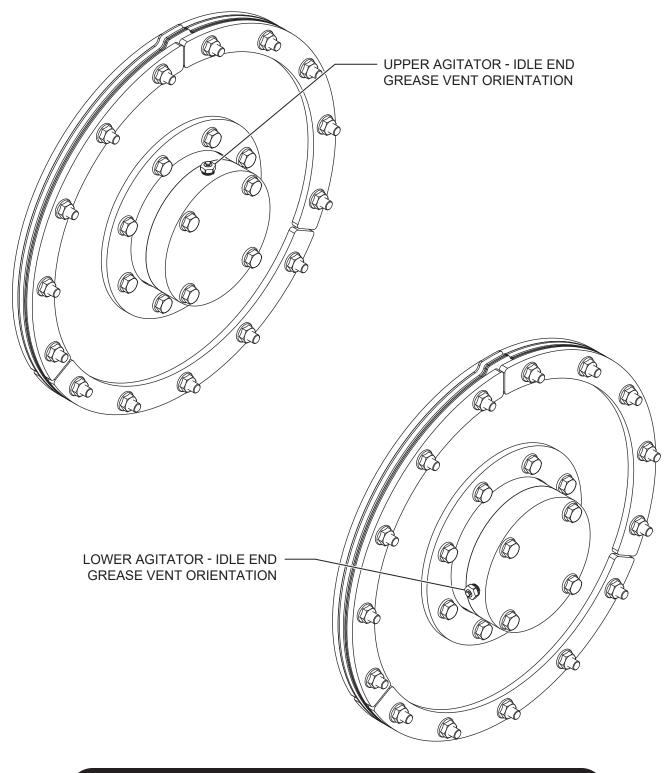
#### KITS AND MARKERS

- A4519-001 Agitator Bearing Assembly, Drive End
- Standard Hardware Item Available at your local hardware store.



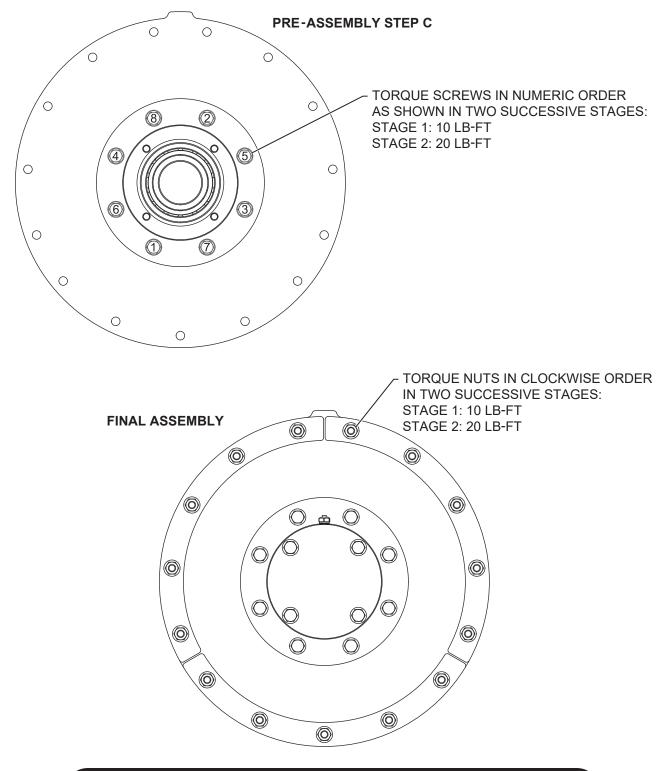
**AGITATOR BEARING - IDLE END** 

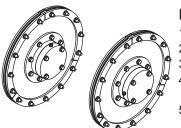




**AGITATOR BEARING - IDLE END** 

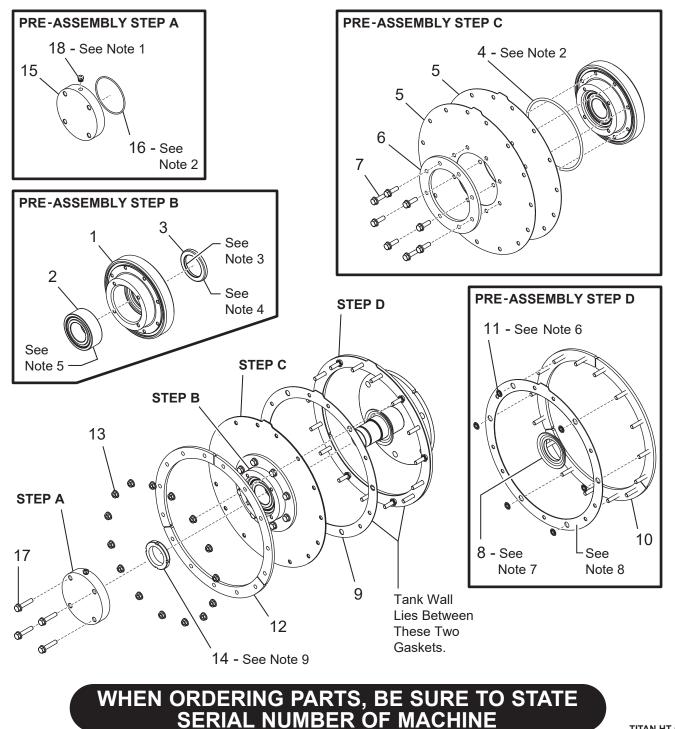






#### NOTES

- 1. APPLY LOCTITE 545 THREAD SEALANT OR SIMILAR PRIOR TO INSTALLATION.
- 2. LUBRICATE O-RING WITH MULTI-PURPOSE GREASE PRIOR TO INSTALLATION.
- 3. LUBRICATE SEAL LIPS WITH MULT-PURPOSE GREASE AFTER INSTALLATION.
- 4. NOTE SEAL ORIENTATION, LEAVE GARTER SPRING INTACT APPLY LOCTITE 640 OR SIMILAR TO SEAL OUTER DIAMETER PRIOR TO INSTALLATION.
- 5. APPLY NICKEL-BASED ANTI-SIEZE TO BEARING OUTER RACE AND HOUSING BORE PRIOR TO INSTALLATION.
- 6. INSTALL PUSH NUTS ON EXTERIOR OF TANK WALL.
- INSTALL EXCLUDER SEAL ON AGITATOR STUB SHAFT. LUBRICATE INSIDE DIAMETER WITH MULT-PURPOSE GREASE PRIOR TO INSTALLATION. LUBRICATE SEAL LIP WITH MULTI-PURPOSE GREASE AFTER INSTALLATION.
   CASKET FACE, THIS SIDE MATER TO INTERPOSE OF TANK WALL
- 8. GASKET FACE, THIS SIDE MATES TO INTERIOR OF TANK WALL.
   9. APPLY NICKEL-BASED ANTI-SIEZE TO NUT AND STUB SHAFT THREAD PRIOR
  - TO INSTALLATION. TORQUE NUT TO 64-90 LB-FT.



## **AGITATOR BEARING - IDLE END**

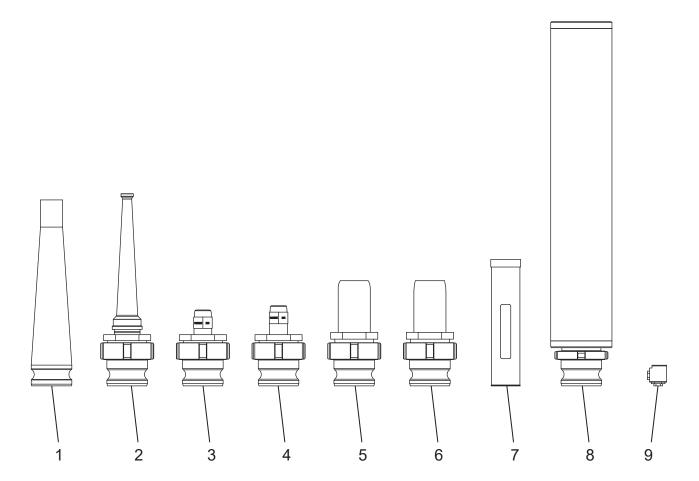
Ref. No.	Kit Ref.	Part Number D	No. escription Req'd	
1	▼	A2363-001	Bearing Housing, Agitator	1
2		006445	Bearing	1
3	$\blacksquare$	A4517-001	l Oil Seal	1
4	$\blacksquare$	A3297-362	2 O-ring	1
5	$\blacksquare$	A2375-003	B Flex Plate, Agitator Bearing, 0.050 in. Thick	2
6	$\bullet$	A2372-001	Clamping Ring, Bearing Housing	1
7	$\bullet$	•	5/16-18 UNC x 1 Hex Flange Screw - Regular Thread	8
8	$\bullet$	A2307-001	Excluder Seal	1
9	$\blacksquare$	A2371-003	3 Gasket	2
10	$\bullet$	A2381-001	Retainer Ring Segment Assembly, Inner	3
11	▼	A4518-001	Push Nut, Round, 5/16 in.	6
12	▼	A2366-001	Retainer Ring Segment, Outer	3
13	$\bullet$	•	18 Hex Flange Nut	15
14	$\blacksquare$	007367	Bearing Locknut	1
15	$\bullet$	A2373-001	Agitator Bearing Cover, Closed End	1
16	$\blacksquare$	006595	O-ring	1
17	▼	•	5/16-18 UNC x 1 Hex Flange Screw - Regular Thread	4
18	$\bullet$	A4521-003	B Grease Vent Fitting	1

#### KITS AND MARKERS

▼ A4520-	01 Agitator Bearing Assembly, Idle End	
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• Standard Hardware Item - Available at your local hardware store.

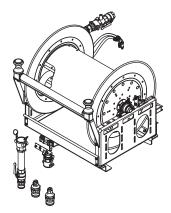






## TOOL KIT

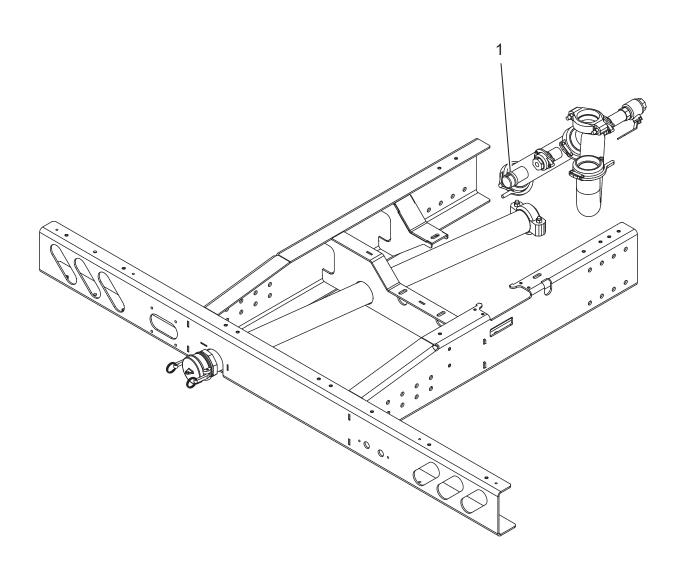
Ref. No.	Kit Ref.	Part Number	Description	No. Req'd
1		011775	Nozzle 2-1/2 in. Long Distance	1
2		A4955-001	Titan HT Long Distance Nozzle Assembly	1
		A4954-001	Adapter 2-1/2 in. NPT Aluminum	1
		160768	Reducer Bushing 2-1/2 in. x 1-1/2 in. Galvanized	1
		160309	Close Nipple 1-1/2 in. STD Galvanized	1
		001042	Brass Nozzle 1-1/2 in. Long Distance	1
3		A4956-001	Titan HT Wide Fan 50 Degree Nozzle Assembly, Small	1
		A4954-001	Adapter 2-1/2 in. NPT Aluminum	1
		160776	Reducer Bushing 2-1/2 in. x 1 in. Galvanized	1
		006604	Veejet Brass Nozzle	1
4		A4957-001	Titan HT Narrow Fan 25 Degree Nozzle Assembly, Smal	1
		A4954-001	Adapter 2-1/2 in. NPT Aluminum	1
		160776	Reducer Bushing 2-1/2 in. x 1 in. Galvanized	1
		006605	Veejet Brass Nozzle	1
5		A4958-001	Titan HT Narrow Fan 25 Degree Nozzle Assembly, Large	e 1
		A4954-001	Adapter 2-1/2 in. NPT Aluminum	1
		160769	Reducer Bushing 2-1/2 in. to 2 in.	1
		011860	Veejet Brass Nozzle, 2 in. NPT	1
6		A4959-001	Titan HT Wide Fan 50 Degree Nozzle Assembly, Large	1
		A4954-001	Adapter 2-1/2 in. NPT Aluminum	1
		160769	Reducer Bushing 2-1/2 in. to 2 in.	1
		011861	Veejet Brass Nozzle, 2 in. NPT	1
7		A2401-001	Automatic Lubricator Grease, 14 oz. Tube	1
8		A4924-018	LONGSHOT Nozzle Assembly, 1.125 in. DIA	1
		A4779-001	Adapter 2-1/2 in. NH Aluminum	1
		A4918-001	Gasket 2-1/2 in. NH	1
9		A5012-001	Grease FITTING, 5/8" BUTTON HEAD COUPLER	1
NOT S	HOWN			
		020365	Multi-Puprose Grease	1
		012681A	FINN Beige Aerosol Paint	1
		012305	Adhesive Label for Aerosol Can	1
		006513	Gasket, 2-1/2 in. Coupler	1
	AND MA	ARKERS		
	<b>L</b>	A4960-001	Titan HT Tool Kit	



#### NOTES

1. IF THE UNIT IS NOT EQUIPPED WITH A HOSE REEL, THE SYSTEM PLUMBING THAT WOULD LEAD TO THE HOSE REEL WILL BE CAPPED OFF. THAT CAP IS AN AVAILABLE REPLACEMENT PART LISTED HERE.

NO HOSE REEL OPTION



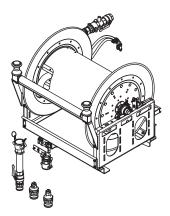


## HOSE REEL ASSEMBLY - NO HOSE REEL OPTION

Ref. No.	Part Number	Description	•	No. Req'd A4860-002	•
1	160263	Pipe Cap 1-1/2	1	0	0

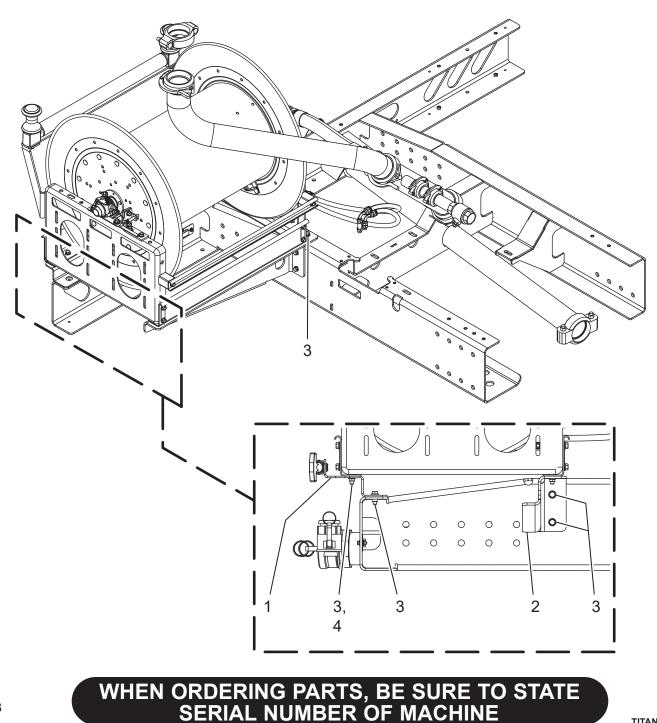


#### NOTES



1. KIT A4860-002, INSTALL OPTION - 1-1/4 IN. HOSE REEL ASSEMBLY SHOWN; KIT A4860-003, INSTALL OPTION - 1-1/2 IN. HOSE REEL SAME UNLESS NOTED

### **HOSE REEL OPTION**



## **HOSE REEL ASSEMBLY - HOSE REEL OPTION**

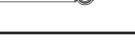
Ref. No.	Part Number	Description	No. Req'd A4860-002	No. Req'd A4860-003
1	A3753-001	Bracket, Hose Reel Mount, Bumper	1	1
2	A3755-001	Bracket, Hose Reel Mount, Gusset	1	1
3	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	10	10
4	•	Hex Flange Nut	4	4
NOT SHOW	WN			
	004832-20	Reel Hose, 1-1/4 in. x 200 ft.	1	0
	008315-20	Reel Hose, 1-1/2 in. x 200 ft.	0	1
	MARKERS			

#### KITS AND MARKERS

• Standard Hardware Item - Available at your local hardware store.

**NOTE:** The items on this page are part of the Hose Reel Assemblies covered in the following pages.





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# WHEN ORDERING PARTS, BE SURE TO STATE SERIAL NUMBER OF MACHINE

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2-See NOTE 2

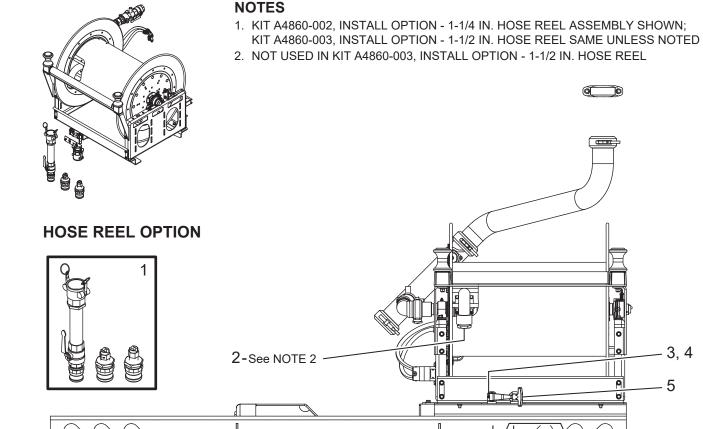
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**HOSE REEL TOP VIEW** 

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## **HOSE REEL ASSEMBLY - HOSE REEL OPTION**

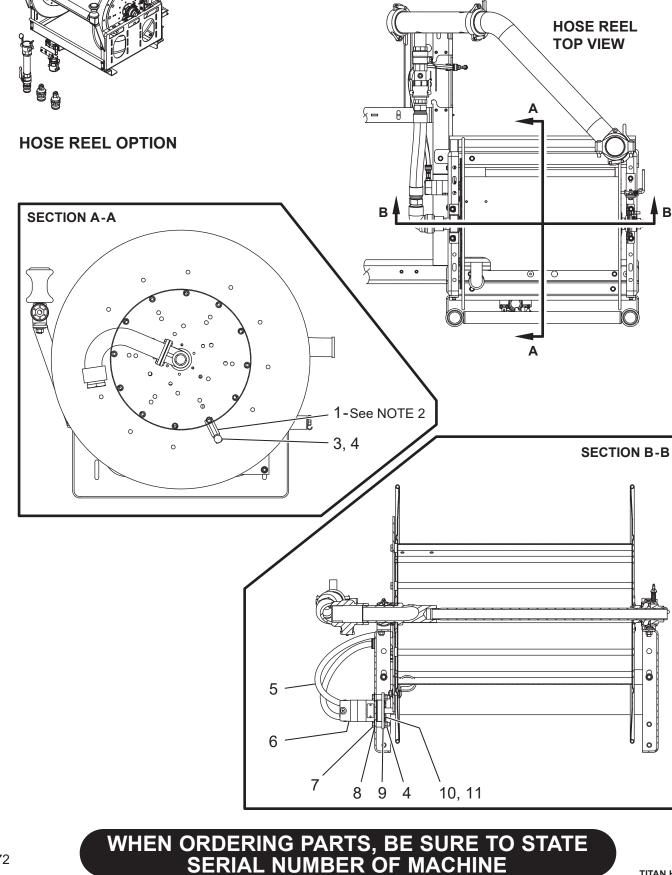
Ref. No.	Part Number	Description	No. Req'd A4860-002	No. Req'd A4860-003
1	011908	Remote Valve With Nozzles	1	1
	007740	Remote Valve Assembly	1	1
	007710	1-1/2 in. Full Port Ball Valve	1	1
	003243	1-1/2 in. Aluminum Nipple Pipe	1	1
	160309	1-1/2 in. Std. Close Nipple	1	1
	160763	2 in. x 1-1/2 in. Tank Bushing	1	1
	006102	2 in. Female Coupler	1	1
	001207	1-1/2 in. Male Brass Adapter	1	1
	006621	Wide Fan Nozzle Assembly	1	1
	006604	Wide Fan Nozzle	1	1
	006096	2 in. Male Adapter	1	1
	160761	2 in. to 1 in. Reducer Bushing	1	1
	006622	Narrow Fan Nozzle Assembly	1	1
	006605	Narrow Fan nozzle	1	1
	006096	2 in. Male Adapter	1	1
	160761	2 in. to 1 in. Reducer Bushing	1	1
2	160756	Bushing, Threaded, 1-1/2 in. x 1-1/4 in.	2	0
3	•	No. 10 - 24 - 1/2 Cross Recessed Pan Head Machine Screw - Type I	4	4
4	•	Hex Machine Screw Nut	4	4
5	A3758-001	Latch, T-Handle Flexible Draw	1	1
6	•	1/4-20 UNC x 0.75 Hex Flange Screw	2	2
7	•	Hex Flange Nut	2	2
8	A4853-001	Switch Plate, 2-Button, Waterproof	1	1
9	002158	1-1/2 in. Part D Brass Coupler	2	2
10	012747-02	Air Flush Hose Reel Tap	1	1
11	007710	1-1/2 in. Ball Valve In Full Port	1	1
12	001207	1-1/2 in. Male Brass Adapter	1	1
13	A4863-001	1-1/2 in. 300 PSI Hose Assembly, Reel Lead In	1	1
14	008212A	Hose Reel Assembly Without Motor	1	1
15	008210	1-1/2 in. Swivel Elbow 90°	1	1
NOT SHOWN				
	004832-20	Reel Hose, 1-1/4 in. x 200 ft.	1	0
	008315-20	Reel Hose, 1-1/2 in. x 200 ft.	0	1

#### **KITS AND MARKERS**

• Standard Hardware Item - Available at your local hardware store.

**NOTE:** The items on this page are part of the Hose Reel Assemblies covered in the previous and following pages.





#### NOTES

REEL

1. KIT A4860-002, INSTALL OPTION - 1-1/4 IN. HOSE REEL ASSEMBLY SHOWN; KIT A4860-003, INSTALL OPTION - 1-1/2 IN. HOSE REEL SAME UNLESS NOTED 2. USE ITEM 2 FOR KIT/OPTION A4860-003, INSTALL OPTION - 1-1/2 IN. HOSE

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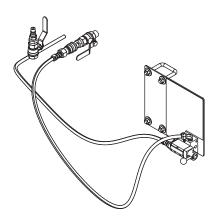
## **HOSE REEL ASSEMBLY - HOSE REEL OPTION**

Ref. No.	Part Number	Description	No. Req'd A4860-002	No. Req'd A4860-003
1	A4839-001	Clamp, Loop-Cushioned, 1.375 in. DIA	1	0
2	A4844-001	Clamp, Loop-Cushioned, 1.875 in. DIA	0	1
3	•	3/8-16 UNC - 1.25 Round Head Square Neck Bol	t 1	1
4	•	Hex Flange Nut	5	5
5	A4867-001	Hydraulic Hose and Fitting Kit, HT Hose Reel	1	1
6	008635	Hydraulic Motor	1	1
7	•	3/8-16 UNC - 1.75 Hex Cap Screw	4	4
8	•	3/8 - Regular - Type B Plain Washer	5	5
9	008634	Hydraulic Motor Mount	1	1
10	•	1/4-28 UNF - 0.75 Hex Cap Screw	5	5
11	•	1/4 Regular Helical Spring Lock Washer	5	5
NOT SHO	WN			
	004832-20	Reel Hose, 1-1/4 in. x 200 ft.	1	0
	008315-20	Reel Hose, 1-1/2 in. x 200 ft.	0	1
KITS AND	MARKERS			

• Standard Hardware Item - Available at your local hardware store.

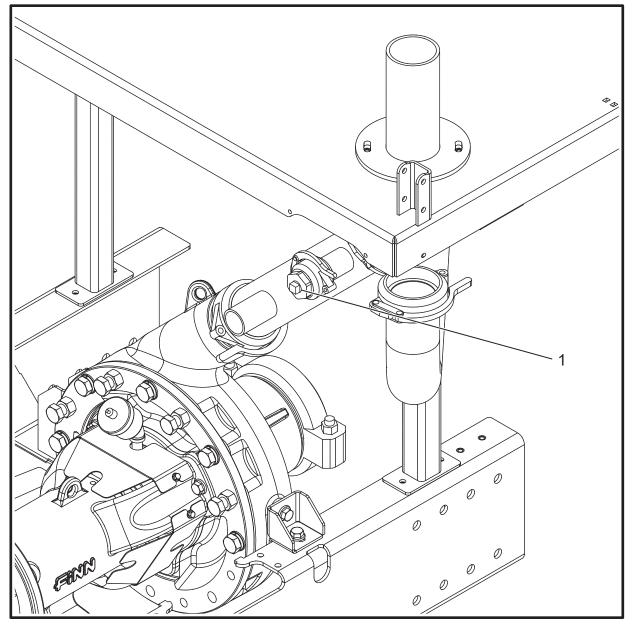
**NOTE:** The items on this page are part of the Hose Reel Assemblies covered in the previous pages.





### NO AIR FLUSH SYSTEM OPTIONS

A4870-001 OPTION - NO AIR FLUSH WITHOUT HOSE REEL



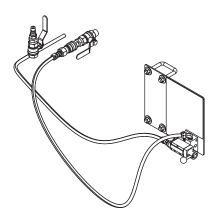
## AIR FLUSH SYSTEM - NO AIR FLUSH WITHOUT HOSE REEL

Ref. No.	Part Number	Description	•	•	No. Req'd A4870-003	•
1	160236	1/2 in. Pipe Plug Square Head	1	1	0	0

**NOTE:** The items on this page are part of the Air Flush Assemblies covered in the following pages.

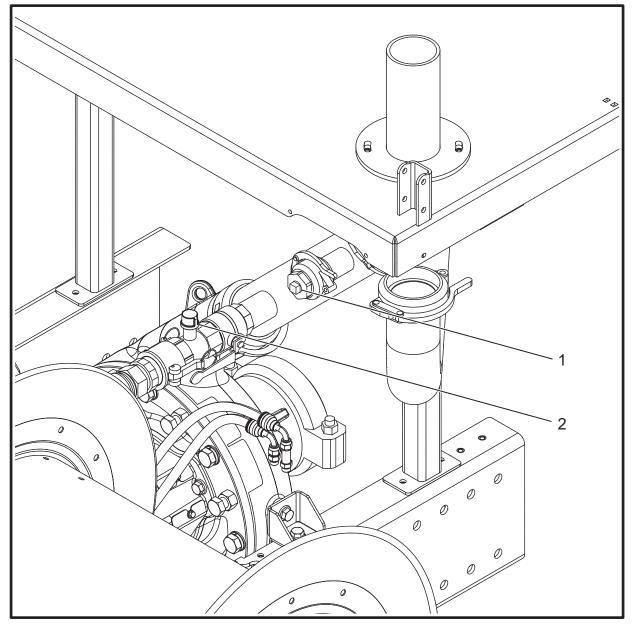
NOTE:	A4870-001 No Air Flush without Hose Reel option has no other parts except those shown on
	this page.





### NO AIR FLUSH SYSTEM OPTIONS

A4870-002 OPTION - NO AIR FLUSH WITH HOSE REEL

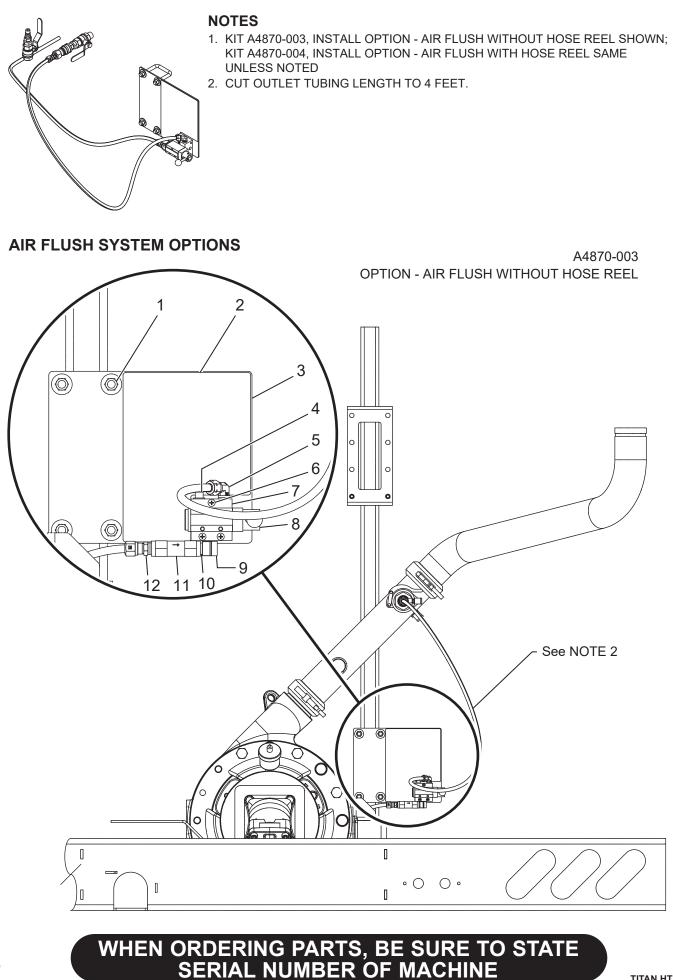


## AIR FLUSH SYSTEM - NO AIR FLUSH WITH HOSE REEL

Ref. No.	Part Number	Description	No. Req'd A4870-001	No. Req'd A4870-002	No. Req'd A4870-003	No. Req'd A4870-004
1	160236	1/2 in. Pipe Plug Square Head	1	1	0	0
2	160259	Pipe Cap 1/2	0	1	0	0

**NOTE:** The items on this page are part of the Air Flush Assemblies covered in the following pages.

NOTE:	A4870-002 No Air Flush with Hose Reel option has no other parts except those shown on this
	page.



### AIR FLUSH SYSTEM - AIR FLUSH WITH/WITHOUT HOSE REEL

Ref. No.	Part Number	Description	No. Req'd A4870-001	No. Req'd A4870-002	No. Req'd A4870-003	No. Req'd A4870-004
1	A4186-001	U-Bolt, Square, Zinc Steel, 2 in. x 2.63 in., 3/8-16 UNC	0	0	2	2
2	041446	Air Flush Operation Dec	al 0	0	1	1
3	A4876-001	Plate Assembly, Air Flus Valve Mount	h 0	0	1	1
4	•	1/4 in. Pipe Plug Square Head	0	0	1	1
5	012803	Brass Elbow	0	0	1	1
6	•	No. 10 - 24 - 1-1/2 Cros Recessed Fillister Head Machine Screw - Type I	s 0	0	3	3
7	012342	Valve Sub Plate	0	0	1	1
8	012800	Air Valve	0	0	1	1
9	007470	Hydraulic Fitting 1/4 in. x 90° Street Elbov	0 w	0	1	1
10	•	1/4 in. Standard Close Nipple	0	0	1	1
11	075302	Check Valve	0	0	1	1
12	041061	Male Connector, 3/8 in. Tube x 1/4 NPT	0	0	1	1

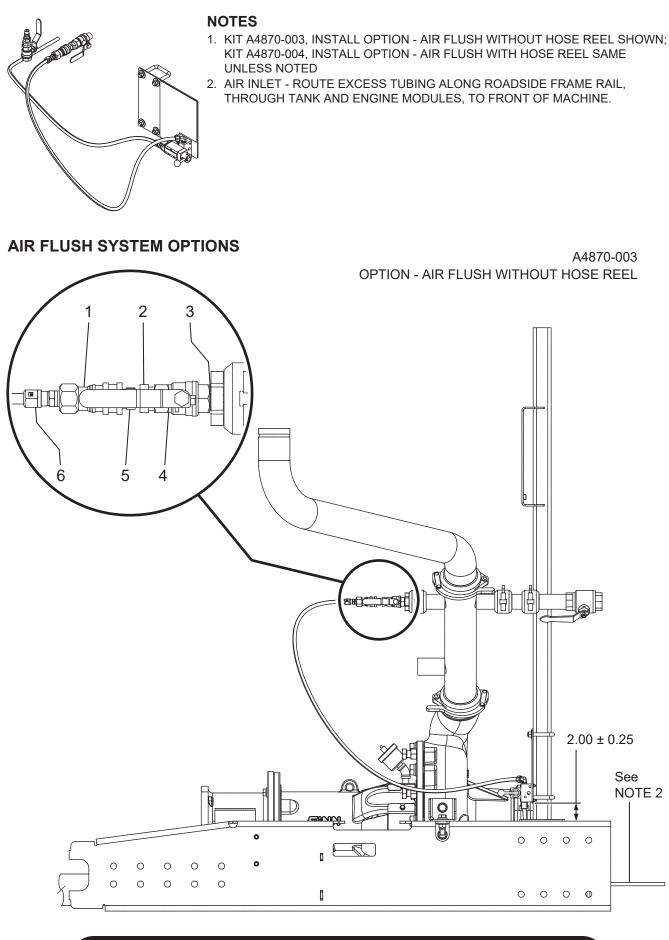
### KITS AND MARKERS

• Standard Hardware Item - Available at your local hardware store.

**NOTE:** The items on this page are part of the Air Flush Assemblies covered in the following pages.

**NOTE:** A4870-003 Air Flush System without Hose Reel and A4870-004 Air Flush System with Hose Reel options share the same identified parts except where noted.



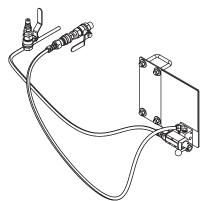


### AIR FLUSH SYSTEM - AIR FLUSH WITH/WITHOUT HOSE REEL

Ref. No.	Part Number		No. Req'd A4870-001	No. Req'd A4870-002	No. Req'd A4870-003	No. Req'd A4870-004
1	022484	1/4 in. Quick Coupler - Female	0	0	1	1
2	004741	1/2 in. NPT x 1/4 in. Mal NPT Straight	e 0	0	1	1
3	160301	1/2 in. Std. Close Nipple	0	0	1	1
4	070122	1/2 NPT Ball Valve	0	0	1	1
5	022302	1/4 in. Quick Coupler - Male	0	0	1	1
6	041061	Male Connector, 3/8 in. Tube x 1/4 NPT	0	0	1	1

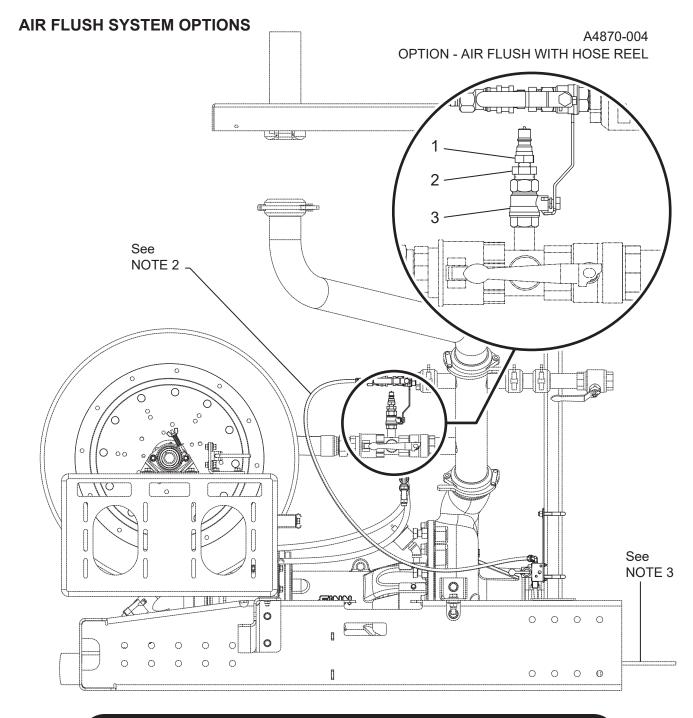
**NOTE:** The items on this page are part of the Air Flush Assemblies covered in the following pages.

**NOTE:** A4870-003 Air Flush System without Hose Reel and A4870-004 Air Flush System with Hose Reel options share the same identified parts except where noted.



NOTES

- KIT A4870-003, INSTALL OPTION AIR FLUSH WITHOUT HOSE REEL SHOWN; KIT A4870-004, INSTALL OPTION - AIR FLUSH WITH HOSE REEL SAME UNLESS NOTED.
- 2. CUT OUTLET TUBING LENGTH TO 4 FEET.
- 3. AIR INLET ROUTE EXCESS TUBING ALONG ROADSIDE FRAME RAIL, THROUGH TANK AND ENGINE MODULES, TO FRONT OF MACHINE.

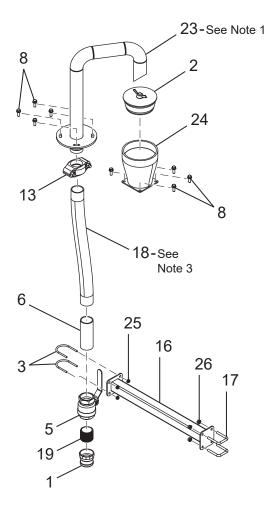


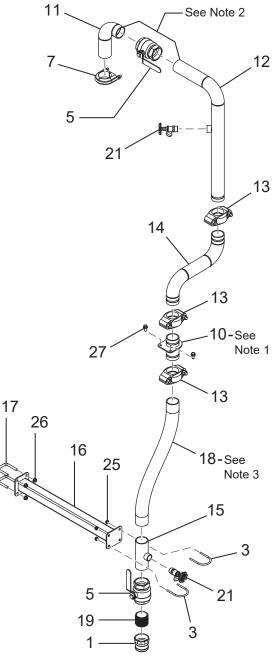
## AIR FLUSH SYSTEM - AIR FLUSH WITH HOSE REEL

Ref. No.	Part Number		No. Req'd A4870-001	No. Req'd A4870-002	No. Req'd A4870-003	No. Req'd A4870-004
1	022302	1/4 in. Quick Coupler - Male	0	0	0	1
2	004741	1/2 in. NPT x 1/4 in. Mal NPT Straight	e 0	0	0	1
3	070122	1/2 NPT Ball Valve	0	0	0	1

**NOTE:** The items on this page are part of the Air Flush Assemblies covered in the previous pages.

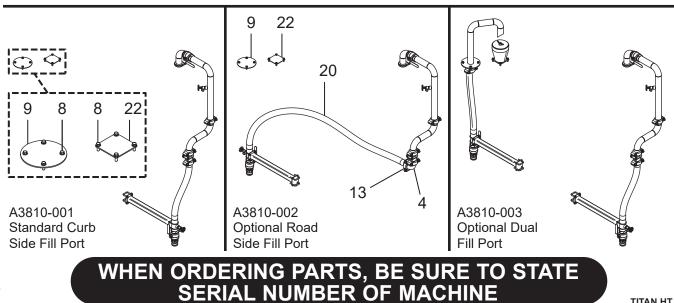
**NOTE:** The parts identified on this page are components of the A4870-004 Air Flush System with Hose Reel option. These parts do not appear in any of the other assembly options.





### NOTES

- 1. PLATFORM BULKHEADS (ITEMS 10 AND 23 ) INTERFACE WITH DECK LID, INSTALLED FROM THE TOP SIDE OF THE DECK.
- 2. ALL UNGASKETED NPT THREADED CONNECTIONS ARE TO BE ASSEMBLED WITH THREAD SEALANT (LOCTITE 565 THREAD SEALANT, LOCTITE 37615 SEALANT STICK OR EQUIVALENT).
- 3. AT INSTALLATION OF FILL PORT MOUNTS (ITEM 16), INSTALL HOSE ITEM NUMBER 18 (AS APPLICABLE) FIRST AND TIGHTEN U-BOLTS (ITEM 17) WHERE HOSE IS TAUT AND KINK FREE.



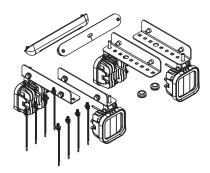
# **FILL PORT OPTIONS**

Ref. No.	Part Number	Description	No. Req'd A3810-001	No. Req'd A3810-002	No. Req'd A3810-003
1	006096	2 in. Male Brass Adapter	1	1	2
2	008470	6 in. Gripper Plug	0	0	1
3	011115	2 in. Pipe U-Bolt	2	2	4
4	012247	Fitting, IPS, Grooved, 90° Elbow, 2 in	n. O	1	0
5	012287	2 in. NPT Ball Valve	2	2	3
6	160584	2 in. Standard Close Nipple x 6 in. Lo	ong 0	0	1
7	A1316-010	U-Bolt, Cushioned, Steel, 2.37 in. I.D	. 1	1	1
8	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Thread	8	8	8
9	A3700-001	Cover Plate, Roadside Boom	1	1	0
10	A3802-001	Platform Bulkhead Weldment, 2 IPS	1	1	1
11	A3806-001	Fill Port Nozzle Weldment	1	1	1
12	A3807-001	Fill Port Riser Weldment	1	1	1
13	A3812-004	Fitting, IPS, Grooved, Rigid Coupling - 2.00 IPS	3	4	4
14	A3815-001	2 in. Fill Port Offset Weldment	1	1	1
15	A3817-001	Fill Port Adapter Weldment	1	1	1
16	A4185-001	Fill Port Mount Weldment	1	1	2
17	A4186-001	U-Bolt, Square, Zinc Steel, 2 in x 2.63 in., 3/8-16 UNC	2	2	4
18	A4219-001	Hose, 2 in. x 34 in. OAL, Fill Port	1	0	2
19	A4510-001	Pipe Nipple, Thick-Walled PVC, Ø2.00 in. NPT	1	1	2
20	A4512-001	Hose, 2 in. x 118 in. OAL	0	1	0
21	A4623-001	Valve, Globe, Brass, Flow-Adjustmen 3/4 in. NPT x 3/4 in. GHT	it, 2	2	2
22	A5406-001	Second Fill Port Cover, Solid	1	1	0
23	A5429-001	HT Platform Bulkhead Weldment	0	0	1
24	A5430-001	HT Deck Level Fill Port Weldment	0	0	1
25	•	Hex Flange Nut	4	4	8
26	•	3/8 - 16 Prevailing Torque Type Hex Flange Nut	4	4	8
27	•	3/8 - 16 UNC x 0.75 Hex Flange Screw - Regular Thread	2	2	2

### **KITS AND MARKERS**

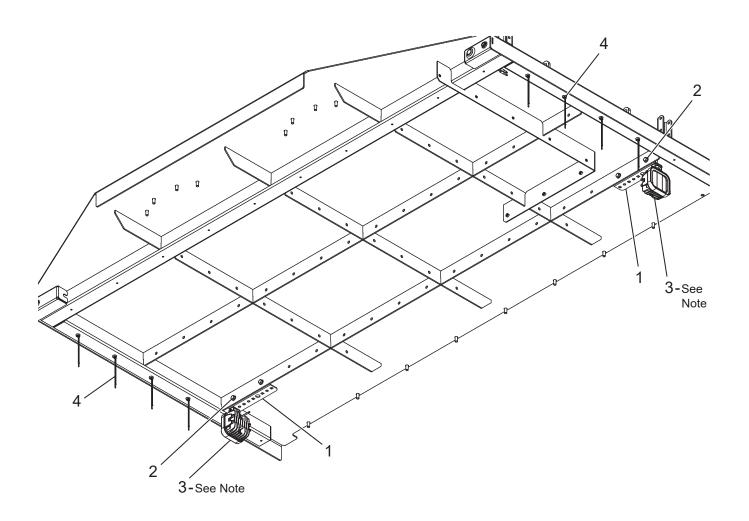
Standard Hardware Item - Available at your local hardware store.

NOTES



STAINLESS STEEL HARDWARE PROVIDED WITH ITEM. USE NICKEL-BASED ANTI-SIEZE AT INSTALLATION.

### WORK LIGHTING SYSTEM OPTION



ENGINE MODULE PLATFORM INSTALLATION



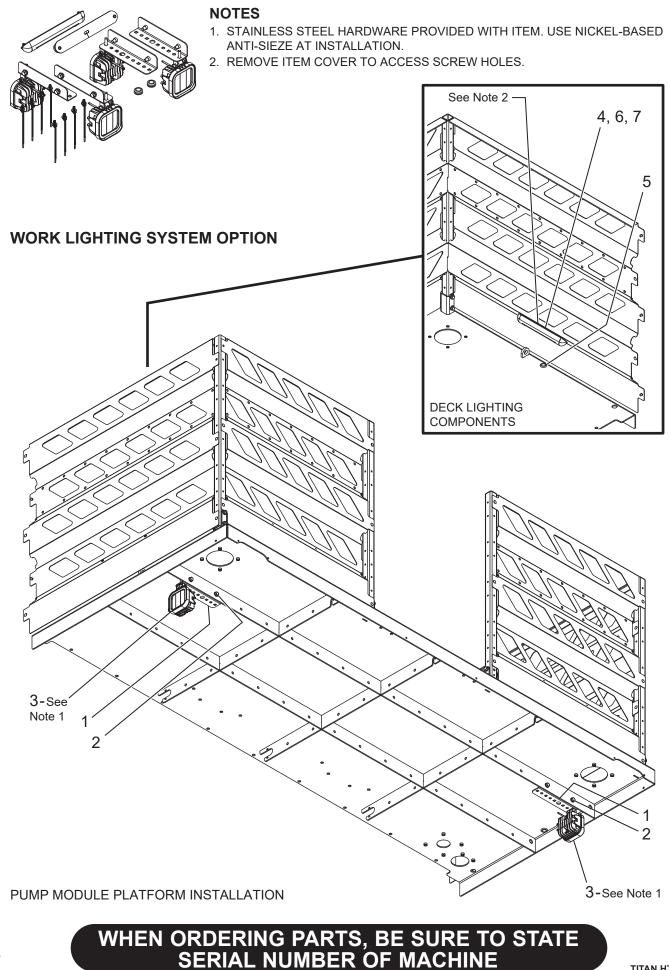
## WORK LIGHTING SYSTEM OPTION - ENGINE MODULE

Ref. No.	Part Number	Description	No. Req'd A4883-001	No. Req'd A4883-002
1	A3791-001	Bracket Assembly, Work Light	0	2
2	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Three	ead 0	4
3	A1456-001	Work Light, Flood Beam, LED, 12-24VDC	0	2
4	A4423-001	Cable Tie, Fir Tree Mount, 0.25 in. Hole x 6 in. Lo	ng 0	8

### KITS AND MARKERS

• Standard Hardware Item - Available at your local hardware store.





TITAN HT OS0514

### WORK LIGHTING SYSTEM OPTION - PUMP MODULE

Ref. No.	Part Number	Description	No. Req'd A4883-001	No. Req'd A4883-002
1	A3791-001	Bracket Assembly, Work Light	0	2
2	•	3/8-16 UNC x 1 Hex Flange Screw - Regular Th	read 0	4
3	A1456-001	Work Light, Flood Beam, LED, 12-24VDC	0	2
4	A3344-001	Work Light, LED Awning, 11 in.	0	2
5	004656	Rubber Grommet 5/8 in. ID x 7/8 in. OD	0	2
6	•	No. 8-32 - 7/8 Cross Recessed Pan Head Machine Screw - Type I	0	4
7	•	8-32 Hex Machine Screw Nut	0	4

### KITS AND MARKERS

• Standard Hardware Item - Available at your local hardware store.



# **SPARE PARTS LIST**

Part Number	Description	No. Req'd
A1123-001	Hydrauilc Filler Cap, Snap Ring, Strainer Basket	1
075747-C	High Pressure Hydraulic Filter Element	1
A3055-001	Low Pressure Hydraulic Filter Element	1
031506-1	Ignition Key	2
002439	3 in. Victaulic Pipe Gasket	2
006722	1-1/4 in. Victaulic Pipe Gasket	2
041368G	6 in. Victaulic Pipe Gasket	2
041371	Dust Cap 3 in. Main Tank Drain	1
005726	Fuel Cap	1
A4471-001	Harness, Coolant Level Switch	1
A4470-001	Coolant Level Sensor	1
A2021-001	Fuel Filter Element, Primary with Water Separator	1
A2022-001	Fuel Filter Element, Secondary	1
A1999-001	DEF Filter	1
A1927-001	Oil Filter	1
A1924-001	31AQ Alternator, 12V, 120A	1
A1926-001	3075 Starter Motor Kit	1
A1929-001	Filter Element, CCV	1
A1928-001	V-Belt, 1815mm Length	1
A3002-001	Filter Element, Primary Air, 4 in.	1
A3284-001	Filter Element, Safety Air, 4 in.	1
A4666-001	Monitor Rebuild Kit	1



## WIRING HARNESS REPLACEMENT LIST

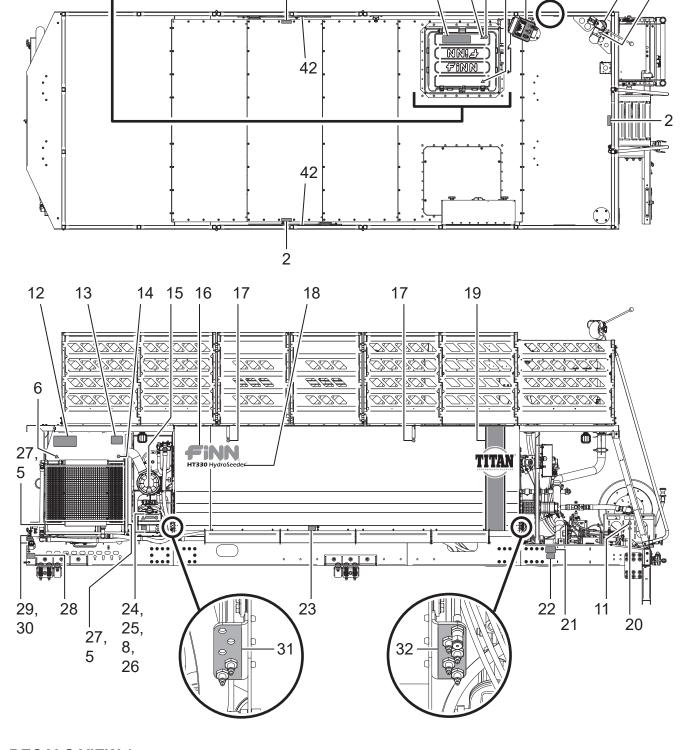
Part Number	Description	
HT330 Tank Module		
A4579-001	Wiring Harness, TITAN HT330 Tank	
A4580-001	Battery Cable, TITAN HT330 Tank, POS	
A4581-001	Battery Cable, TITAN HT330 Tank, NEG	
HT400 Tank Module		
A4582-001	Wiring Harness, TITAN HT400 Tank	
A4583-001	Battery Cable, TITAN HT400 Tank, POS	
A4584-001	Battery Cable, TITAN HT400 Tank, NEG	
Pump Module		
A4586-001	Wiring Harness, TITAN HT Pump Module	
A4587-001	Coaxial Cable, TITAN HT Radio Antenna	
A4301-001	Wiring Harness, Tool Box	
Control Box Assem	bly on Platform	
A4585-001	Wiring Harness, TITAN HT Platform Control Box	
A4311-001	Wiring Harness, VFX40m Display USB	



DECALS VIEW 1

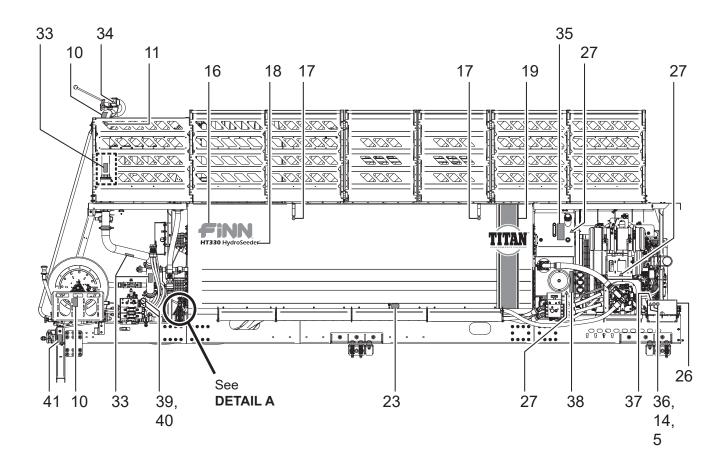
FINN INTEGRINDER

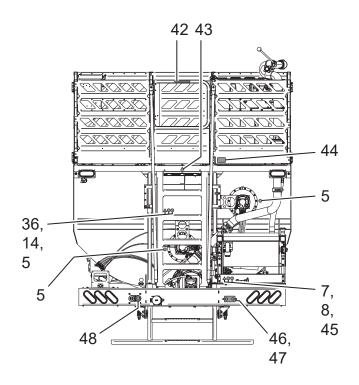


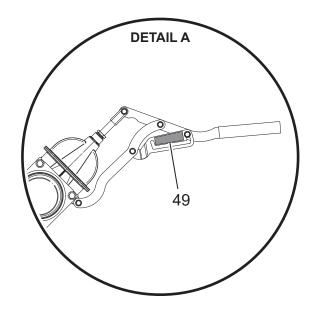


# DECALS

Ref. No.	Kit Ref.	Part Number	Description	No. Required
1		A4950-001	Integrinder Decal	1
2			Deck Load Information Decal	3
3			Danger Confined Space Hazard	1
4			Entanglement Hazard	1
5			Do Not Remove Guard	7
6			Remote Start Hazard	2
7			Hazard/Attention Decal	2
8			Read Manual	3
9			Caution Wear Ear Protection	1
10			Danger Electrocution Hazard	5
11			Service Weekly Decal	6
12			Burn Hazard and Radiator Handling	1
13			Decibel Warning 102dB	1
14			Do Not Pressure Wash	4
15			Notice "Do not use ether or starting fluid" Decal	1
16		023174	Decal Finn - Large, Red	2
17			Lift Points	4
18		A4612-001	HT330 HydroSeeder Decal	2
		OR		
		A4613-001	HT400 HydroSeeder Decal	2
19		A4611-001	Titan Badge	2
20			Hand in Gears Crush/Hazard	1
21			US Patent	1
22		A4691-001	Skid Nameplate/Serial Plate	1
23		A1304-001	Reflector, Amber	2
24			Poison Hazard	1
25			DEF Fluid Decal	1
26			DEF System Caution	2
27			Burn Hazard	6
28			Danger Fire Hazard/Fuel Safety	1
29			Diesel Fuel Decal	1
30			Ultra-Low-Sulfur Diesel Fuel Only Decal	1
31			Grease Zerk Grouping	1
32			Grease Zerk Grouping with Auto Lubricator	1







**DECALS VIEW 2** 



# DECALS

Ref. No.	Kit Ref.	Part Number	Description	No. Required
33			Warning Burn Hazard/Pump Operation	4
34			Spray Hazard	4
35			Hydraulic System Instructions	1
36			Electrical Shock Hazard	2
37			Do Not Step	1
38			Gauge Panel Decal	1
39			STANDBY Gauge Decal	1
40			SYSTEM Gauge Decal	1
41		A1304-002	Reflector, Red	2
42			Warning Fall Hazard	3
43			Fall Hazard	1
44		012260	Metal Plate "IMPORTANT"	1
45			Wear Eye Protection	1
46			Hose Reel Controls	1
47			Hose Reel Controls Blackout	1
48			Engine On/Off button	1
49			Valve Operation Decal	1
50		A3911-001	Control Panel Decal	1
NOT SH	IOWN			
			Wear proper eye protection Decal	1
			Auto Lubricator Decal	1
		A4951-001	Longshot Decal	1
		KERS		
		A4702-001	TITAN HT330/HT400 Decal Sheet	

**NOTE:** All of the decals listed and identified with a ▲ are part of Decal Kit A4702-001. To order replacements decals identified with a ▲, you must order the TITAN HT Decal Kit (A4702-001). Replacement decals and plates identified with a part number are not part of the decal kit and must be ordered separately.

