

12093

Parano NT

YRSPH W/ESH

# Advanced Farm Equipment, LLC

Customer PARAMOUNT

W/O#

S# 12053

Initials

Section

Initials

Section

**Plastic**

- Conveyors
- Airhead
- Sorting Table
- Trash Chute
- Stone Conveyor
- Bin

**Belting**

- Airhead
- Door
- Sides
- Pillow
- Diaphragm

- Cross Conv
- Stone Conv
- Rear Axle
- Star Rolls
- Distributor
- Vine Belt Shield
- Bin

**Oil Tank**

- Breathers
- Sight Guage
- Plumbed Per Specs
- In Tank Filters

**Rollers**

- Digger Bed
- Primary
- Secondary
- Cross Conv
- Side Convs
- Stone Conv
- Sorting Conv or Bin Fill
- Bulk Loader
- Stone Conveyor

**Sprockets**

- Primary
- Secondary
- Cross Conv
- Lower Side Conv
- Upper Side Conv
- Sorting Conv or Bin Fill
- Bulk Loader
- Stone Conv

**Gear Boxes**

- Engine 15W
- Airhead 15W
- Chain Drive 90W
- Grease All Bearings & Wear Plates
- Durst Gear Box W/Syntec Oil
- Breathers

★

P.T.

SECONDARY (FLIPPERS)

TC

N.H.

P.O.T.

N.H.

N.H.

N.H.

N.H.

TC

N.H.

N.H.

N.H.

# Advanced Farm Equipment, LLC

Customer

W/O#

S#

**Engine**

**Misc**

<u>N.H</u>	<input checked="" type="checkbox"/>	Radiator Hoses	<u>P.T</u>	<input checked="" type="checkbox"/>	Battery Cables
<u>N.H</u>	<input checked="" type="checkbox"/>	Heater Hoses	<u>N.H</u>	<input checked="" type="checkbox"/>	Control Cables
<u>N.H</u>	<input checked="" type="checkbox"/>	Engine Oil	<u>C.S</u>	<input checked="" type="checkbox"/>	Cover Wiring
		Radiator Fluid	<u>PT. N.H</u>	<input checked="" type="checkbox"/>	Decals
<u>N.H</u>	<input checked="" type="checkbox"/>	Anti-Corrosive	<u>PT/TC</u>	<input checked="" type="checkbox"/>	Serial Number Plates
<u>N.H</u>	<input checked="" type="checkbox"/>	Half Water	<u>N.H</u>	<input checked="" type="checkbox"/>	Slow Moving Vehicle Sign
<u>N.H</u>	<input checked="" type="checkbox"/>	Half Anti-Freeze	<u>N.H</u>	<input checked="" type="checkbox"/>	Service Kit
	<input type="checkbox"/>	Exhaust System		<input checked="" type="checkbox"/>	Tool Box
<u>N.H</u>	<input checked="" type="checkbox"/>	Air Intake System	<u>P.T.</u>	<input checked="" type="checkbox"/>	Digger Blades Per Spec
<u>P.T. T.G.</u>	<input checked="" type="checkbox"/>	Reversing Fan Option	<u>T.L</u>	<input checked="" type="checkbox"/>	Coulter Blades Per Spec
		<b>Hydraulics</b>	<u>P.T.</u>	<input checked="" type="checkbox"/>	Set Screws Tight
<u>P.T.</u>	<input checked="" type="checkbox"/>	Needle Valves	<u>P.T.</u>	<input checked="" type="checkbox"/>	AFE Table
<u>P.T.</u>	<input checked="" type="checkbox"/>	Check Valves	<u>P.T.</u>	<input checked="" type="checkbox"/>	Vine Belt Dist
<u>P.T.</u>	<input checked="" type="checkbox"/>	Flow Control Handles	<u><del>K.C</del></u>	<input checked="" type="checkbox"/>	Cross Dist
<u>P.T.</u>	<input checked="" type="checkbox"/>	Hydraulic Oil		<input type="checkbox"/>	Bearings
<u>P.T.</u>	<input checked="" type="checkbox"/>	Charge Pumps		<input type="checkbox"/>	Tires
<u>P.T.</u>	<input checked="" type="checkbox"/>	Proper Motor Rotation		<input type="checkbox"/>	Touch Up Paint
<u>P.T.</u>	<input checked="" type="checkbox"/>	Plugs In Pumps	<u>P.T.</u>	<input checked="" type="checkbox"/>	Chain & Sprockets To Spec
<u>P.T.</u>	<input checked="" type="checkbox"/>	Plugs In Manifolds			
	<input type="checkbox"/>				

**Notes / Comments:**

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Serial Number: #12053  
 Customer: Penwest Farm  
 Dealer: D. J. Iron

Do Not Use

Standard Equipment:		Special Notes
Standard Equipment:		
Full Width Digger Bed		
QSM 360 HP Cummins Engine		
4 Wheel Drive		
Rear Tires: 6600-43 x 25 Terra		
Front Tires: 1400-24 x 12 Tires		
40" Cross		
MS 50 Rear Motors		
Front Steps		RAISED 4" ABOVE ROCK CHAIN
Strobe Light		
Back-Up Beeper		
* 40" Air Head		
* 50" Air Head		
* 65" Air Head		XXXXXX
Leveling:		
* Mechanical		XXXXXX
* Electrical		
		Options
Engine		
* QSM-360 HP Cummins		
* QSM-400 HP Cummins		
* 9 Liter- 350 HP John Deere		
* 13.5 Liter 400 HP John Deere		
* QSX-450 HP Cummins		XXXXXX
* QSX-510HP Cummins		
* 13.5 Liter 500 John Deere		
* 13.5 Liter 450 John Deere		
Rear Tires		
* 6600-43 x 25 Terra		
* 73x5000 -32		XXXXXX PRIMEX
Front Tires:		
* 17.5 x 24		
* 1400 x 24 x 12		
* 4800 x 25 x 12		XXXXXX FIRESTONE DT: 23 DEGREE
Steering:		
* No Rear Steering		
* 37 Degree Rear Steering		XXXXXX EXTRA RAM ON FRONT STEERING (2)
Front Wheel Motors:		
* MS 18		
* MS 18 Plus 20%		XXXXXX WITH 10" SPACER (STONE BOX SIDE)
Rear Wheel Motors:		
* MS 50		
* MS 83		XXXXXX
Row Spacing		
* 32" with 30" chain		

2 cylinders.



Serial Number: \_\_\_\_\_

Customer: \_\_\_\_\_

Dealer: \_\_\_\_\_

* 34" with 32" chain		
* 36" with 33" chain	XXXXXX	Wiscon Frame
* 36" with 34" chain		
* 38" with 36" chain		
<b>Digger Blade Brackets</b>		
* Standard		
* Rock Guard	XXXXXX	
<b>Digger Blades</b>		
* Regular Straight		
* Extended Straight		
* Clod Blades		
* Sand Blades		
* Full Width Solid Blade 3/4" x 12"	XXXXXX	
* Regular Straight w/ Plastic Under		
* Full Width Solid 3/4" X 12 w/ Bevel		
* Full Width Solid 3/4" X 12 w/ Rod		
<b>Center Blades</b>		
* 12"		
* 15"	XXXXXX	ONLY 3 CENTER ONES NOT ON ENDS WELL
<b>Primary Bed</b>		
* Full Width Common Lift	XXXXXX	ENDS TO SIDE PLATES
* Full Width Side to Side Control		
<b>Primary Drive</b>		
* Top Drive	XXXXXX	WITH ANTI WRAP BARS STRAIGHT
* Reverse Drive		BEARINGS BETWEEN ROWS 1&2 AND
<b>Primary Bed Chains</b>		
* Single Width Belted	XXXXXX	3&4 NO BEARINGS ON ENDS OF VIS
* Double Width Belted		MOTORS
<b>Primary Belted Chains</b>		
* 45 mm All Straight Belted Chains		
* 45 mm 2 Down & 1 Straight Belted Chains	XXXXXX	NOFFSINGER
* 50 mm All Straight Belted Chains		
* 50 mm 2 Down & 1 Straight Belted Chains		
* 50 mm 1 Up & 2 Down Belted Chains		
* 56 mm All Straight Belted Chains		
Lockwood Style Chain, Double Belt Middle		
Double Width Single Belt Middle		
<b>Secondary Bed Chains</b>		
* Single Belted SRT		
* Full Belted SRT	XXXXXX	2 CHAIN BROKEMA
<b>Secondary Belted Chains</b>		
* 45 mm All Straight SRT		42MM ALL STRAIGHT SRT
* 45 mm 2 Down & 1 Straight SRT		
* 50 mm All Straight SRT		
* 50 mm 2 Down & 1 Straight SRT		
<b>2nd Secondary</b>		
* No 2nd Secondary	XXXXXX	



Serial Number: \_\_\_\_\_

Customer: \_\_\_\_\_

Dealer: \_\_\_\_\_

<b>*2nd Secondary Belted Chain</b>		
<i>2nd Secondary Belted Chain Width</i>		
*No Second Secondary	XXXXXX	
<b>*Single Belted Chains</b>		
<b>*Full Belted SRT</b>		
<i>2nd Secondary Belted Chains</i>		
*No 2nd Secondary	XXXXXX	
<b>*45mm All Straight SRT</b>		
<b>*45mm 2 Down &amp; 1 Straight SRT</b>		
<b>*50mm All Straight SRT</b>		
<b>*50mm 2 Down &amp; 1 Straight SRT</b>		
<i>2nd Secondary Star Table Options</i>		
* No Star Table Option		4 ROLLS IN SECONDARY EACH SIDE
* 5 Stars with Distributor Stars on Cross		SHORT SIDE 1 FULL ROLLER PAST REAR
* 6 Stars with 2 Adjustable Smooth Roll and Distributing stars on cross, extra star roll on left		CROSS AND LONG SIDE ALL 4 ROLLERS PAST REAR CROSS
<i>Primary Drive Option</i>		
<b>* 6,000 Hydraulic Motor w/Chain</b>		
<b>* 6,000 Hydraulic Motor w/Gear Box</b>		
* VIS Direct Drive Motor	XXXXXX	
<i>Secondary Drive Option</i>		
<b>* 6,000 Hydraulic Motor w/Chain</b>		
* 6,000 Hydraulic Motor w/Gear Box	XXXXXX	
<i>2nd Secondary Drive Option</i>		
*No Secondary	XXXXXX	
<b>*6,000 Hydraulic Motor w/Chain</b>		
<b>*6,000 Hydraulic Motor w/Gear Box</b>		
<i>Deviner Drive Option</i>		
<b>* 6,000 Hydraulic Motor w/ Chain</b>		
* 6,000 Hydraulic Motor w/ Gear Box	XXXXXX	
<i>Reversing Valve Option</i>		
<b>*No Reversing Valves</b>		
*Primary	XXXXXX	
*Secondary-Deviner	XXXXXX	
<b>*2nd Secondary</b>		
<i>Vibrator</i>		
*No Vibrator		2 SETS IN PRIMARY WITH SIDE LEFT AND RIGHT CONTROLS
<b>*Rotating Hydraulic Shaker Primary</b>		
<b>*Rocking Hydraulic Shaker Primary</b>		
<b>*Rotating Hydraulic Shaker Secondary</b>		
*Lift in Shaker	XXXXXX	
<i>Override Chain</i>		
*150 mm	XXXXXX	NOFFSINGER
<b>*180 mm</b>		
<b>*200 mm</b>		
<i>Vine Coulters</i>		



Serial Number: \_\_\_\_\_

Customer: \_\_\_\_\_

Dealer: \_\_\_\_\_

*Double Disk Coulters-Shorter Hub-Spudnik	XXXXXX	
*Kickers		
<i>Bulk Loader</i>		
*35"		
*40"	XXXXXX	
<i>Bulk Loader Chain</i>		
*40 mm All Straight SRT		36MM CHAIN
*45 mm All Straight SRT		NOFFSINGER
<i>Self Leveling System</i>		
*No Leveling System	XXXXXX	
*Hydraulic Rear Cross & Side Elevator		
<i>Rear Cross</i>		
*40" Cross		
*48" Cross	XXXXXX	
<i>Rear Cross Chain</i>		
*45 mm All Straight SRT		42MM STRAIGHT SRT
*50 mm All Straight SRT		NOFFSINGER
<i>Rear Cross Table Option</i>		
*No Star Table Chain Only		12 PT STARS ONLY
*Star Table	XXXXXX	LAST ROLLER TO BE CENTERED OVER SIDE ELEVATOR EDGE.
<i>Vine Belt Option-Top Side Elevator Return Conveyor</i>		
*No Vine Belt		
*40" Vine Belt w/Fan and Distributing Stars		
*50" Vine Belt w/Fan and Distributing Stars		
*65" Vine Belt w/Fan and Distributing Stars	XXXXXX	
*40" Vine Belt w/Fan and Stars w/Distributing Stars and Steel Roll leading onto Vine Belt		
*50" Vine Belt w/Fan and Stars w/Distributing Stars and Steel Roll leading onto Vine Belt		
*65" Vine Belt w/Fan and Stars w/Distributing Stars and Steel Roll leading onto Vine Belt		
<i>Lower Side Elevator Ellis Star Table</i>		
*No AFE Table	XXXXXX	
*AFE Table		
<i>M-Table</i>		
*No M-Table Option	XXXXXX	
*40" with Dist Stars		
*50" with Dist Stars		
*65" with Dist Stars		
<i>Sort Table or Bin Fill</i>		
*No Sort Table (if ordering Bin)	XXXXXX	
*35"		
*40"		
<i>Sort or Bin Fill Table Belted Chain</i>		
*No Belted Chain		36MM CHAIN
*45mm All Straight SRT		NOFFSINGER
*50mm All Straight SRT		
<i>Stone Conveyor</i>		
*Beltd Chain	XXXXXX	
*Hook Chain		

Serial Number: \_\_\_\_\_

Customer: \_\_\_\_\_

Dealer: \_\_\_\_\_

<b>Bin</b>		
*No Bin		
*Bin with In Tank Fill Conveyor and Sonic Control	XXXXXX	
*35" Fill Conveyor		
*40" Fill Conveyor		
*Flights on Belt, "V" shaped every 24"		
<b>Hydraulic Gauges</b>		
* Electronic	XXXXXX	
* Mechanical		
<b>Camera Systems:</b>		
<b>Deflector for Airhead Discharge:</b>		
<b>Flow Controls</b>		
*Flow Control with Actuator		
*Flow Control with Actuator and Gauge		
<b>Primary Plates: 4" extensions on outside</b>	XXXXXX	
<b>Raise Cab 12":</b>	XXXXXX	171" TO TOP OF MACHINE ANY POINT
<b>Stone Conveyor Flooring:</b>		
*Open under Airhead	XXXXXX	BELTED CHAIN PAN ON BOTTOM
*Solid under Airhead		28MM NOFFSINGER

**Comments:**

SIDE ELEVATOR CHAINS TO BE 42MM BROKEMA AND 4 SPROCKETS ON DRIVES  
 FLO CONTROL ON STONE CHAIN W/SWITCH IN CAB  
 FLO CONTROL ON TOP SIDE ELEVATOR W/SWITCH IN CAB  
 FLO CONTROL ON BOOM CHAIN W/SWITCH IN CAB  
 FLO CONTROL FOR BIN AND OUTER BOOM VISABLE FROM CAB OUT SIDE WINDOW  
 BIN SHUT OFF  
 REINFORCE BOOM PIVOT  
 CUT OUT TANK FOR VISABILITY (HELBACH STYLE)

Estimated Delivery Date:	Date:
Customer:	Date:
Dealer:	Date:
Manufacturer:	Date:

LARGE JOYSTICK TO HANDLE THE DOUBLE SHAKER  
 PLASTIC LINER IN TUB  
 EXTRA BRACE ON FRONT STEERING PIVOT  
 RUBBER TRI SHAKERS R7016003S KREPTANE  
 RAISE STEP ABOVE ROCK CHAIN 4"  
 FILL GAP IN ON SIDES OF PRIMARTY CHAIN  
 LARGER FUEL TANK 75 GAL ?  
 ADD SHUT OFF TO REAR CROSS AND REVERSING VALVE TO REAR CROSS STAR TABLE

*w/ Rod on TOP*



Serial Number: \_\_\_\_\_

Customer: \_\_\_\_\_

Dealer: \_\_\_\_\_

- FLOOR GREAT MATERIAL NOT TO GO UNDER ANY STEEL PIPES
  - TALLER SIDE TIN ON PRIMARY BED
  - LARGE HOLE FLOOR GREATING BY CAB
  - WIRES FOR TRUCK LIGHTS
  - WIRES FOR EXTRA MASTER AND BIN SHUT OFF BY HYDRO HANDLE
  - ADD STRAPS TO BOOTOM CROSS BRACES ON BOTTOM AND TOP SIDE ELEV..
  - ALL BELTED CHAIN CLIPS TO BE BOLTED
  - GUSSET ON MAIN FRAME BY REAR LADDER
- Please Indicate Noffsinger or Broekema (N=Noffsinger / B=Broekema)

Mfg.	Chain/Location	Qty	Rod Size	Width	MM	LPR	Pattern	Covering
	Primary							
	Secondary							
	Deviner							
	Cross							
	Lower Side							
	Upper Side							
	BulkLoader							
	Bin Fill							
	Belted Stone							

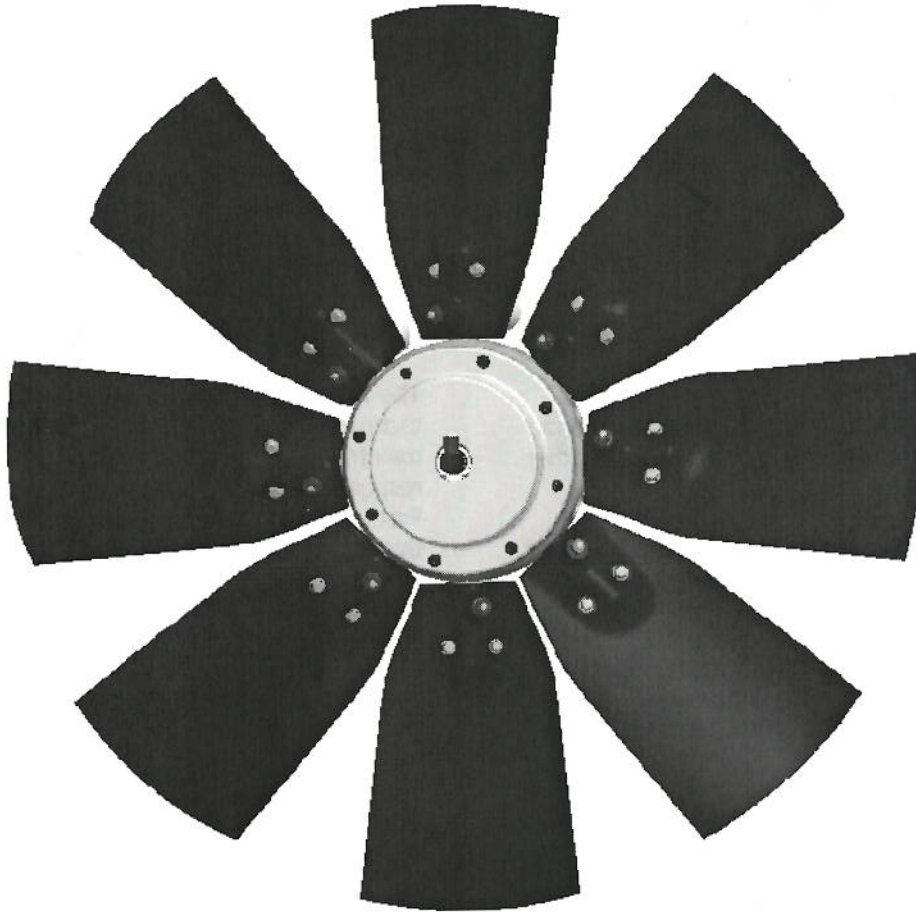
- STEP BY RADIATOR FOR CLEAN OFF?
- SAFTY SHUT DOWN TO BE HYDRALIC ONLY (NOT ENGINE)
- TRASH SHUT TO BE 6' LONG TO MAKE IT PAST REAR CROSS
- ENGINE OIL CHECK DOOR
- GRIND CHANNEL ON FRONT C CHANNELS FOR MS18 SO RIMS DON'T HIT ON LARGE TIRES
- FLO CONTROL ON BIN FILL
- LED FLASHERS ?
- SHATTER PROFF LIGHT?
- REV. WRAP ON BOOM CHAIN
- MOUNTS FOR SNAPPER ROLLS (BUT NO SNAPPER ROLLS)
- LARGER FLOOR PLATE WITH TWO SWITCHES FOR LIGHTS FOR DRIVERS?





# **FLEXXAIRE**

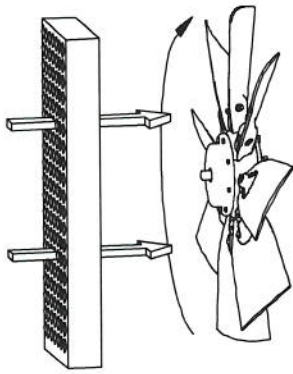
**INSTALLATION AND SERVICE MANUAL  
FOR THE  
TAC2000-P & TAC3000-P FAN SERIES  
(PNEUMATIC CONTROL)  
TAC2000-H & TAC3000-H FAN SERIES  
(HYDRAULIC CONTROL)**



**PUBLICATION No. 01524  
Revision 11**

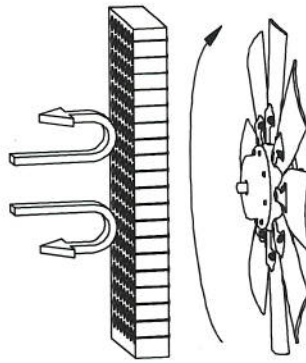
Printed in Canada





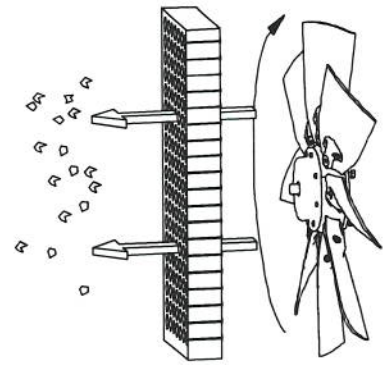
NORMAL OPERATION

EFFICIENT COOLING



NEUTRAL PITCH

STOP AIR FLOW  
PREVENT OVERCOOLING  
SAVE HORSEPOWER



PURGE

CLEAN RADIATOR  
PREVENT OVERHEATING

### 1.4.2. FAN BLADE TIP SPEED

**WARNING:** The fan system must not exceed a blade tip speed of 20,000 feet/minute. Exceeding this speed may cause damage to and/or failure of the fan, which in turn may cause injury or death, or damage to the radiator and surrounding equipment.

To calculate the blade tip speed, use the following formula:

$$\frac{\text{Fan Diameter (Inches)} \times 3.14 \times \text{Fan RPM}}{12}$$

If your calculated tip speed exceeds 20,000 ft/min, contact Flexxair directly, prior to installation. **It is important to use Fan RPM and NOT engine RPM.**

### 1.5. FAN OVERVIEW

Flexxair's TAC2000/TAC3000 fan systems are designed to minimize overheating caused by debris plugged radiators, screens and guards, and reduce overcooling in low ambient temperatures. The blades of the TAC2000/TAC3000 vary pitch, not speed, to control air flow volume and direction.

#### How your TAC2000/TAC3000 works:

The TAC2000-P/TAC3000-P is a pneumatically actuated variable pitch fan. The TAC2000-H/TAC3000-H is a hydraulically actuated variable pitch fan. The blades are held in full pitch by a heavy spring. As pneumatic (or hydraulic) pressure is applied to the control line, the pitch of the blade is reduced and then reversed. When the pressure is released, the fan blades return to their default

position. The TAC2000/TAC3000 has a number of important features:

1. Fail Safe Operation: The blades are spring loaded into the default full pitch position. If the fan loses pressure, the fan will default to full pitch and act like a fixed pitch fan giving maximum cooling.
2. Depending on the control kit ordered (see Section 2.0), the fan can be run in a neutral pitch (or any pitch in between) to solve overcooling problems and save horsepower and fuel.
3. When purging, there are no horsepower spikes, in fact, the horsepower drops off as you pass through neutral pitch, then slowly builds as pitch increases.

### 2.0. CONTROL KITS

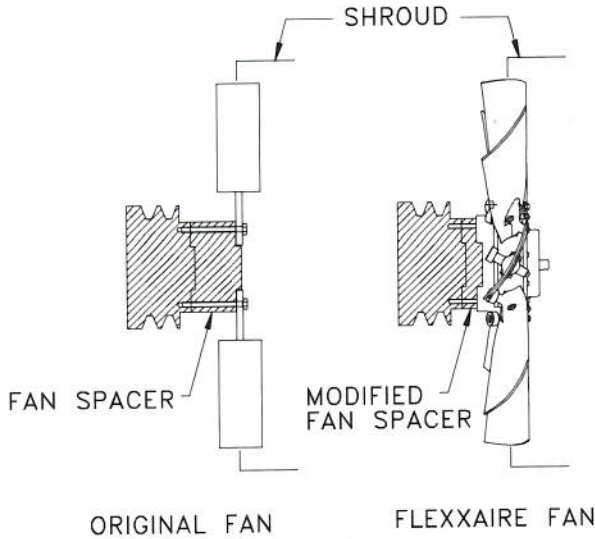
Due to the variability of machines that the TAC2000/TAC3000 fan may be installed on, the fan does not include any control components. Flexxair has a number of different control kits available to suit a wide range of applications:

#### PNEUMATIC CONTROL:

- 2 Position kit (Manual Purge)
- 2 Position kit with timer (Manual and Auto Purge)
- Infinitely Variable Pitch Controller (IVP fan control)
- Each kit is available with or without an air compressor.

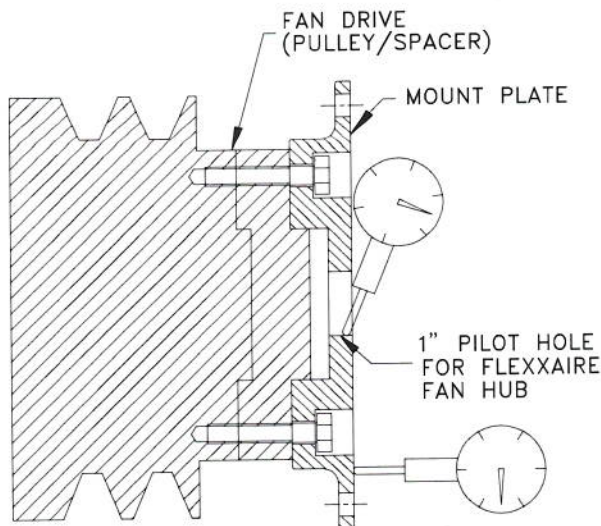
### Fan Position

Ideally the fan should be centered in the shroud (30-70% immersion is acceptable). This may require modification or removal of the fan spacer or modification of the shroud. See **Figure 2**.



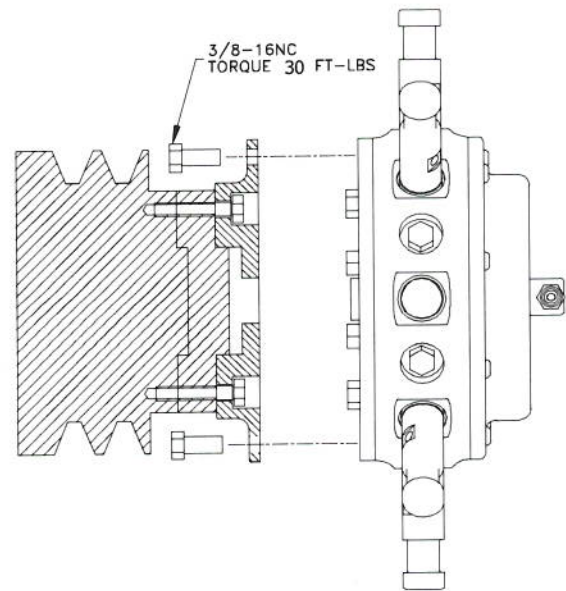
**Figure 2**

- A.** Install the Flexxaire supplied mounting adapter using bolts from the original fan. If the bolt length needs to be changed, use an equivalent or better grade of bolt. Follow original equipment manufacturer's torque and thread locking specifications when installing the mounting adapter to the fan drive. Refer to **Figure 3**.



**Figure 3: Adapter Plate Mounting**

- B.** Set up dial gauge to measure axial deviation of the mounting adapter on the fan mounting surface. Deviation should not exceed 0.005". Refer to **Figure 3**.
- C.** Set up dial gauge to measure radial deviation of the mounting adapter on the 1" pilot hole surface. Deviation should not exceed 0.005". Refer to **Figure 3**.
- D.** Remove the silicon shipping plugs from the rear of the fan. Place the TAC2000/ TAC3000 fan onto the mounting adapter, and torque the 3/8" bolts to 30 Ft-Lbs (41 N.m). Do not use loctite. Refer to **Figure 4**.



**Figure 4**

### 3.0. ATTACHING THE BLADES

Your Flexxaire fan shipped with the fan blades unattached. Care must be taken to ensure the blades are attached correctly. If the primary operation of the fan is to "pull" air towards the engine, the blades must be mounted with the concave surface towards the engine (assuming the fan rotates counter clockwise, as viewed from the engine towards the fan). If the primary operation of the fan is to "push" air away from the engine, the blades must be mounted with the concave surface away from the engine. Refer to **Figure 6**. (Some fans are shipped from Flexxiare with the blades already attached, by special order.)



- C. Carefully torque the blade bolts with a certified torque wrench to the following specification:

**1/4"–20NC to 9 ft./lbs**

**WARNING – DO NOT OVER TORQUE**

**NOTE:** If any of the supplied flanged lock nuts are lost, they may be replaced with grade 8 flanged lock nuts. **Loctite 242 or equivalent must be applied to the bolt if lock nuts are not used.**

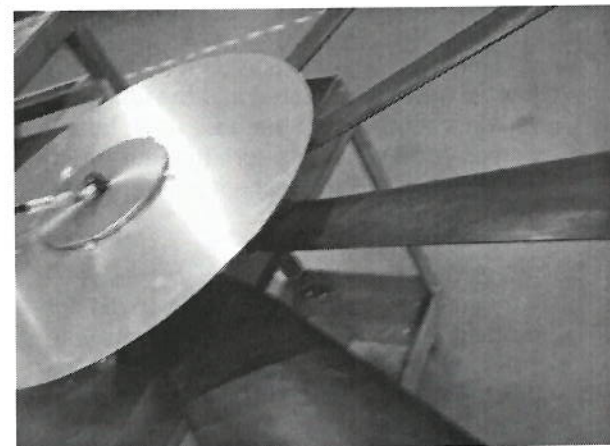
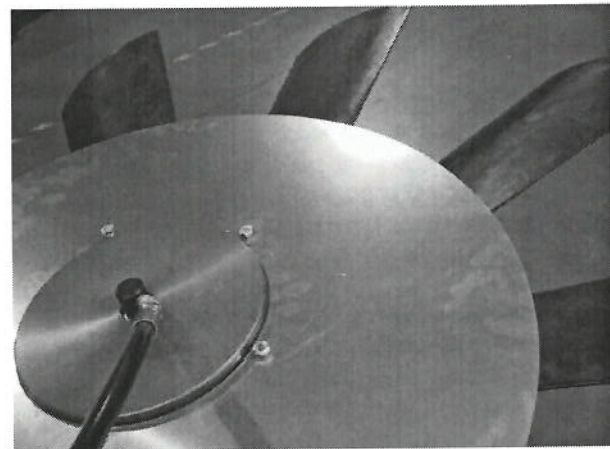
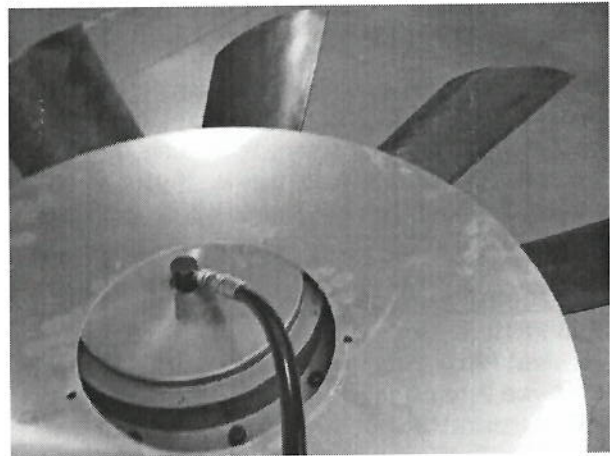
- D. Rotate the fan by hand and check for obstructions. A final check will be required once the pneumatic or hydraulic hose has been connected to the fan. (See Page 7 for a list of required pressures for each fan model.) Spin the fan by hand with the blade pitch reversed and check for obstructions.
- E. Ensure you have the correct blade clearance. See **Figure 5** on page 5 for a list of recommended minimum clearances based on fan diameter.
- F. Tighten the fan belts and replace all the fan guards and safety equipment.
- G. Attach the "WARNING" label to the machine, on a housing, guard, or any location near the fan where it can be easily seen.

**WARNING:** Failure to have the correct blade clearance could result in blade contact that can cause extensive damage to people and equipment.

### 3.1. TAC3000 AIR DAM

TAC3000 fans above 54" in diameter have extended blade shafts, and an aluminum air dam/air seal is mounted to the front of the hub. This air dam is necessary to prevent reverse airflow between the bottom of the blades and the hub diameter.

The air dam is mounted with 5 bolts, on the front shoulder of the TAC3000 hub assembly. See Pictures.



- D. The fan is shipped with a default hose assembly attached to the hub assembly. Contact Flexxaire if you want a different hose length of different fittings for future orders. The hose is attached at the Flexxaire factory to avoid unnecessary side loads to the bearings of the rotary union that can be applied every time the hose is attached or detached from the rotary union.

## 5.2. HYDRAULIC LINE SPECIFICATIONS

### A. TAC2000-H

- The connection on the rotary union is a 1/8NPT female thread.
- The fitting on the end of the default hose is a male 1/8NPT. An adapter is used to mate to the #6 ORB port on the manifold.
- If supplying your own hose, it is recommended to use a hose that is as small as possible. The potential exists that a large, heavy hose with bulky fittings could create a side load on the rotary union, just due to the weight of the hose. Side loads can drastically reduce the life of the rotary union.
- Maximum allowable working hydraulic pressure is 1000 psi

### B. TAC3000-H

- The connection on the rotary union is a 1/8NPT female thread
- The fitting on the end of the default hose is a flare 37 deg #4. An adapter is used to mate to the #6 ORB port on the manifold.
- If supplying your own hose, it is recommended to use a hose that is minimum 1/4" inside diameter. Smaller hoses can cause a problem with the fan performance as the small hose will slow down the actuation speed of the fan blades while changing pitch or purging.
- Maximum allowable working hydraulic pressure is 1000 psi

## 6.0. SERVICE AND MAINTENANCE

Flexxaire's TAC2000/TAC3000 fan hub is fully sealed with o-rings, and contains a small amount of oil. As a result, the fan should not require any maintenance.

## 6.1. VISUAL INSPECTIONS

Under normal operating conditions TAC2000/TAC3000 fans do not require any scheduled maintenance and are built to provide thousands of hours of trouble free service. In moderate to extreme operating conditions a visual inspection of the moving parts is recommended from time to time to safeguard against fan blade damage which could lead to equipment downtime and/or other damages.

## 6.2. MECHANICAL REVIEW

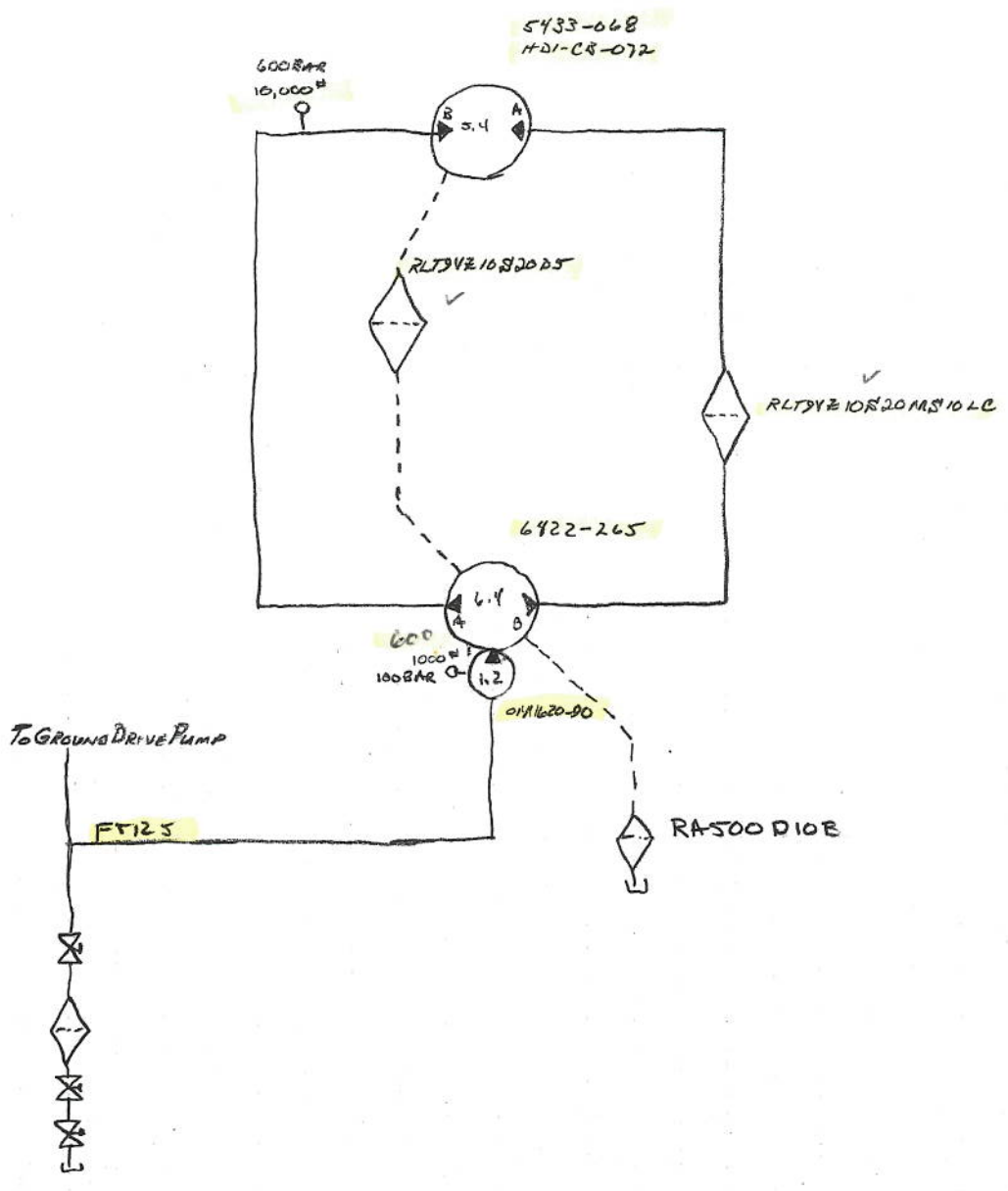
Ensure that the fan fully reverses pitch. Check for leaks in the rotary union. Check that the rotary union bearings rotate smoothly. Verify that you have the correct blade clearance as per **Figure 5** on page 5.

CHECK	YES	NO
Does fan rotate in default and full reverse pitches without obstruction?	<input type="checkbox"/>	<input type="checkbox"/>
Are blade fasteners torqued to 9 ft-lbs?	<input type="checkbox"/>	<input type="checkbox"/>
Are blades installed in the correct orientation (blower /sucker)? See Fig 6	<input type="checkbox"/>	<input type="checkbox"/>
Has the side load on the pressure line been minimized?	<input type="checkbox"/>	<input type="checkbox"/>
Has the pressure line been constrained to prevent contact with the blades?	<input type="checkbox"/>	<input type="checkbox"/>
Is the pressure line flexible enough to accommodate relative movement between the radiator and engine?	<input type="checkbox"/>	<input type="checkbox"/>
Are any of the blades damaged?	<input type="checkbox"/>	<input type="checkbox"/>
Does the rotary union rotate freely?	<input type="checkbox"/>	<input type="checkbox"/>
Are there any pressure leaks in the system?	<input type="checkbox"/>	<input type="checkbox"/>
Are all screens and guards secured?	<input type="checkbox"/>	<input type="checkbox"/>
Have you recorded the fan S/N for future reference? S/N _____	<input type="checkbox"/>	<input type="checkbox"/>





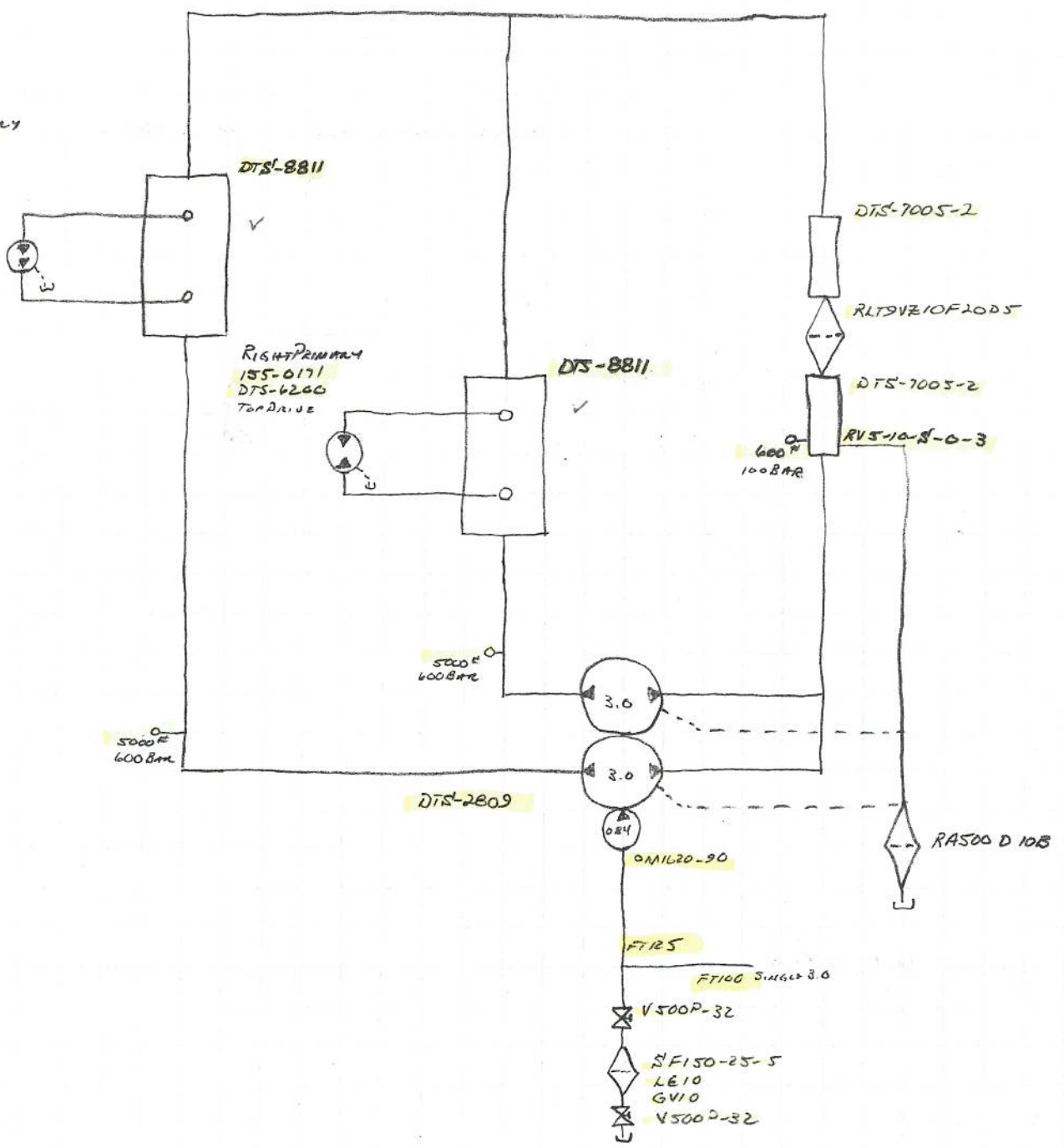
11/16/11  
#12053  
PARAMOUNT FARMS  
4RS#652MH





11/16/11  
 #12053  
 PARAMOUNT FARMS  
 HRS. #4652AH

LEFT PRIMARY  
 155-0171  
 DTS-6200  
 TOP DRIVE



DTS-8811

RIGHT PRIMARY  
 155-0171  
 DTS-6200  
 TOP DRIVE

DTS-8811

DTS-7005-2

RLTSVZ10F2025

DTS-7005-2

600#  
 100 BAR

RV5-10-S-C-3

5000#  
 600 BAR

5000#  
 600 BAR

3.0

3.0

DTS-2809

0.84

FT125

FT100 Single 3.0

V500P-32

SF150-25-5  
 LE10  
 GV10

V500P-32

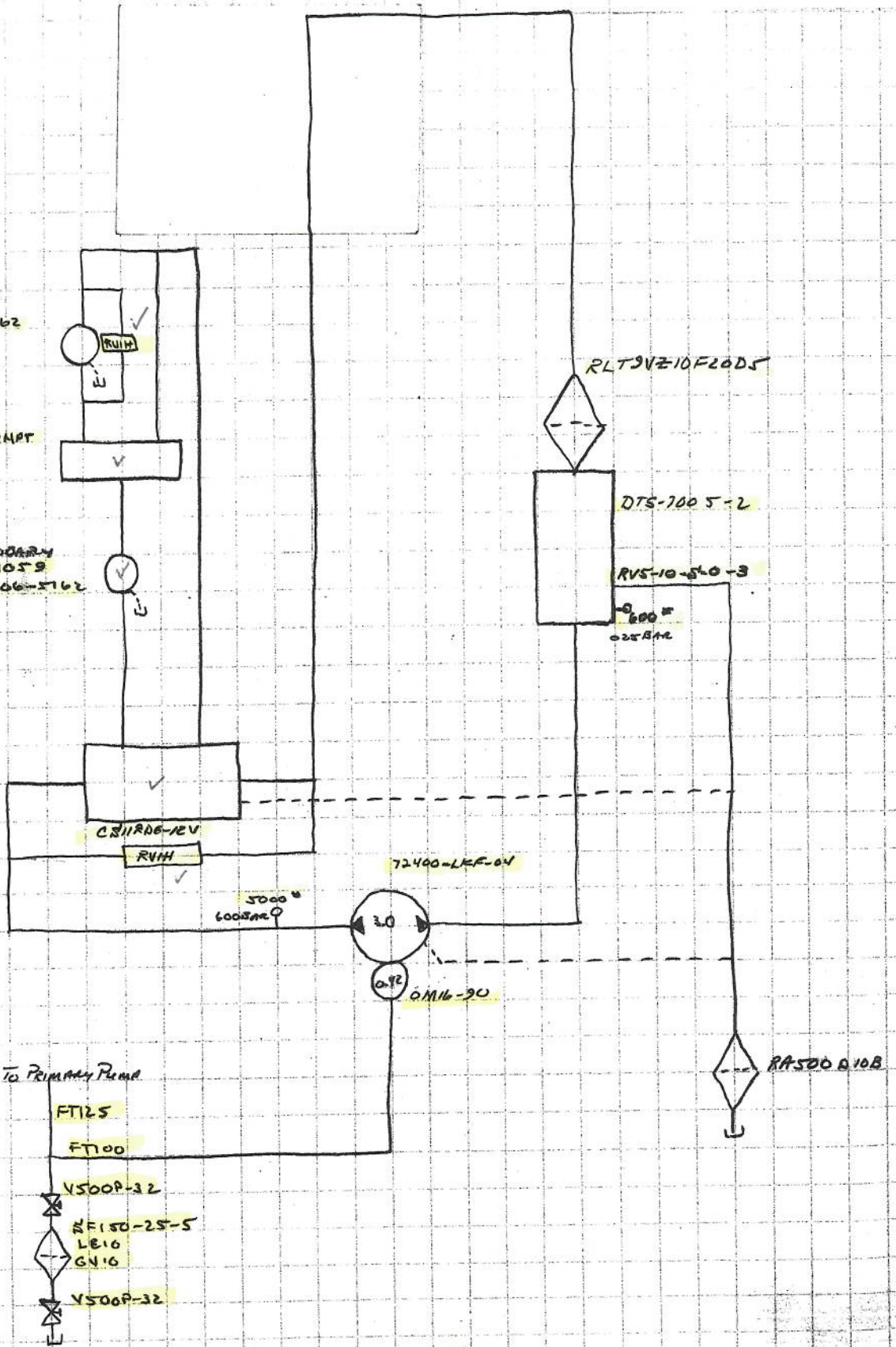
RASCO D 108

11/16/11  
#12053  
PARAMOUNT FARMS  
42SP465LAH

DEVIATA  
112-1058  
28-006-5162

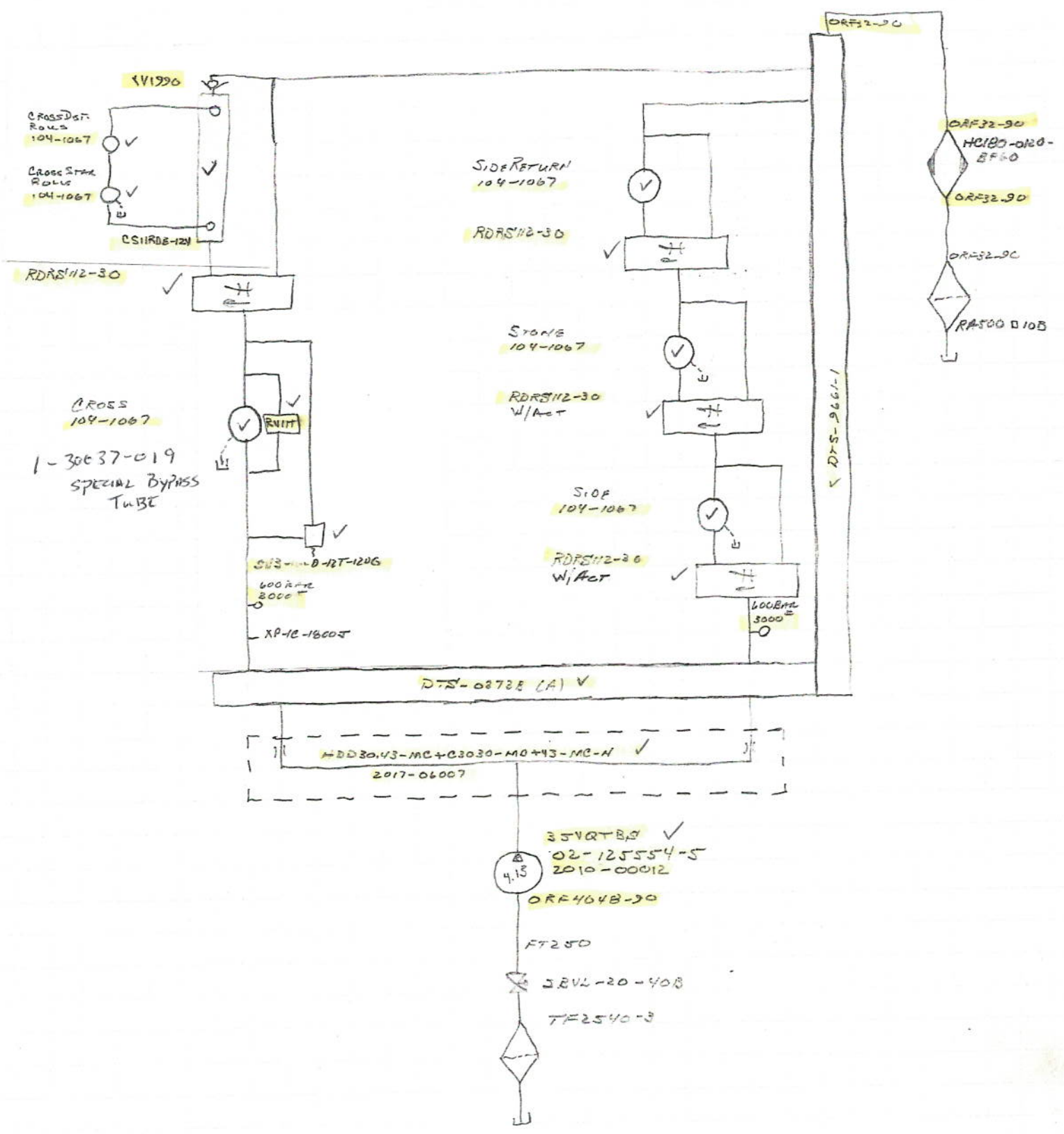
FPSS-314MPT

SECONDARY  
112-1059  
28-006-5162

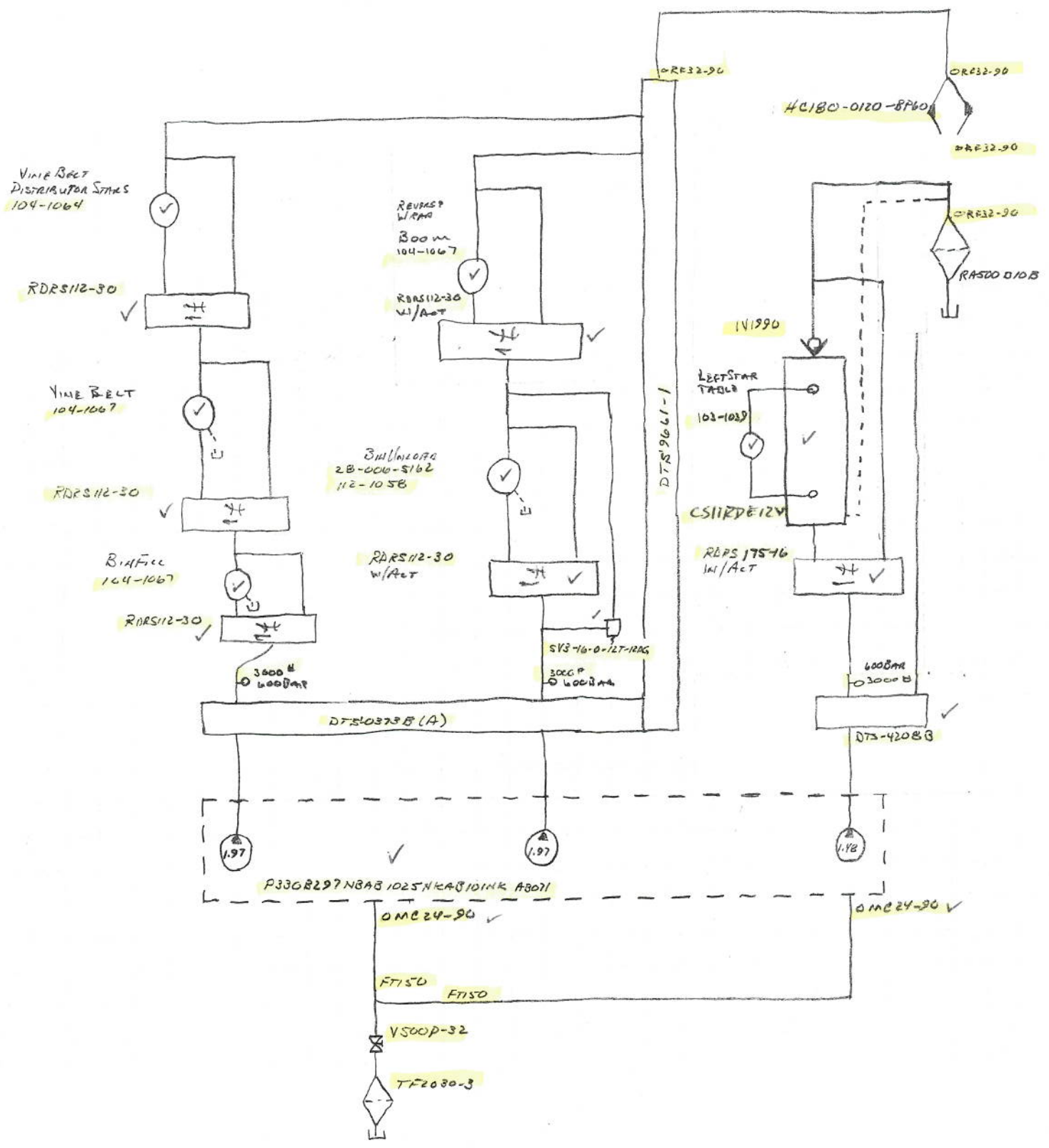




1/2/12  
 #12053  
 PARAGON FARM  
 4RS1465LAH

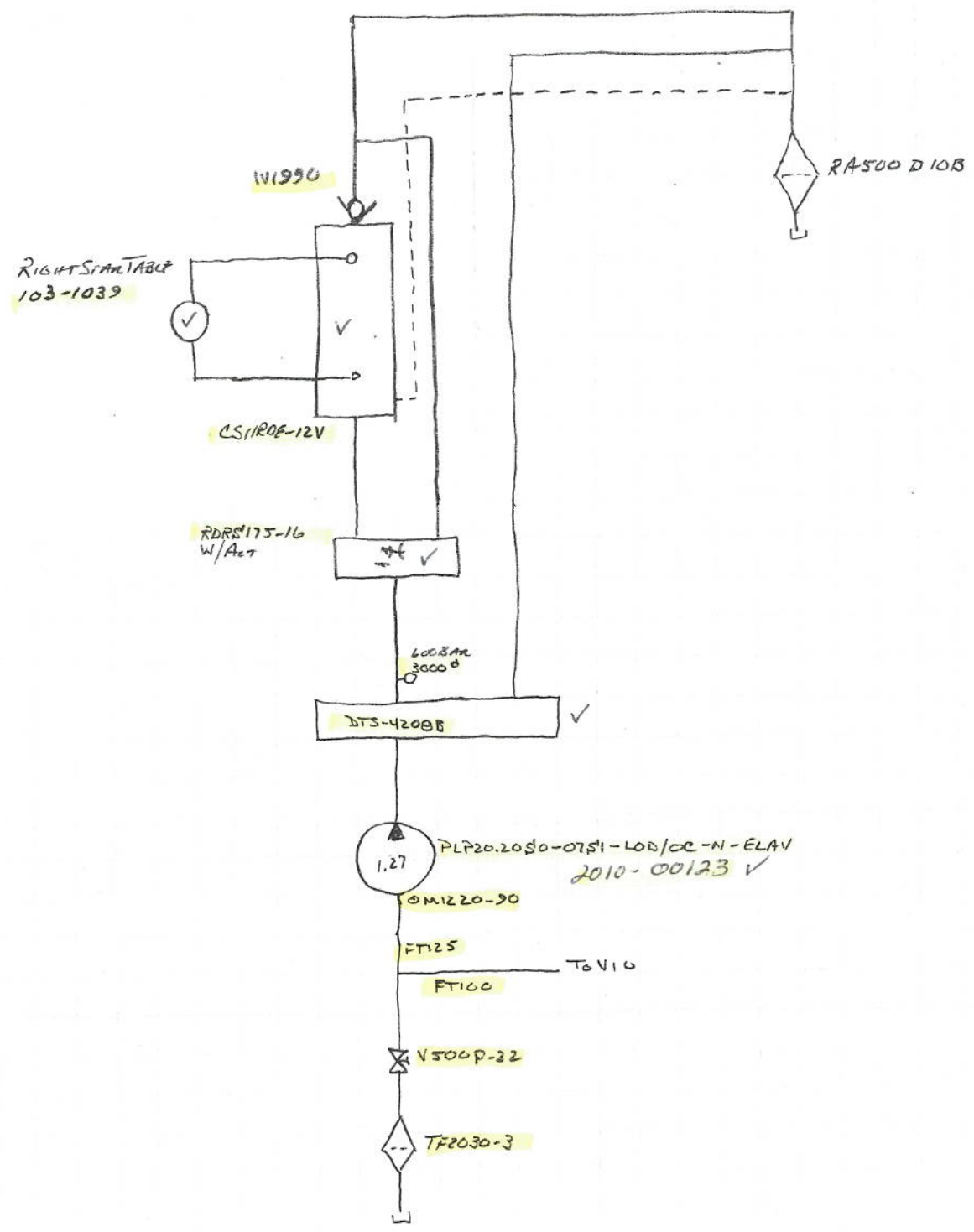


1/3/12  
 #12053  
 PARAMOUNT FARMS  
 9RSP#65 LATT

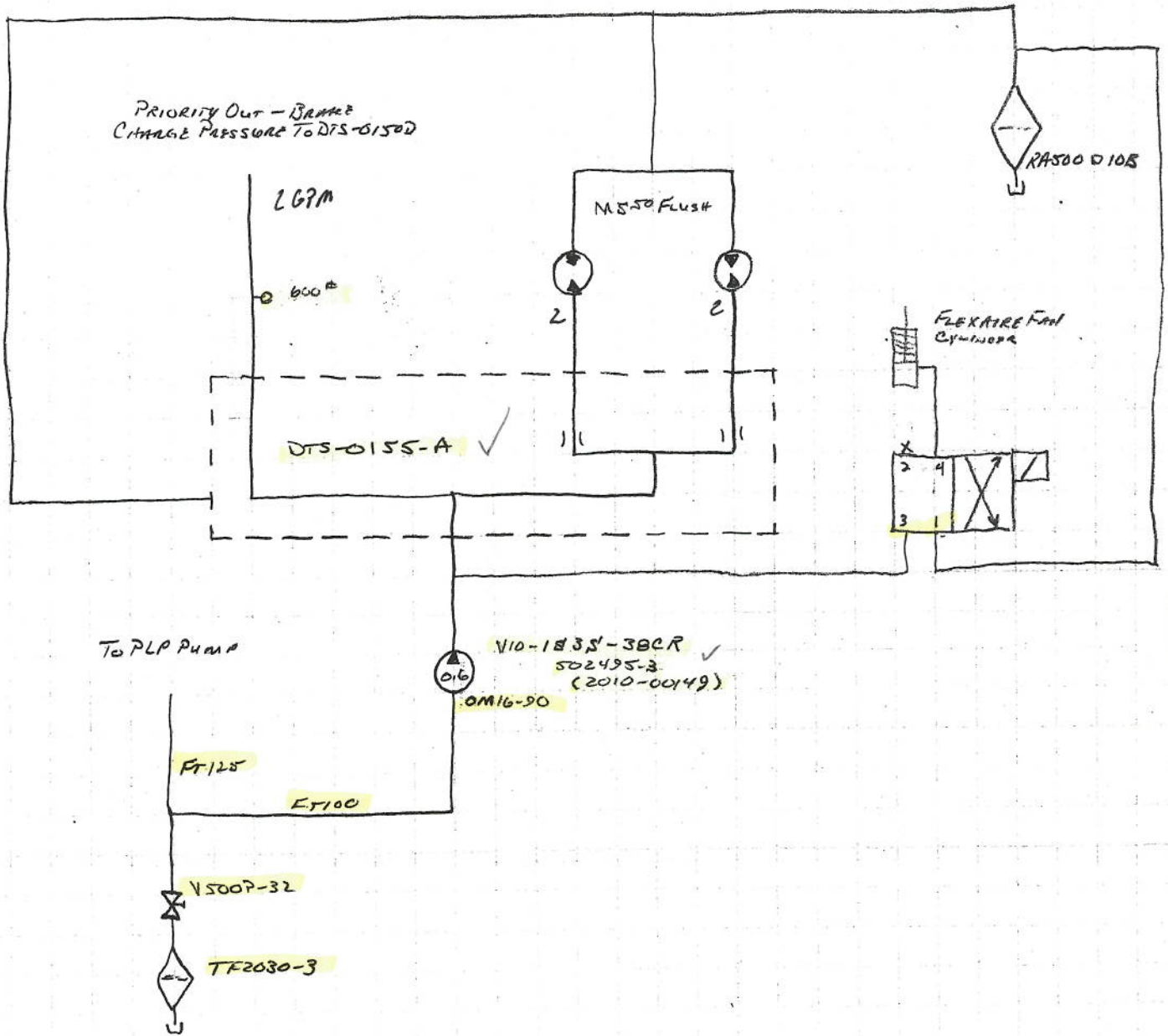




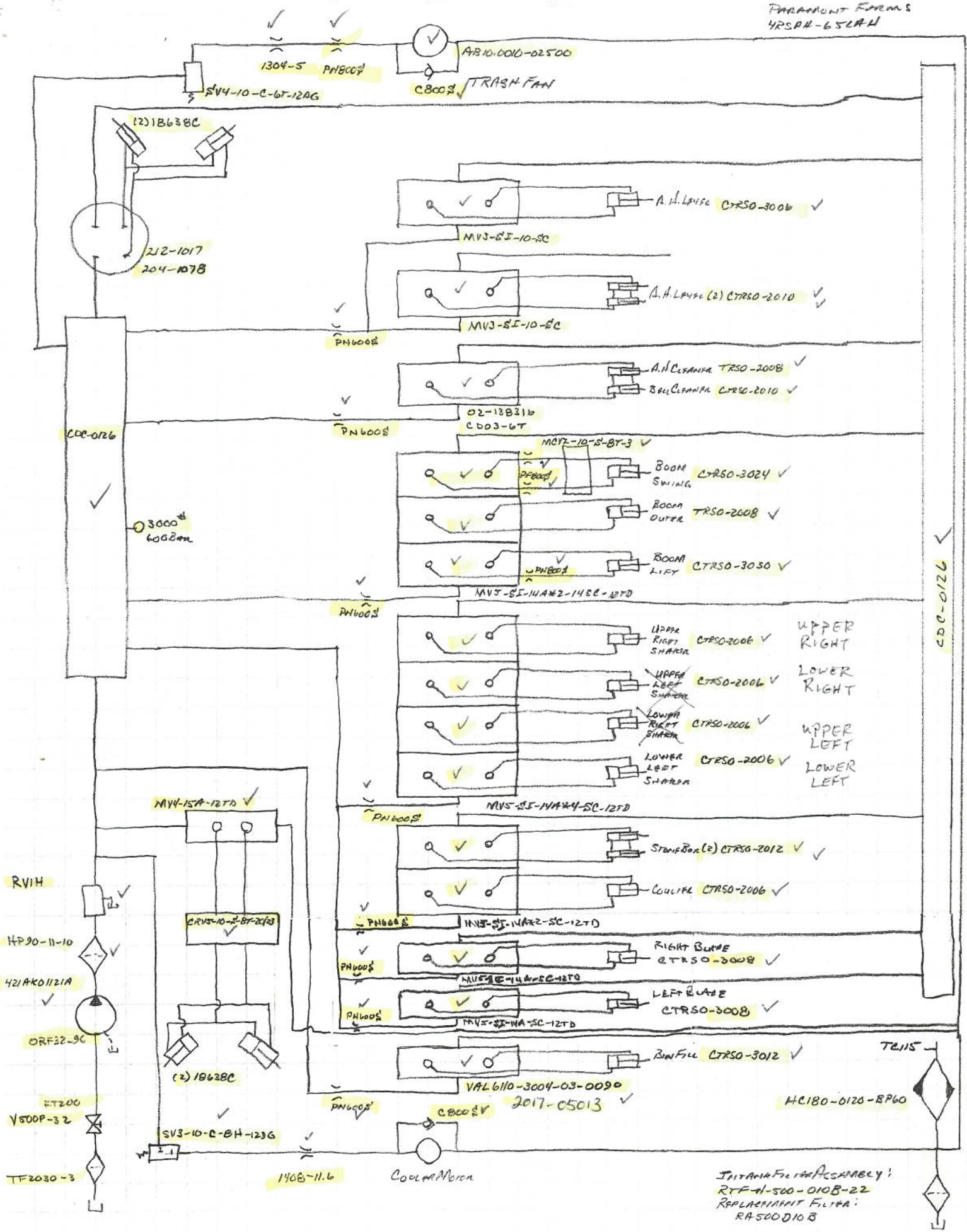
1/3/12  
#12053  
PARAMOUNT FARM  
4RSP465LPH



11/16/11  
#12053  
DARANLUNT FARMS  
MIRSAH 65LH







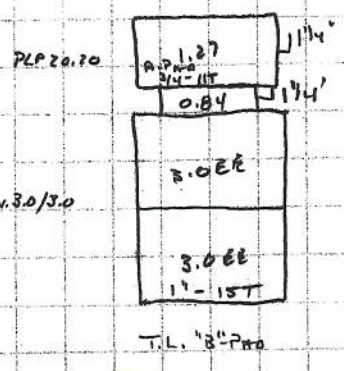
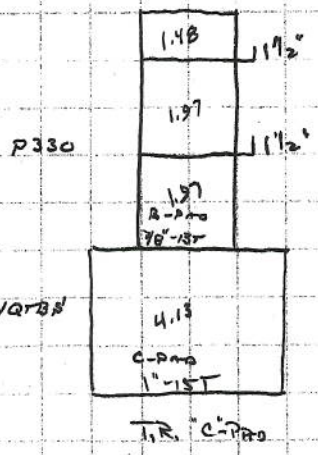
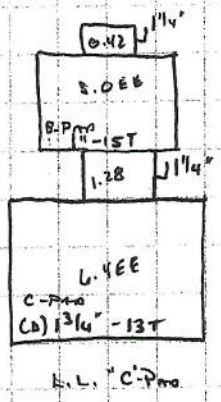
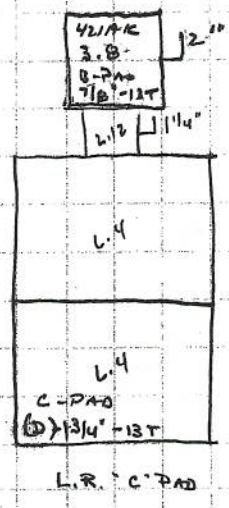
JITANIA Filter Assembly:  
 RTF-A-500-010B-22  
 REPLACEMENT FILTER:  
 RA500D10B



- ④  
 TF2540-3  
 2 1/2" 90° STEEL  
 2 1/2" CLS NIP  
 28VLT20-408  
 FT250  
 \* 35VQTR8
- ③  
 3" X 2" BUSH  
 2" CLS NIP  
 V500P-32  
 FT200  
 ORF 32-90  
 FF200  
 2" 90° STEEL  
 W43-32PK  
 20F2215-25-5  
 W43-32PK  
 2" 90° STEEL  
 2" CLS NIP  
 V500P-32  
 2" CLS NIP  
 2" TEE X  
 2" X 1 1/4" BUSH  
 X FT125  
 2" 90° STEEL  
 2" X 1 1/4" BUSH  
 FT125  
 \* T6.4/6.4 \* L.4EE

- ③  
 TF2030-3  
 2" 90° STEEL  
 2" CLS NIP  
 V500P-32  
 2" CLS NIP  
 2" TEE X  
 X 2" X 1 1/2" BUSH  
 FT150  
 \* TRIPLE COMMAND  
 2" 90° STEEL  
 2" X 1 1/2" BUSH  
 FT150  
 \* TRIPLE COMMAND
- ③  
 TF2030-3  
 2" 90° STEEL  
 2" CLS NIP  
 V500P-32  
 2" CLS NIP  
 2" TEE X  
 X 2" X 1 1/4" BUSH  
 FT125  
 \* PLP20.20  
 2" 90° STEEL  
 2" X 1" BUSH  
 FT100  
 \* VID

- ④  
 4" X 2" BUSH  
 2" 90° STEEL  
 2" CLS NIP  
 V500P-32  
 2" X 1 1/2" BUSH  
 1 1/2" CLS NIP  
 8FISD-25-5  
 1 1/2" CLS NIP  
 2" X 1 1/2" BUSH  
 V500P-32  
 2" CLS NIP  
 2" TEE X  
 FT125  
 \* TANDEM 3.0EE  
 2" 90° STEEL  
 2" X 1" BUSH  
 FT100  
 \* SINGLE 3.0EE



- L.R. TANDEM L.4  
 42AK  
 L.L. L.4EE  
 3.0EE  
 T.R. 35VQTR8  
 TRIPLE COMMAND  
 T.L. TANDEM 3.0  
 PLP20.20  
 ENGINE VID

- GROUND DRIVE  
 STEERING CIRCUIT  
 AIR HEAT  
 SECONDARY  
 CROSS  
 SIDE  
 BIN FILL  
 BIN UNLOADER  
 LEFT START TABLE  
 LEFT PRIMARY  
 RIGHT PRIMARY  
 RIGHT START TABLE  
 BRAKE CHARGE PRESSURE  
 FLUSHING

DURAT D13387 4PA09-120L-AU-BBBA-COM-COM-COM-145  
 DRIVE PLATE - TORSION CONTROL 19310

10.6  
 A-PAD  
 3/4"-11T  
 ENGINE QSK15 450 H.P.



11/16/11  
 #12053  
 PARACOUNT FARMS  
 425 PAHLS LAH

MS1B-2

MS1B-2

