

# **TUCKERBILT®**

## **T-630**

### OWNER'S MANUAL



# **CALIFORNIA PROPOSITION 65 INFORMATION**

## **TO CALIFORNIA CUSTOMERS AND TO CUSTOMERS SELLING DIESEL ENGINE EQUIPMENT INTO - OR FOR USE IN - CALIFORNIA**

Proposition 65, a California law, requires warnings on products which expose individuals in California to chemicals listed under that law, including certain chemicals in diesel engine exhaust.

### **Obligations of Manufacturers of Diesel-Powered Off-Road Equipment.**

The California Superior Court has approved either of the following two methods if compliance with Proposition 65 requirements by manufacturers of off-road equipment containing diesel engines.

#### **1. On-Equipment Warning.**

Place the warning pictured in attachment 1 on all equipment shipped by you into or for sale in California after January 1, 1996. The warning must be in a location where it is easily visible to the operator of the equipment when (s)he is operating the equipment. The warning must be secured to the equipment. If warnings or operating instructions are provided through a digital display, you may use that method of providing the warning.

#### **2. Operator Manual Warning.**

When the operator manual is next revised or by December 31, 1995, whichever is earlier, place the warning in attachment 2 in the operator manual. The warning may be either printed in the manual or on a sticker.

The warning must appear in one of the following locations:

- Inside the front cover
- Inside the back cover
- Outside the front cover
- Outside the back cover
- As the first page of text

Under either alternative, the warning must appear in the same size, print and format as the attachment selected or be of an equally conspicuous size and format. If the warning is provided in an on-screen display, the warning must contain the language in the attachment and must be provided at the time of or in connection with ignition in the same manner as other safety warnings electronically communicated on screen.

### **Obligation of Resellers of Diesel Engines.**

This letter must accompany any loose diesel engine sold in California.

Should you have any questions, please call the manufacturer's representative.

## ATTACHMENT 1

### Warning to Place on Equipment

#### **CALIFORNIA**

##### **Proposition 65 Warning**

**Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.**

## ATTACHMENT 2

### Warning in the Manual

#### **CALIFORNIA**

##### **Proposition 65 Warning**

**Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.**

#### **CALIFORNIA**

##### **Proposition 65 Warning**

**Diesel engine exhaust and some of the constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.**

# **T-630 Recommended Service**

## **-- CAUTION -- Before Any Service or Maintenance**

- Engine Must Be OFF.
- Set Park Brake and remove key.
- Lock Articulate Safety Lock Bar.
- Engage Auger Safety Catch.
- Do not allow unauthorized or unqualified personnel to operate or service this machine.

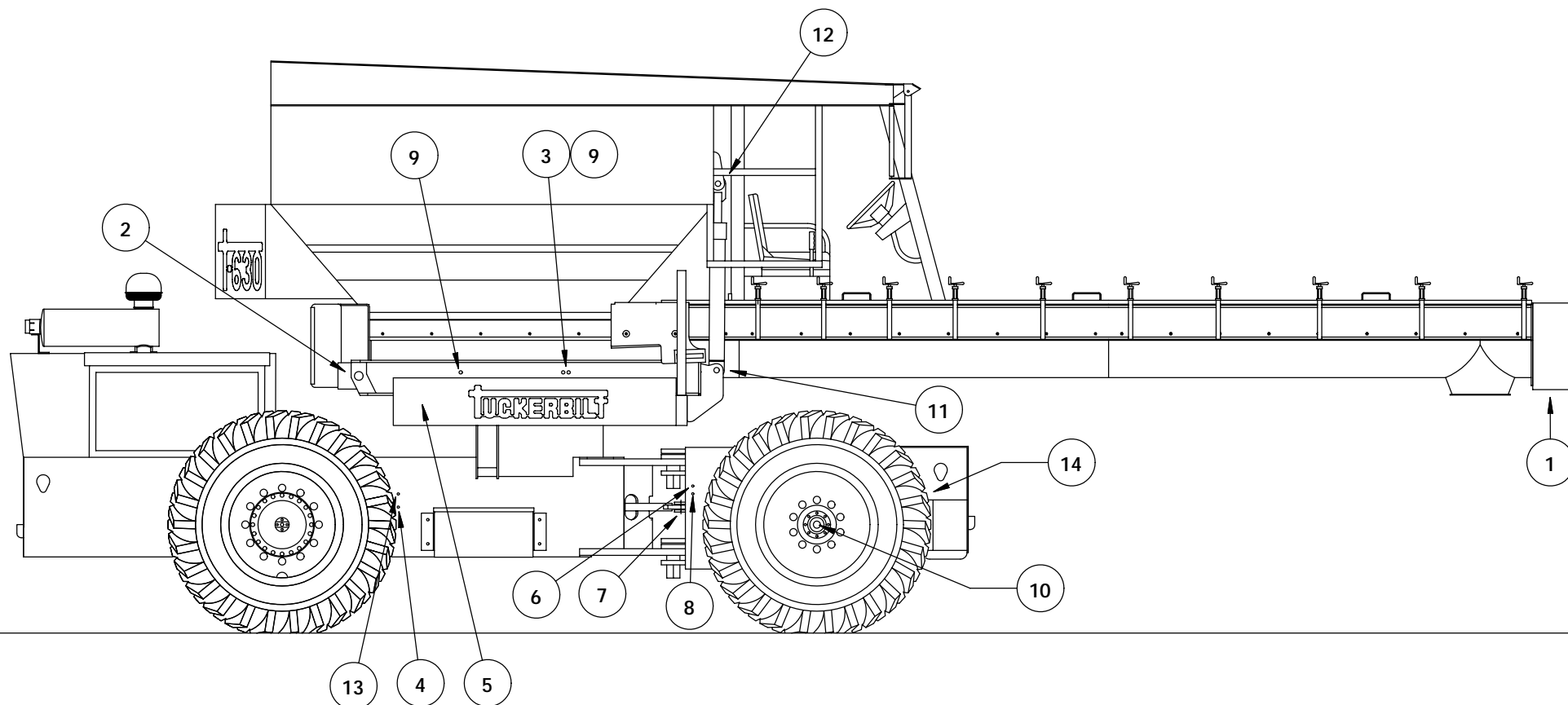
## **DAILY SERVICE:**

1. Grease all fittings except front axle
2. Grease turntable
3. Check engine oil level \*
4. Check engine air breather indicator
5. Check engine water (with engine cold)
6. Check auger seal and tighten if necessary
7. Check chain tensions (1/2" play) of:
  - a. Turntable
  - b. Turntable swing motor
  - c. Auger drive
8. Lubricate turntable chain and swing motor chain
9. Check oil level in front axle (2 places)\*\*
10. Fuel T-630\*

\* For engine oil and filter recommendations consult engine manufacturer's manual.

\*\* 90 - 120w Gear Lube.





## LUBRICATION POINTS

T-630 Lube Points

KEY	DAILY SERVICE	KEY	DAILY SERVICE
1	FRONT AUGER BEARING - End of Chute	10	FRONT AXLE - Hub Oil Cap ( Visual Check )
2	HOPPER PIVOT - 1 Fitting on Right Side & 1 Fitting on Left Side	11	LIFT CYLINDER - LOWER - 1 Fitting Each Cylinder
3	TURNTABLE PIVOT BEARING	12	LIFT CYLINDER - UPPER - 1 Fitting Each Cylinder
4	STEERING CYLINDER REAR PIVOT - 1 Fitting on Right Side & 1 Fitting on Left Side	13	TOURQE HUB GREASE BOLT - 1 Fitting Each Hub
5	TURNTABLE CHAIN SPROCKETS - Left Side ( 6 Locations )	13	
6	TOP FRAME PIVOT		
7	STEERING CYLINDER FRONT PIVOT		<b>WEEKLY SERVICE</b>
8	LOWER FRAME PIVOT	14	FRONT AXLE - 6 Locations on Brake Rods
9	TURNTABLE TRACK		

few 2/17/06

## **WEEKLY SERVICE:**

1. Check hydraulic oil (engine must be off)
2. Check tire pressure (65 PSI)
3. Check battery water level

### **-- CAUTION --**

Engine must be OFF, Park Brake must be ON, and Articulate Safety Lock Bar must be LOCKED.

4. Grease front axle

## **MONTHLY SERVICE:**

1. Check two (2) Fairfield gearboxes gear lube levels\*\*
2. Test Engine Safety Shutdown

## **AFTER FIRST 50 HOURS THEN EVERY 300 HOURS OR 3 MONTHS SERVICE:**

1. Change Sunstrand Suction Filter
2. Change Twin Return Filters
3. Change Gear Lube in Fairfield Hubs (80-140 w/EP additive)

## **YEARLY SERVICE:**

1. One (1) strainer in hydraulic tank should be removed and cleaned
2. Hydraulic oil change and flush
3. Change Gear Lube in Fairfield Hubs (80-140 w/EP additive)

\*\* 90 - 120w Gear Lube.

# **TUCKERBILT EQUIPMENT WARRANTY**

**NO EXPRESS WARRANTIES AND NO IMPLIED WARRANTIES AS TO MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE OR PURPOSE OR OTHERWISE (EXCEPT AS TO TITLE), OTHER THAN THOSE EXPRESSLY SET FORTH HEREIN WHICH ARE MADE EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, SHALL APPLY TO PRODUCTS SOLD BY TUCKER'S, AND NO WAIVER, ALTERATION, OR MODIFICATION OF THE FOREGOING CONDITIONS SHALL BE VALID UNLESS MADE IN WRITING AND SIGNED BY AN EXECUTIVE OFFICER OF TUCKER'S.**

Tucker's guarantees to replace or, at its option, repair any products or parts thereof which are found to be defective in material or workmanship within 3 months from the date of shipment, free of charge, F.O.B. Tucker's plant, provided that the product has been installed in accordance with Tucker's recommendations, and that the product has been operated under normal conditions for the purpose for which it was manufactured. Prompt notification of any defect and proof that the product has been properly installed, maintained, and operated within the limits rated and normal usage is required before Tucker's will agree to replace or repair defective parts.

**IN NO EVENT SHALL TUCKER'S BE LIABLE FOR CONSEQUENTIAL DAMAGES, DAMAGES FOR LOSS OF USE, OR SPECIAL DAMAGES, OR FOR TRANSPORTATION, INSTALLATION, ADJUSTMENT OR OTHER EXPENSES WHICH MAY ARISE IN CONNECTION WITH SUCH PRODUCTS OR PARTS.**

## **TUCKERBILT EQUIPMENT WARRANTY (CONT.)**

If purchaser is a distributor, Tucker's limited warranty is transferable to the initial user, provided notice of transfer is given by purchaser to Tucker's at the time of such transfer, and provided further that the initial user used the products in accordance with the requirements stated herein.

Neither the warranty nor any other provisions stated herein entitles Purchaser or any third party to damages, direct or consequential, for Personal injury arising from the installation, operation, or use of product furnished hereunder, and purchaser agrees to assist Tucker's and to hold Tucker's harmless in effectuation of this provision.

Machinery, parts, accessories and components manufactured by others are warranted only to the original manufacturer's warranty.

## **GRC TRACTOR HYDRAULIC FLUID**

Bulletin No. 20581  
(Supersedes No. 1022751)

**DESCRIPTION:** This product is a highly developed hydraulic/transmission fluid which performs the following functions:

- Lubricates the transmission, differential and final drive gears.
- Acts as a power steering, power brake, power take-off and implement drive fluid.
- Provides a medium with the correct friction and heat transfer characteristics for proper operation of the tractor wet brakes and power take-off unit.

**QUALITIES:** The following characteristics make GRC Tractor Hydraulic Fluid an outstanding product for multi-functional application:

- Superior extreme pressure (EP) and antiwear performance protects tractor transmissions, axles and hydraulic pumps.
- The frictional characteristics are designed to minimize “chatter” while permitting the wet brakes to hold properly. This frictional balance also provides smooth engagement of the power take-off clutch.
- A special blend of base helps maintain seals and gaskets used in modern tractors.
- Its balanced formulation provides excellent rust and corrosion protection as well as good oxidation stability for high temperature service.

**APPLICATIONS:** GRC Tractor Hydraulic Fluid is recommended for most hydraulic fluid and transmission oil applications for tractor and implements, including:

- Allis Chalmers PF
- Allison C-3
- Ford M2C134-A, M2C86-A
- IH Hy-Tran
- J. I. Case JIC-143, JIC-145
- John Deere J-20A, J-12B
- Massey-Ferguson M-1110, M-1127, M-1135
- UHTF
- White Oliver Type 55

PROPERTIES:	Gravity, API (1)	28.0
	Flash Point F Min.	380
	Viscosity, cP at 0 F Max. (2)	4,500
	Viscosity, cSt at 100 C	8.9-9.4
	Viscosity, SUS at 100 F (1)	310
	Viscosity, SUS at 210 F	56-58
	Viscosity Index, Min.	130
	Pour Point, F Max.	-30
	Sulfated Ash, %	1.4-1.7
	Foam Test (3)	Pass
	Pounds per Gallon (1)	7.46

**Notes:**

- (1) Typical value.
- (2) ASTM D 2983 (Brookfield)
- (3) ASTM 892

# MOBILFLUID® 424

## HIGH PERFORMANCE TRACTOR HYDRAULIC/TRANS FLUID

Approved against specifications  
 JOHN DEERE J20C  
 FORD NEW HOLLAND M2C134D  
 MASSEY FERGUSON M1135, M1141  
 ALLISON C-4 (AGRICULTURE APPLICATIONS)  
 VOLVO BM  
 WHITE NEW IDEA Q-1802, Q-1826  
 DENNISON HF-0, HF-1, HF-2  
 SAUER SUNDSTRAND  
 KUBOTA UDT  
 AGCO POWERFLUID 821XL  
 CATERPILLAR 10-2  
 CLARK  
 SUNDSTRAND HYDROSTATIC  
 ZF TE-ML06

Also recommended for service makeup and refill in  
 Torque converters, power-shift transmissions, final  
 Drives and hydraulics calling for SAE 10W-30  
 engine oils or mild EP fluids

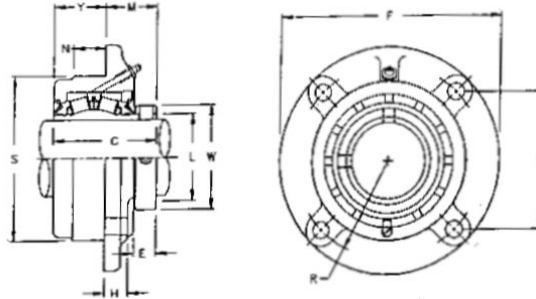
# AUGER BEARING

REX BEARING COMPANY

**NORMAL DUTY**  
2000 Series  
Single Set Collar  
**M SEAL**



Rex #MBR2207  
Tucker's #80305



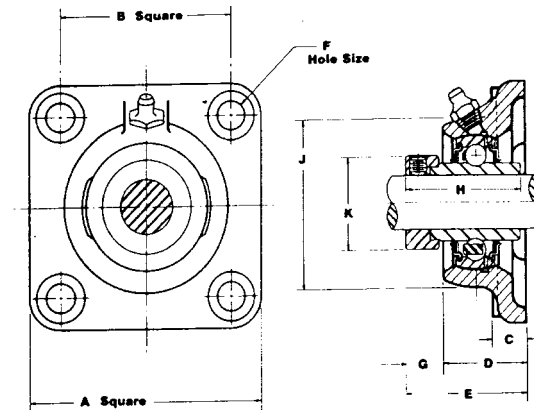
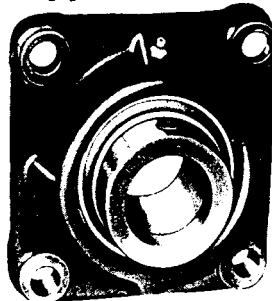
Shaft Size Inches	Complete Block No.	Size Code	B	C	E	F	H	L	M	N	R	S +.000 -.002	W	Y Flange- I.R. End	Bolt Size	Complete Block Net Wt. Lbs.
2-7/16	MBR-2207	8	4-19/32	3-1/2	7/8	7-5/8	5/8	2-29/32	1-13/16	1	3-1/4	5.500	3-9/16	1-11/16	1/2	14.8

# CENTER SWING BEARING

**Flange Cartridges — Standard Series**  
**RCJ • LCJ† • TCJ Types**

FAFNIR OR EQUAL

Fafnir #RCJ1-3/4  
Tucker's #80502



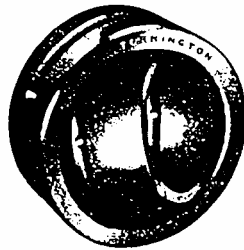
Fafnir flange cartridges are used in applications where a minimum amount of machining is to be done. Each unit is furnished assembled and ready for mounting by means of bolts through the flange. They use a wide inner ring bearing, self-aligning B type, which compensates for shaft misalignment. RCJ type flange units are equipped with G-KRRB (R-Seal) wide inner ring bearings.

LCJ type flange units are equipped with G-KLLB (Mechani-Seal) wide inner ring bearings.

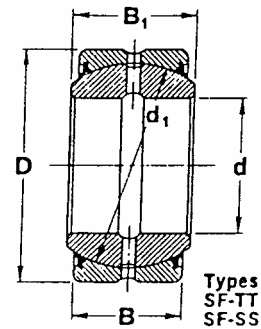
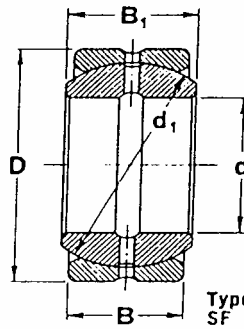
A grease fitting provides means of relubrication where required. A groove on the inside surface of the housing conducts grease to either of two holes in the bearing outer ring.

Complete Unit & Shaft Diameter In Inches	A	B	C	D	E	F	G	H	J	K	RCJ	LCJ	TCJ	Collar No.	Housing No.	Approx. Unit Wt. in Lbs.
RCJ,LCJ,TCJ 1-3/4	5-3/8	4-1/8	11/16	1-5/8	2-5/16	33/64	11/16	2-7/32	4-1/8	2-1/2	G1112- KRRB	G1112- KLLB	G1112- KPPB2	S1112K	T-16667	5.70

## TORRINGTON BEARING OR EQUAL



Type SF bearing

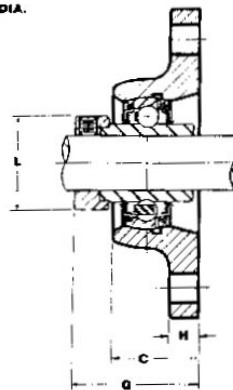
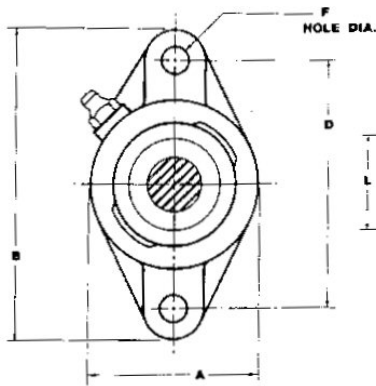


d bore (norm.)		D o.d. (norm.)		Bearing designation	B1 inner ring width (norm.)		B outer ring width (norm.)		d1 spherical diameter (ref.)	
mm	inch	mm	inch	type SF	Mm	inch	mm	inch	mm	inch
<b>TORRINGTON #12SF20    <u>STEERING BEARING</u>    Tucker's #80500</b>										
31.750	1.250	50.800	2.000	12SF20	27.76	1.093	23.80	.937	45.59	1.795
<b>TORRINGTON #20SF32    <u>HOPPER PIVOT BEARING</u>    Tucker's #80306</b>										
50.800	2.000	80.962	3.1875	20SF32	44.45	1.750	38.10	1.500	73.02	2.875
<b>TORRINGTON #25SF40    <u>ARTICULATE BEARING</u>    Tucker's #80304</b>										
63.500	2.500	100.012	3.9375	25SF40	55.55	2.187	47.62	1.875	91.19	3.590

## LOCK COLLAR SWING BEARING

### Flange Cartridges — Standard Series

**RCJT • LCJT† • TCJT Type**



**FAFNIR OR EQUAL**

**FAFNIR #RCJT 1-3/4  
Tucker's #80501**

Complete Unit & Shaft Diam. in Inches	A	B	C	D	F	G	H	L	RCJT	LCJT	TCJT	Collar No.	Housing No.	Approx. Unit Wt. in Lbs.
RCJT, LCJT, TCJT, 1-3/4	4-3/8	7-1/16	1-3/4	5-27/32	33/64	2-5/16	9/16	2-1/2	G1112- KRRB	G1112- KLLB	G1112- KPPB4	S1112K	T-21416	5.24



## OPTIONAL T-630 AIR DRYER:

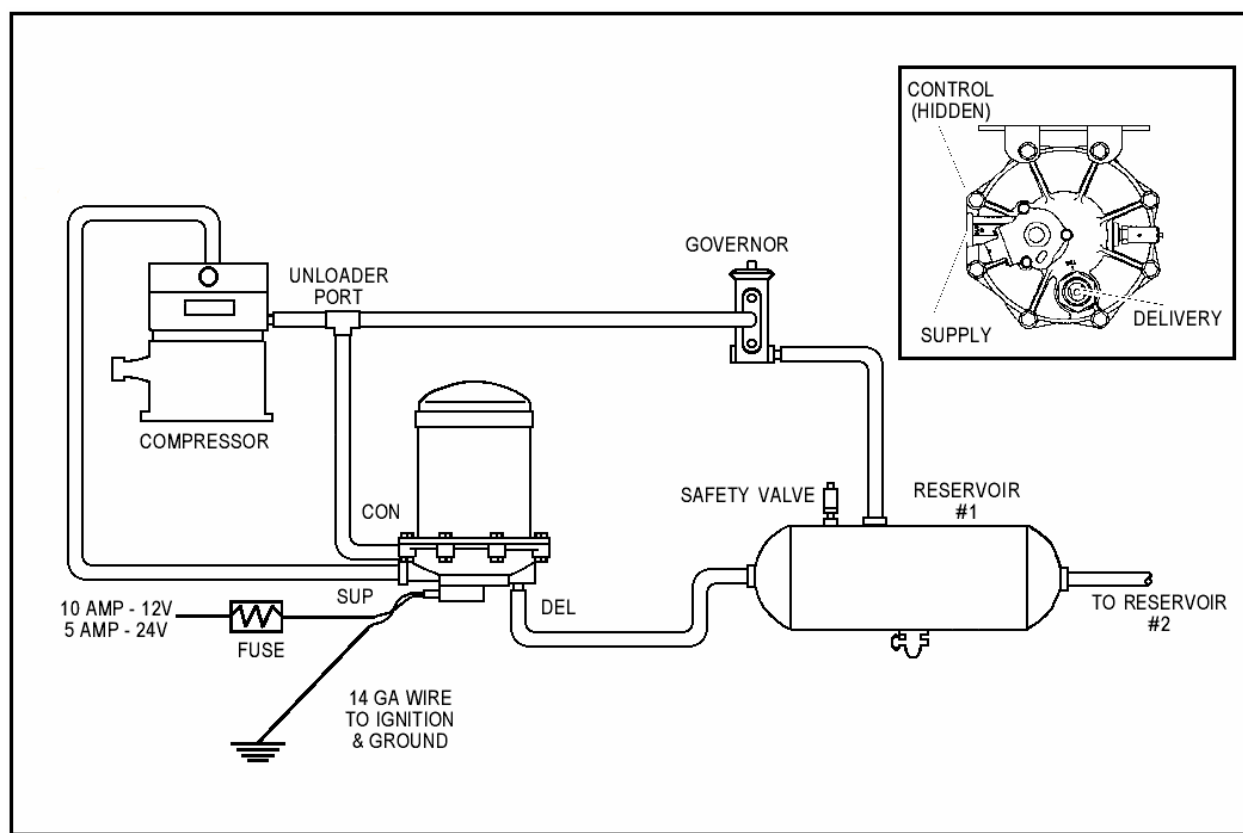


FIGURE 2 - AD-9 CHARGE CYCLE

### Bendix AD-9 Air Dryer

Bendix #065225  
Tucker's #80619

For all technical information: [http://www.bendix.com/downloads/service\\_data\\_sheet/Sd082412b.pdf](http://www.bendix.com/downloads/service_data_sheet/Sd082412b.pdf)

Mount AD-9 Dryer vertically, outside engine compartment, in area of air flow. Provide 8 inches clearance below air dryer for servicing.

Use at least 6 ft. of discharge line between compression discharge port and air dryer inlet for a multi-cylinder compressor and 10 ft. of line for a single cylinder compressor. Six feet of discharge line and a 90 cubic inch reservoir can be used in lieu of 10 ft. of discharge line for single cylinder compressors. Maximum discharge line length for all compressors is 20 feet. The discharge line should slope downward from the compressor to the air dryer inlet to avoid water traps and to allow drainage to the air dryer. Discharge line material may be either high temperature hose or copper tubing.

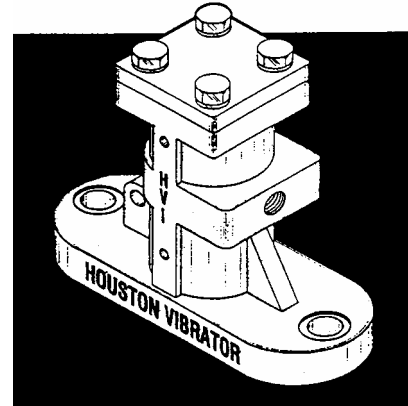
Bendix compressors require a minimum of 4 feet of copper tubing extending from the discharge port with the balance being either high temperature hose or copper.

# PNEUMATIC PISTON VIBRATOR

Houston Vibrator, Inc.

HVI MODEL NUMBER	All Dimensions in Inches								
	A	B	C	D	E	F	G	NPT Inlet	WT
BV-225	7-1/4	9	3-1/2	1	7-1/2	1-3/4	5/8	1/4	21

Tucker's #80443



## VIBRATOR VALVE

Parker Schrader Bellows  
#015210439  
Tucker's #80442

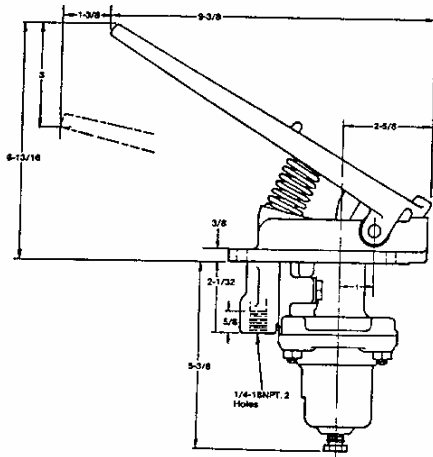


2-way, hand-operated, large capacity, normally-closed poppet valve with rugged brass body. Aluminum handle has large palm surface for easy actuation.

PORT SIZE	FLOW CAPACITY	OLD NUMBER	MODEL NUMBER
3/8	170 SCFM	1521W	01521-0439

## ACCELERATOR VALVE

Wabco Controlair Valve



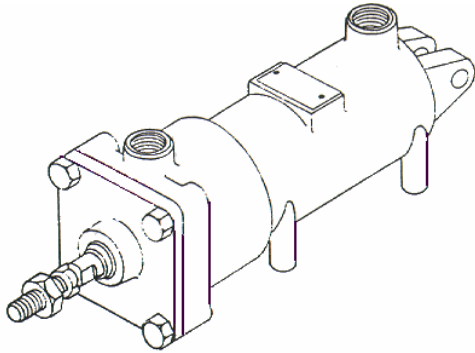
The H-1 CONTROLAIR Valve is a pedal actuated, 3-way pressure regulating valve, suitable for application where the valve portion extends below the floor level. Depressing the pedal increases the outlet pressure. The pedal is self-returning. This valve is suitable for brake and clutch control or any use where foot operation pressure control is desired.

	PSI Range	Piece number
WABCO	0-65	P52570-0001
Tucker's	0-65	80303

REPLACEMENT SEAL KIT:  
WABCO #P59028  
Tucker's #80303-01

## TWO-DIRECTION ACCELERATOR CYLINDER

### WABCO ACTUATOR POSITIONER



An extremely versatile type, the Two-Direction positioner moves  $\frac{1}{2}$  its total stroke length in each direction from a center "zero" position. It is a compact, economical, accurate linear piston type with three total stroke lengths, 1", 1-1/2", and 2". WABCO's HC-2 Controlair Valves or MC-2 Type "M" Valves with center indexing are natural Partners with the Two-Direction positioner.

ORDERING INFORMATION			
Piece No.	Operating Pressure	Force Rating	Total Stroke Length
P59833-1000	10 - 60	820	2"

Tucker's #80300

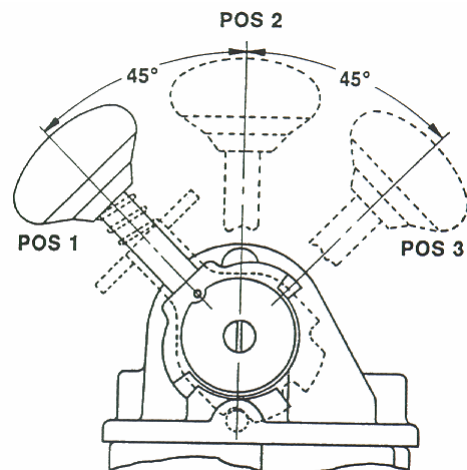
## THROTTLE VALVE FORWARD & REVERSE

### WABCO Panel-Mounted Valve

#### 4-WAY EXHAUST CENTER VALVES 3-POSITION HANDLE

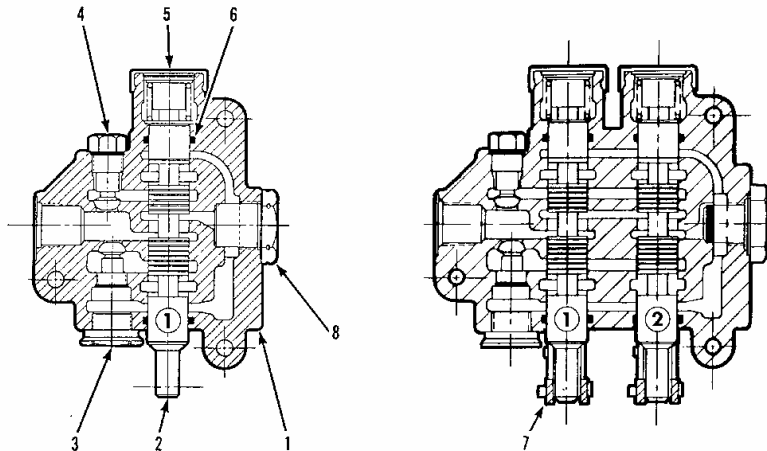
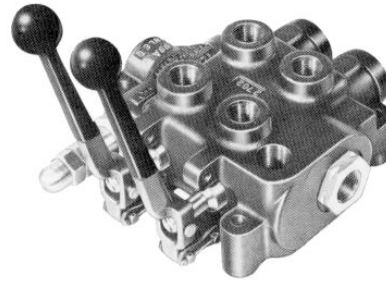
2-HA-2 PILOTAIR VALVE (with detents).  
WABCO #P59335  
Tucker's #80301

HANDLE POSITION	PORTS SUPPLIED	
	OUT 1	OUT 2
1		X
2		
3	X	



# LIFT-SWING VALVE

Gresen #SP-4-4HP  
Tucker's #80104



Model SP Spool Directional Controller Valve		
Item No.	Part No.	Description
1	2701-	HOUSING, SP 1-SPOOL See Note 1
	2702-	HOUSING, SP 2-SPOOL See Note 1
	2703-	HOUSING, SP 3-SPOOL See Note 1
2	904-001	SPOOL, 4-WAY, 3-POSITION See Note 1
	903-001	SPOOL, 3-WAY, 3-POSITION See Note 1
	2805-001	SPOOL, 4-WAY, FREE FLOW See Note 1
	2897-001	SPOOL, METERING See Note 1
3		RELIEF, ADJUSTABLE, J
		RELIEF, HIGH PRESSURE, ADJUSTABLE, J-HP
		RELIEF, NON-ADJUSTABLE, J-NJ
		RELIEF, HIGH PRESSURE, NON-ADJUSTABLE, J-NJ-HP
		RELIEF, DIFFERENTIAL POPPET TYPE, NON-ADJUSTABLE, WS
		RELIEF, DIFFERENTIAL POPPET TYPE, ADJUSTABLE, WSA
		PLUG, NO RELIEF, NR
4	K-2028	LOAD CHECK
5		POSITIONER, SPRING RETURN TO NEUTRAL
		POSITIONER, MANUAL
		POSITIONER, 3-POSITION RETENT (PRIOR TO EARLY 1974)
		POSITIONER, 3-POSITION RETENT (AFTER EARLY 1974)
		POSITIONER, 1-POSITION WITH SPRING RETURN
		POSITIONER, ROTARY RETENT
		POSITIONER, SPRING EXTENDED SPOOL
		LIMITER, SPOOL TRAVEL
6	7691-001	SEAL, STANDARD (2 REQ'D. FOR EACH SPOOL)
	2816-001	SEAL, BUYTL QUAD RING (2 REQ'D. FOR EACH SPOOL)
	2902-001	SEAL, BUNA-N QUAD RING (2 REQ'D. FOR EACH SPOOL)
7	902-001	HANDLE ASSEMBLY, SHORT
	2580-001	HANDLE ASSEMBLY, STANDARD
	3461-001	HANDLE ASSEMBLY, OFFSET TO RIGHT
	3462-001	HANDLE ASSEMBLY, OFFSET TO LEFT
8		PLUG, CLOSED CENTER
		PLUG, CONVERSION
		SLEEVE, POWER BEYOND
<b>NOTE 1:</b> These are matched parts and are not sold separately. A complete valve assembly must be ordered. Refer to Monoblock product catalog No. 10401 for complete details and ordering instructions.		

## CYLINDER LOCK

Vicker's #02-160853  
Tucker's #80215



## HOT OIL SHUTTLE VALVE

Sunstrand #8800485-2400  
Tucker's #80202-01



# SPEED SELECTOR – TRANSMISSION WATERMAN HYDRAULICS

Waterman #12C51SM-A12T6

Tucker's #80202

## Series 12

## Solenoid Cartridge Valves

4-Way Spool • 3 GPM (11 l/min) • 3000 PSI (210 bar)

### Features . . .

- *High flow capacity with reduced space requirements.*
- *No dynamic seals.*
- *Standard valve bodies and common cavities.*
- *One-piece encapsulated coil with minimal amperage draw.*
- *Oil immersed armature solenoid.*
- *Numerous coil terminals and voltages.*
- *Coil interchangeability with all Series 12 valves.*
- *Manual overrides, seal variations and other options available.*

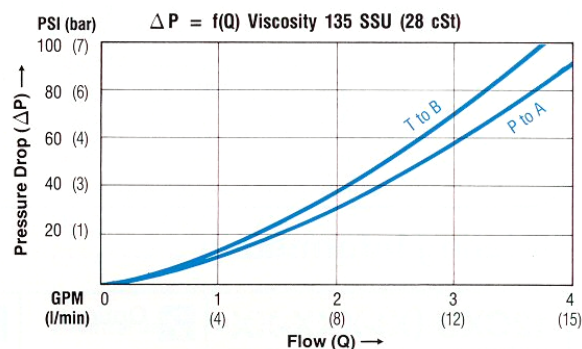


### Specifications . . .

Basic Model Number	12C51SM
Symbol	
Nominal Flow (at $\Delta P = 70$ psi)	3 GPM (11 l/min)
Max. Operating Pressure	3000 PSI (210 bar)*
Response Time (dependent on flow and pressure)	40 to 100 mil-sec
Design	Working parts hardened, ground & honed
Viscosity Range	36 SSU (3cSt) to 3000 SSU (647 cSt)
Filtration	30 micron nominal
Media Operating Temperature Range	+200°F (93.3°C) to -45°F (-42.7°C)
Seals	Buna-N O-rings, teflon back-up washer
Mounting Position	Unrestricted
Weight	10 ounces (.28 kg)
Cavity Form Tool No.	FT12-4 (Cavity Style #12-4).
Options	See ordering info. or consult manufacturer
Electrical Data	See Series 12 Coil Data Sheet.
Valve Body Data	See Series 12 Valve Body Data Sheet.

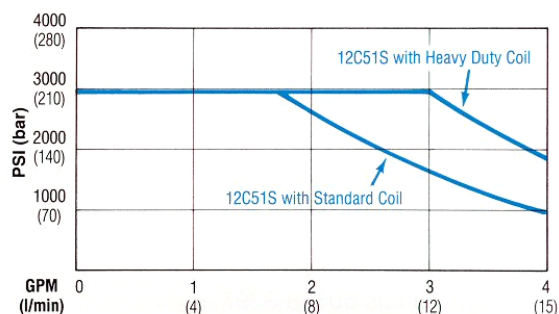
\*For higher pressures, consult manufacturer.

### Pressure Drop vs. Flow . . .



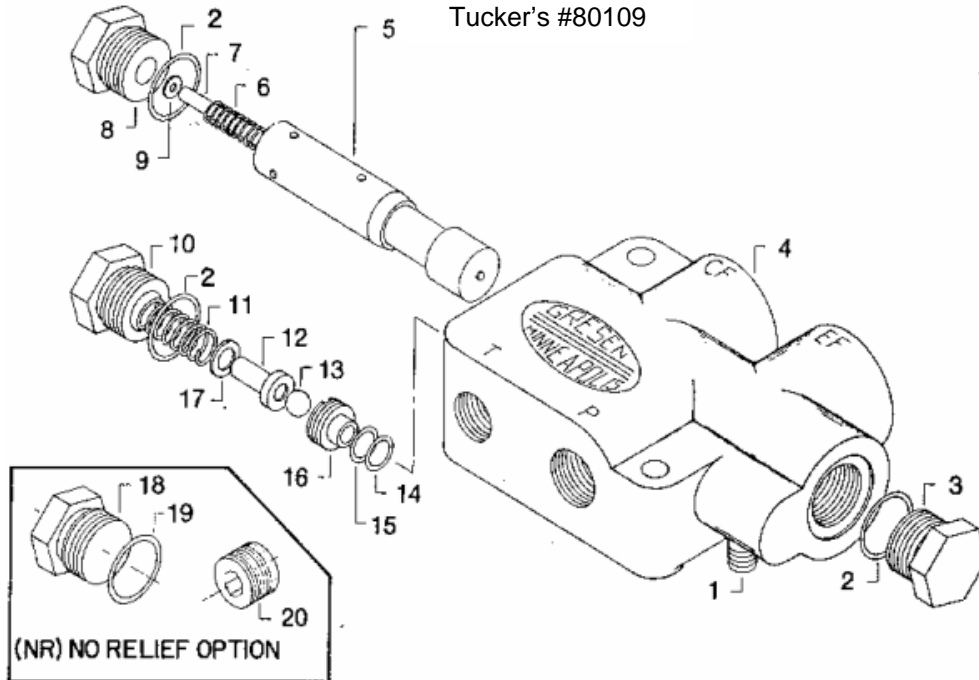
### Valve Performance

### Operating Characteristics . . .



# MODEL CFD FLOW DIVIDER

GRESEN #CFD50-5-HP  
Tucker's #80109



Parts List			
ITEM	PART NO.	DESCRIPTION	NO. REQ.
1	015-001	Plug	1
2	2707-001	O-ring seal	3
3	1458-001	Spool cap, Solid	1
4	1460-	Housing	1
5		Spool – see options below	1
	1447-001	1.5 GPM	
	1462-001	2.0 GPM	
	1463-001	3.0 GPM	
	1464-001	4.0 GPM	
	1465-001	5.0 GPM Controlled	
	1466-001	6.0 GPM flow Gallonage	
	1467-001	7.0 GPM	
	1468-001	8.0 GPM	
	1469-001	9.0 GPM	
	1470-001	10.0 GPM	
6	1456-001	Spool Spring	1
7	1455-001	Spool Spring Guide	1
8	1459-001	Spool Cap, Hollow	1
9	1448-001	Spool Spring Shim	1
10	1449-001	Relief Cap	1
11	1450-001	Relief Spring (0-1500)	1
	1451-001	Relief Spring (1501-2500PSI)	
12	1452-001	Spring Guide	1
13	2504-001	Relief Ball	1
14	2503-001	O-ring seal	1
15	1453-001	Backup Washer	1
16	1454-001	Relief Seat	1
17	458-001	Shim (.040 thick)	As reqd.
	459-001	Shim (.020 thick)	As reqd.
	462-001	Shim (.010 thick)	As reqd.
OPTIONAL NR RELIEF			
18	1458-001	Spool cap (Solid)	1
19	2707-001	O-ring Seal	1
20	073-001	3/8" NPT Pipe Plug	1

## PORTING KEY

CF = Controlled Flow

EF = Excess Flow

P = Pressurized Oil From Pump

T = Relief Valve Return to Tank (from constant flow side only)

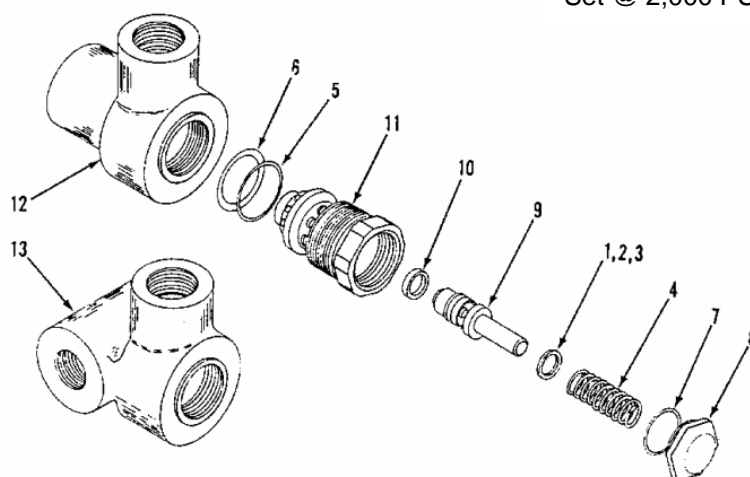
Note: This port plugged on (NR) models.



# DIFFERENTIAL-POPPET RELIEF VALVE

Model WJ & WJL Series

Gresen #WJL-75  
Tucker's #80211  
Set @ 2,000 PSI



## INSTRUCTIONS FOR ADJUSTING THE RELIEF SETTING

Remove 1881-001 cap and add shims to increase setting or remove shims to decrease setting. Shims must be placed over stem of 1881-001 relief poppet under spring.

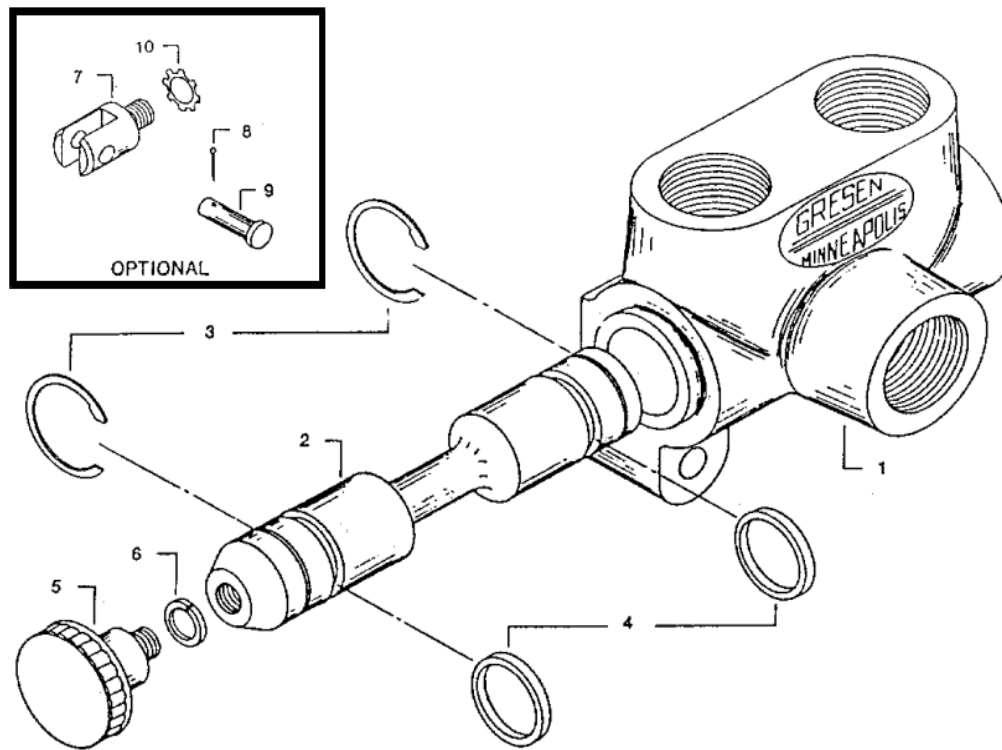
CAUTION: Never attempt to adjust relief pressure without use of a reliable gage in the system.

Parts List			
Item No.	Part No.	Description	Quantity
	K-19002	Service kit (Contains Items 10 and 11)	
	K-6006	SEAL KIT (Contains Items 5, 6, and 7)	
1	458-001	SHIMS (.040)	A/R
2	459-001	SHIMS (.020)	A/R
3	462-001	SHIMS (.010)	A/R
4		SPRING, Relief Pressure (Choose one)	1
	1450-001	500-1350 PSI, No Color	1
	1864-001	1351-1750 PSI, Silver	1
	1451-001	1751-2200 PSI, Yellow	1
	1865-001	2201-3000 PSI, Red	1
5	1615-001	SEAL, O-Ring Order K-6006	1
6	1718-001	SEAL, O-Ring Order K-6006	1
7	2707-001	SEAL, O-Ring, Order K-6006	1
8	1880-001	CAP, Relief, without hole lockwire (Standard)	1
	1880-003	CAP, Relief, with hole for lockwire (Optional)	1
9	1881-001	POPPET, Relief Order K-19002	1
10	1883-001	RING, PISTON Order K-19002	1
11	1890-001	BODY, Relief, without hole for lockwire (Standard)	1
	1890-002	BODY, Relief, with hole for lockwire (Optional)	1
12	2716-004	Housing, SAE 10 Ports	A/R
	2716-005	Housing, ½" NPTF Ports	A/R
13	2818-008	Housing, SAE 10 ports	A/R
	2818-006	Housing, ½" NPTF Ports	A/R
14	1234-001	LOCKWIRE and LEAD SEAL (Not shown)	1



# AUGER SELECTOR VALVE

Gresen Model S75  
Tucker's #80111



## Parts List

ITEM	No. Req'd	Description	S-50	S-75	S-100
			Part No.	Part No.	Part No.
1	1	Valve Housing	*1140-001	*1120-001	*1310-001
2	1	Valve Spool	*1139-001	*1130-001	*1311-001
3	2	Snap Ring	602-001	1127-001	1312-001
4	2	Spool Seal	8021-001	7700-001	8020-001
5	1	Control Knob	081-001	081-001	081-001
6	1	Lock Washer	1291-001	1291-001	1291-001
7	Opt.	Handle Adapter	1478-001	1478-001	1478-001
8	Opt.	Cotter Pin	086-001	086-001	086-001
9	Opt.	Handle Pin	085-001	085-001	085-001
10	Opt.	Lock Washer	603-001	603-001	603-001
Available Kits-Seal Kit contains items 3 and 4			K-13001	K-14001	K-15001
Control Knob Kit contains items 5 and 6			K-13002	K-13002	K-13002
Clevis Adapter contains items 7 and 10			K-13003	K-13003	K-13003
*Not sold as separate items. Spools are factory honed to individual housing and are not interchangeable. Repair service available at factory.					

## **INSTRUCTIONS FOR REPLACING SEALS ON MODEL S75 SELECTOR VALVE**

**IMPORTANT:** When installing new seals care must be taken to prevent dirt entering valve or system. Extreme care must also be taken to avoid cutting new seals when installing in valve.

- 1. Remove Snap Rings at handle end and rear end of spool.**
- 2. Push knob in until rear Seal is exposed. Remove rear Seal.**
- 3. Spool may now be removed from valve body. Remove front Seal from spool.**
- 4. To prevent cutting Seal on sharp edges, wrap spool in 3 or 4 layers of glossy paper, leaving only the front Seal groove exposed. Install new Seal from rear of spool over the paper and into the Seal groove.**
- 5. Apply clean grease to new Seal. Remove paper and insert spool in body and with a rotating action on knob, push in spool until front Seal disappears and until rear Seal groove is exposed.**
- 6. Install rear Seal in grove.**
- 7. Apply clean grease to rear Seal.**
- 8. IMPORTANT – Now install rear Snap Ring and with firm rotating action pull Spool to stop.**
- 9. Install front Snap Ring.**

## VIBRATOR OILER VALVE

### VERSA VALVES SERIES "B"

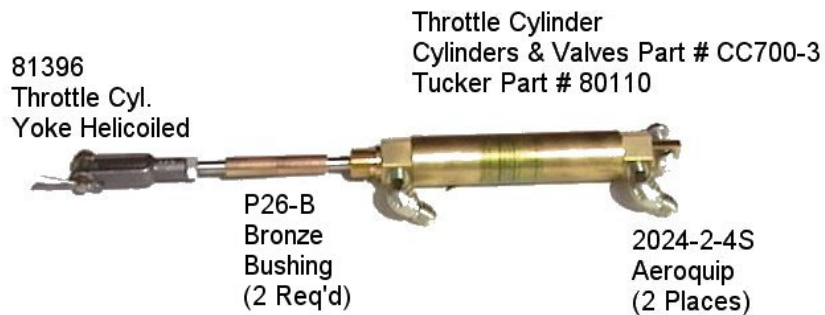


Normally Closed	
Palm Button	For Panel Mtg.
Two-Way	BLK-2208-P25B

Tucker's #80106

## THROTTLE CYLINDER

### CYLINDERS AND VALVES, INC.



Set up for 4045T John Deere

Tucker #  
80575-85  
Throttle  
Arm



Stanadyne #  
16392

Tucker #  
80575-86  
Throttle  
Arm Adj.  
Spacer



Stanadyne #  
16136

Tucker #  
80575-87  
Throttle  
Arm Spring



Stanadyne #  
13003

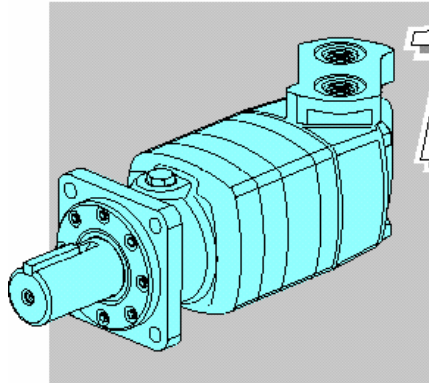
# AUGER MOTOR

CHAR-LYNN #119-1030  
Tucker's #80102



Disc Valve Hydraulic Motors

## 10,000 Series



# 10,000

### 10,000 Series

Geroler® Element ..... 4 Displacements  
Flow LPM [GPM] ..... 170 [45] Continuous\*\*  
265 [70] Intermittent\*  
Speed ..... Up to 784 RPM  
Pressure Bar [PSI] ... 200 [ 3000] Cont.  
270 [ 4000] Inter.  
Torque Nm [lb-in] ... 2700 [23910] Cont.  
3440 [30460] Inter.

#### EACH ORDER MUST INCLUDE THE FOLLOWING:

1. Product Number
2. Data Code
3. Part Name
4. Part Number
5. Quantity Parts

10,000 Series Displacement Size = cubic centimeter per shaft revolution (  $\text{cm}^3/\text{r}$  )  
= cubic inch per shaft revolution ( [  $\text{in}^3/\text{r}$  ] )

• 345 [21.0]

• 480 [29.2]

• 665 [40.6]

• 940 [57.4]

#### Mounting Flange

• 4 Bolt (Bearingless) 152.4 [6.00] Pilot Dia. and 20.88 [.522] Dia. Mounting Holes 228.6 [9.00] Dia. B.C.

• 4 Bolt (Standard) 127.0 [5.00] Pilot Dia. and 17.02 [.670] Mounting Holes on 161.9 [6.37] Dia. B.C.

• 4 Bolt (Wheel) 177.8 [7.00] Pilot Dia. and 17.02 [.670] Dia. Mounting Holes on 209.5 [8.25] Dia. B.C.

#### Output Shaft

• Bearingless

• 2-1/4 inch Dia. Straight with Straight Key, 1/2-20 Threaded Hole and 97.5[3.84] Max. Coupling Length

• 2-1/4 inch Dia. Tapered with Straight Key and 1-1/2—18 UNEF Slotted Hex. Nut

• 2-1/8 inch Dia. Splined 16 T with 52.1 [2.05] Min. Full Spline Length and 1/2-20 UNEF Threaded Hole

#### Port Type

• 1-5/16-12 O-ring with 9/16-18 O-ring Case Drain

• 1-1/4 Split Flange with 9/16-18 O-ring Case Drain

#### Special Features

• Viton Shaft Seal

• Viton Seals

• Two Speed Option

• Corrosion Protected

Type of motor	Type of shaft	Ports	Displacement Cu. In./rev. and Product Number			
			20.6	29.2	40.6	57.4
Standard	Straight	1-5/16 O-ring			119-1030	

\*\* Continuous— (Cont.) Continuous rating, motor may be run continuously at these ratings.

\* Intermittent— (Inter.) Intermittent operation, 10% of every minute.

# SWING MOTOR

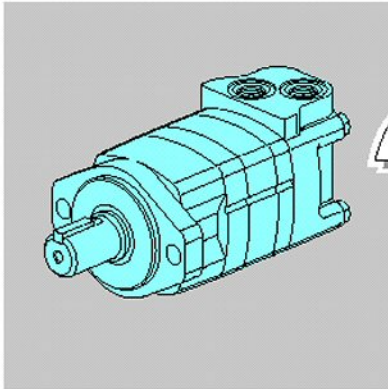
CHAR-LYNN #104-1035  
Tucker's #80103



Disc Valve Hydraulic Motors

## 2000 Series

Type of Motor	Standard w/2 Bolt SAE A Flange
Type of Shaft	1-1/4 14 T Splined
Ports	7/8-14 O-ring
Displacement (cu. In./rev.) & Product Number	18.7



# 2000

### 2000 Series

Geroler® Element ..... 9 Displacements  
Flow LPM [GPM] ..... 75 [20] Continuous\*\*  
115 [30] Intermittent\*  
Speed ..... Up to 924 RPM  
Pressure Bar [PSI] ... 200 [3000] Cont.  
300 [4500] Inter.  
Torque Nm [lb-in] .... 845 [7470] Cont.  
930 [8225] Inter.

#### EACH ORDER MUST INCLUDE THE FOLLOWING:

1. Product Number
2. Data Code
3. Part Name
4. Part Number
5. Quantity Parts

2000 Series Displacement Size = cubic centimeter per shaft revolution ( cm<sup>3</sup>/r )  
= cubic inch per shaft revolution ( [ in<sup>3</sup>/r ] )

- 80 [ 4.9]
- 100 [ 6.2]
- 130 [ 8.0]
- 160 [ 9.6]
- 195 [11.9]
- 245 [14.9]
- 305 [18.7]
- 395 [24.0]
- 490 [29.8]
- Mounting Flange**
  - 4 Bolt (Bearingless) 101.6 [4.00] Pilot Dia. and 13.59 [.535] Dia. Mounting Holes on 127.0 [5.00] Dia. B.C.
  - 2 Bolt (SAE A) (Standard) 82.5 [3.25] Pilot Dia. and 13.59 [.535] Mounting Holes on 106.4 [4.19] Dia. B.C.
  - 4 Bolt (Wheel) 107.9 [4.25] Pilot Dia. and 13.59 [.535] Dia. Mounting Holes on 147.6 [5.81] Dia. B.C.
  - 4 Bolt (Standard) 82.5 [3.25] Pilot Dia. and 13.59 [.535] Dia. Mounting Holes on 106.4 [4.19] Dia. B.C.
  - 4 Bolt Magneto 82.5 [3.25] Pilot Dia. and 13.59 [.535] Dia. Mounting Holes on 106.4 [4.19] Dia. B.C.
  - 2 Bolt (SAE B) 101.6 [4.00] Pilot Dia. and 14.27 [.562] Dia. Mounting Holes on 146.0 [5.75] Dia. B.C.
- Output Shaft**
  - Bearingless
  - 1 inch Dia. Straight with Woodruff Key, 1/4-20 Threaded Hole and 38.4 [1.51] Max. Coupling Length
  - 1-1/4 inch Dia. Straight with Straight Key, 3/8-16 Threaded Hole and 47.3 [1.86] Max. Coupling Length
  - 32 mm Dia. Straight with Straight Key, M8 x 1.25 -6H Threaded Hole and 56.4 [2.22] Max. Coupling Length
  - 1-1/4 inch Dia. Splined 14 T, 3/8-16 Threaded Hole and 33.0 [1.30] Min. Full Spline Length and 45.5 [1.79] Max. Coupling Length
  - 1-1/4 inch Dia. Tapered with Straight Key and Nut
  - SAE 6B Splined 6 T, 1/4-20 Threaded Hole and 22.8 [.90] Min. Full Spline Length and 28.8 [1.13] Max. Coupling Length
  - 7/8 inch Dia. Splined 13 T, 15.2 [.60] Min. Full Spline Length and 30.8 [1.21] Max. Coupling Length
  - 25 mm Dia. Straight with Straight Key, M8 x 1.25 -6H Threaded Hole and 38.1 [1.50] Max. Coupling Length
- Port Type**
  - 7/8-14 O-ring (Staggered) with 7/16-20 O-ring Case Drain
  - G 1/2 (BSP) (Staggered) with G 1/4 (BSP) Case Drain
  - Manifold Mount with 3/8-16 UNC Mounting Threads (3) and 7/16-20 O-ring Case Drain
  - Manifold Mount with M10 x 1.5 -6H Mounting Threads (3) and G 1/4 (BSP) Case Drain
  - 1-1/16-12 O-ring (Positioned 180° Apart) with 7/16-20 O-ring Case Drain
  - 7/8-14 O-ring (End Ports) with 7/16-20 O-ring Case Drain (Rear)
- Special Features**
  - Viton® Shaft Seal
  - Viton Seals
  - Free Running Geroler
  - Speed Sensor
  - Two Speed Option
  - Hot Oil Shuttle
  - Corrosion Protected
  - Seal Guard Package

\*\* Continuous— (Cont.) Continuous rating, motor may be run continuously at these ratings.

\* Intermittent— (Inter.) Intermittent operation, 10% of every minute.

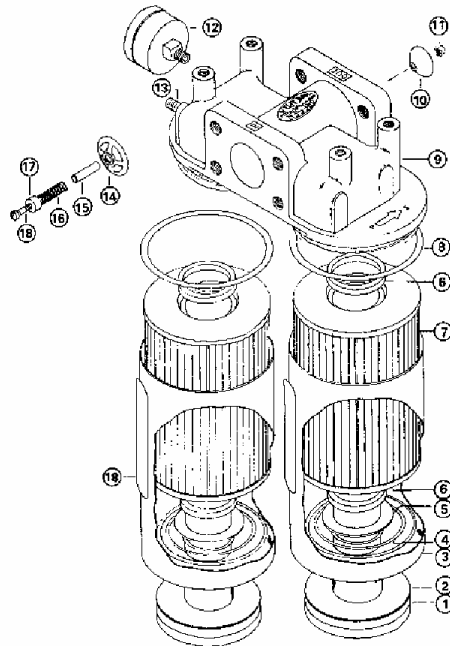
Viton® is a Registered Trade Name of Dupont Corp.

# T-630 TANK RETURN FILTER

GRESEN #FLR415-5EDNH  
Tucker's #80101

## F-400 SERIES "TWIN ELEMENT" FILTER

F 4 0 1 - 3 A O E



### INSTALLATION INSTRUCTIONS

1. When mounting filter on equipment, allow 1" clearance below filter for easy replacement of dirty filter element. For convenience and best results, mount filter in vertical position with Filter Housing "DOWN".
2. Be sure to connect filter for oil flow in direction of arrows cast on Filter Head.
3. If possible, plumb filter into system so that when the Filter Housing is removed to clean or replace element, oil supply in reservoir will not drain. This can be accomplished by making certain that the lower surface of the Filter Head Casting is above Reservoir Oil Level.
4. To change from "Suction-Line" Filtration (line Between Reservoir Tank and Pump Intake) to "Return Line" Filtration (line between Outlet of Control Valve to Reservoir Tank) or vice-versa, see INSTRUCTIONS TO REPLACE BY-PASS SPRING.

	DESCRIPTION	NO. REQ'D PER ASSEMBLY
FILTER ELEMENT		
K-23013	3293-001 Element, 10 micron paper	2
COMPLETE SEAL AND ELEMENT KIT		
K-23015	3276-001 Element, 10 micron shielded	2

Elements and Seal Kits contain one each of items 2, 8, 7, and two of item 6.

ITEM 2 Flat Gasket 1575-001

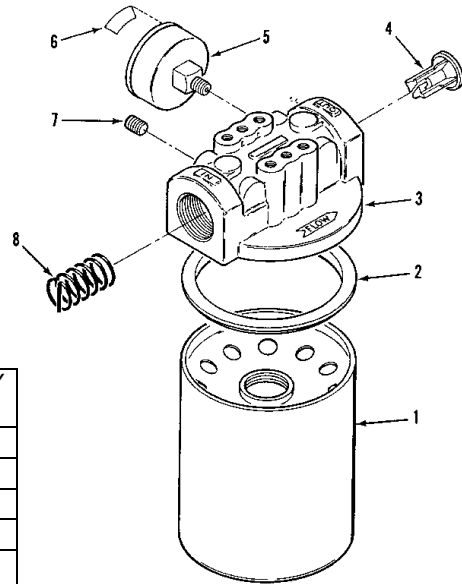
ITEM 8 "O" Ring 1576-001

# FS250 SERIES HYDRAULIC SYSTEM FILTER

GRESEN #SP212-1EDNH  
Tucker's #80107

## INSTALLATION INSTRUCTIONS

1. When mounting Filter, allow 1-1/2" clearance below filter for easy replacement of dirty Filter Element. For convenience and best results, mount Filter in vertical position with Filter Housing "DOWN".
2. Connect Filter for oil to flow in direction of arrow cast on Filter Head.
3. If possible, install Filter so that when the Filter Housing is removed to replace element, oil supply in Reservoir will not drain. This can be accomplished by making certain that the lower surface of the Filter Head Casting is above Reservoir Oil Level.
4. To change from "Suction-Line" Filtration (line between Reservoir Tank and Pump-Intake) to "Return Line" Filtration (line between Control Valve Outlet and Reservoir Tank) or vice-versa.
5. Follow instructions printed on Filter Element can when changing Elements.



## PARTS LIST

ITEM	PART NUMBER	DESCRIPTION	QUANTITY REQ'D
1	See Table 1	Filter Element	1
2	7519-001	Filter Element Seal	1
3	7507-XXX	Head Casting, FS250*	1
4	7510-001	Relief Valve Poppet	1
5	K23028	No. 6671-001 Compound Indicator With No. 6673-001 Decal and No.6672-001 30" Vacuum Indicator	1
6	6673-001	Indicator Decal, Red, For Compound Indicators only	1
7	0015-001	1/8" Pipe Plug, optional	1
8	See Table 2	Relief Valve Spring	1

\* Filter Head Casting is not available as a spare part. Order complete Filter

TABLE 1 – FILTER ELEMENT		
DESCRIPTION	PART NUMBER (STAMPED ON ELEMENT)	KIT NUMBER * (FOR COMPLETE KIT REPLACEMENT)
3 Micrometer, Paper	7531-001	K-23020
<b>10 Micrometer, Paper</b>	<b>7520-001</b>	<b>K-23018</b>
25 Micrometer, Paper	7521-001	K-23019
* Complete Kit includes 1 Element (Item 1) and 1 Seal (Item 2) shown in the Parts List. Note: Element Kits are packed 12 Elements per case.		

TABLE 2 – RELIEF VALVE ASSEMBLY				
PRESSURE RATING	APPLICATION	SPRING COLOR	PART NUMBER	KIT NUMBER* (For Complete Kit Replacement)
3 psi	Suction Line	Blue	7511-001	K-23023
5 psi	Suction Line	Black	7512-001	K-23021
9 psi	Suction Line	Red	7513-001	K-23024
15 psi	Return Line	Silver	7514-001	K-23022
25 psi	Return Line	Steel Gray	7515-001	K-23025
* Complete Kit includes 1 each of Item 4 and 8 shown in Parts List				

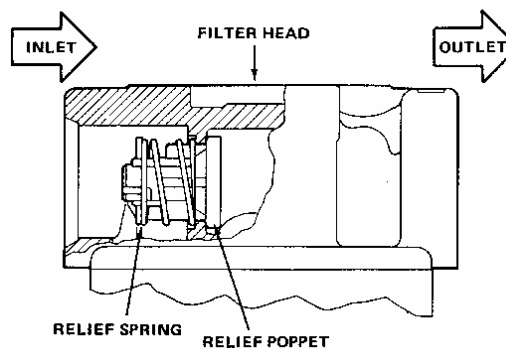
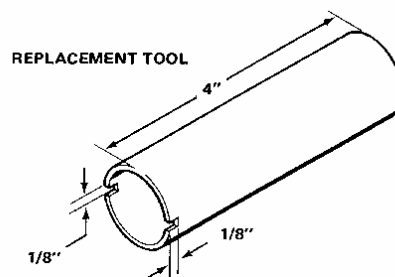
## INSTRUCTIONS TO REPLACE RELIEF VALVE SPRING

### TOOLS REQUIRED

1. Hold Relief Poppet in place with a ½" Allen wrench.
2. Depress Spring, turn counterclockwise. To simplify Spring removal, make a simple Spring Replacement Tool by using electric conduit or tubing as follows:
  - a. Cut a section of 1-1/8" O.D., 1" I. D. by 4" long electric conduit or equal.
  - b. Cut 2 notches 1/8" wide by 1/8" deep. Place Tool notches over Spring, depress and turn counterclockwise
3. Remove Spring and Poppet.
4. Install new Spring.

Note: The 5 PSI Spring is standard for suction line applications. 3 PSI and 9 PSI Springs are optional. The 15 PSI Spring is standard for return line applications. 25 PSI Spring is optional.

Caution: When replacing poppet and spring make sure that poppet is always installed from the outlet side of the filter head and the spring from the inlet side.





## CONDITION INDICATOR INSTALLATION INSTRUCTIONS

If filter is installed in "Return-line" (Line from Outlet of Control Valve to reservoir Tank), the indicator must be installed on the "pressure" side of the filter designated by the word "IN" cast in the Filter Head. For "Suction Line" operation (Line between Reservoir Tank & Pump Intake), install the indicator on the "suction" side, designated by the word "OUT" cast in the Filter Head.

### INSTRUCTIONS FOR PROPER MARKING OF "DANGER ZONE" ON INDICATOR DIAL FACE.

1. If unit is operated as a "Suction-Line" Filter, indicator dial has danger zone marked on dial starting at 10" Hg(5 PSI Spring) and the Red Decal is not required. To avoid possible damage to your pump, check with the manufacturer to determine the max. safe inlet drop allowed.

EXAMPLE: When Filter is installed in "Suction Line" ahead of pump, some allowable restriction is created. As dirt or foreign matter is collected in Filter, increase suction is required. This may cause starvation or cavitation of pump prior to the opening of Filter Relief Valve, which is normally set at 10" Hg(5 PSI Spring). Gresen Vane Pumps are designed to withstand a suction of 10" Hg(5 PSI Spring).

2. If unit is operated as a "Return Line" Filter, (with 15 PSI Spring) take pressure reading on Filter Condition Indicator when Filter is clean and with oil at operating temperature. Disregard Indicator reading until oil reached operating temperature. To this figure, add the number from the chart below, which corresponds to your particular installation. The total of these two figures represents the point on the Indicator dial face at which the enclosed Red Decal should be placed when the 15 PSI Spring is installed. This will be the starting point of DANGER ZONE. The Relief Valve begins to open as the needle enters into the RED DANGER ZONE. This indicates that the Filter Element should be changed or cleaned to avoid the possibility of circulating any dirty oil through the system.
3. When installation has been completed, and before starting oil flow in the system, check Indicator to be sure needle is on "0".

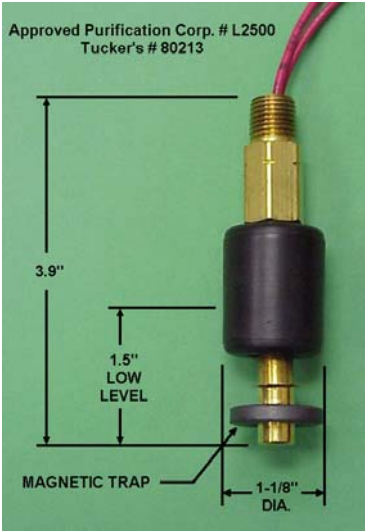
RETURN-LINE INDICATOR CALIBRATION CHART (150 SUS OIL and FILTER ELEMENT)			
PUMP OUTLET (GPM)	MODEL FS250 FILTER		
	PAPER ELEMENT 3 MICROMETER	PAPER ELEMENT 10 MICROMETER	PAPER ELEMENT 25 MICROMETER
0 - 20	10	13	14
21 - 30	6	11	12
31 - 40	2	9	9
41 - 50	-	5	7
51 - 60	-	-	5

# GRESEN®



# HYDRAULIC OIL LEVEL SENSOR

APPROVED PURIFICATION CORP.



Approved Purification Corp. #L2500  
Tucker's #80213

# IN-TANK STRAINER

HYDRAULIC SUPPLY COMPANY



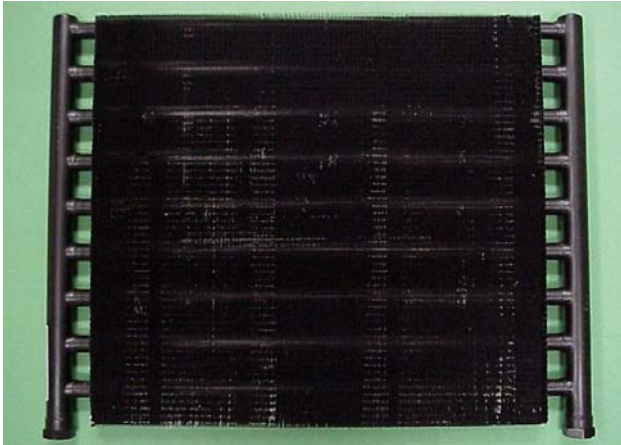
Hydraulic Supply Co. #SU65SF32  
Tucker's #80100

ORDERING INFORMATION												
TYPE OF ELEMENT		ELEMENT AREA			NORMAL MICRON RETENTION		MAGNET		THREAD (N.P.T.)		STANDARD LINE SIZE (in inches)	
<b>S</b>	<b>U</b>	Cm2	In2	<b>6</b>		<b>5</b>		<b>S</b>		<b>F</b>		<b>32</b>
One Pc.	U	2903	450	6	150 (100 mesh)	5	No Magnet	S	Female	F	2	32

## HEAT EXCHANGER (OIL COOLER)

Thermal Dynamics #DHR2491130

Tucker's #80207-1



## RUBBER MOUNTS FOR HEAT EXCHANGER

Thermal Dynamics #L84740

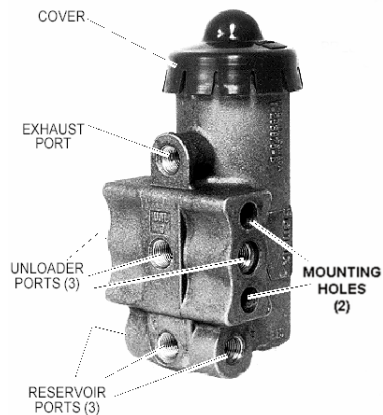
Tucker's #80207-02



## BENDIX D-2 GOVERNOR

Bendix #BW275491

Tucker's #80609

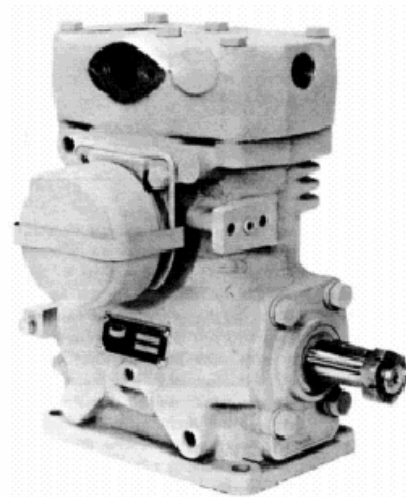


## AIR COMPRESSOR

~~Bendix #108261~~

Tucker's #80609-01

12 CFM at 1250 RPM



Available Remanufactured Exchange  
Maintenance Kit with High Temperature O-  
Rings PC. No. 280915  
Maintenance Kit with Standard O-Rings  
276121

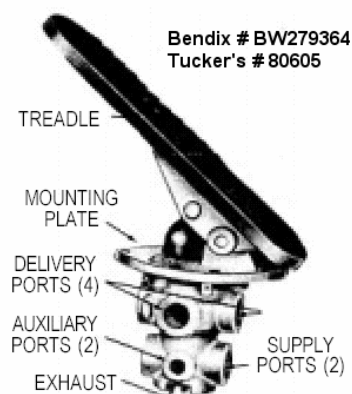
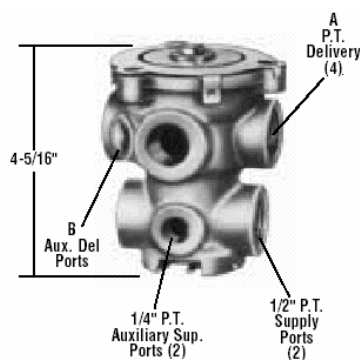
# Bendix Air Valves

## E-3 Brake Valve (Basic)

- Available Remanufactured Exchange
- Maintenance Kits  
Pc. No. 276119 Minor Repair  
Pc. No. 289329 Major Repair

Treadle and Mounting Plate  
Not Furnished. If Required Refer To  
Master Parts Catalog.

Basic E-3 Pc. No.	A Pipe Thread (Delivery)	B Auxiliary Ports
277863	1/2"	NONE
278998	1/2"	2-1/4"



## Single Check Valve

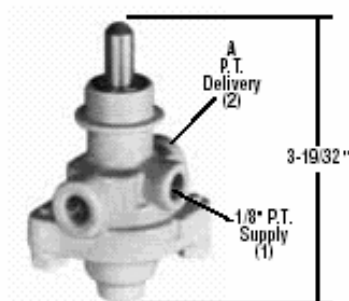
Bendix # BW800372  
Tucker's # 80612



## PP-1 Control Valve

- Available Remanufactured Exchange
- Maintenance Kit 281126
- Button and Mtg. Nut not Furnished with Exchange Valve
- Refer to Master Parts Catalog for Button or Dial Plate Pc. No.

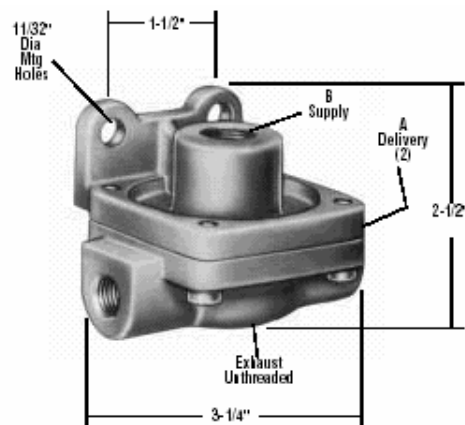
Bendix # BW275176  
Tucker's # 80600



## QR-1 Quick Release Valve

- Available Remanufactured Exchange

Bendix # BW229813  
Tucker's # 80611



## AIR HORN

Tucker's #80608 Air Horn Kit (includes  
valve, horn, tubing, & fittings



### Grover Products

Grover #1601 Dual Connected Truktone Horn  
Tucker's #80608-2 Air Horn

Bendix Horn Valve Model HV-3  
Tucker's #80608-1 Horn Valve

## AIR BRAKE AIR RESERVOIR

Tucker's #80610



## AIR PRESSURE GAUGE

Bendix #225635  
Tucker's #80607



## **REYCO INDUSTRIES INC.**

**P. O. BOX 2268 - SPRINGFIELD, MO. 65801-2268**  
**TELEPHONE 417 – 862-4343 - TELEX: 436424 REYCO SPG. - FAX 417 – 862-0343**

### **102 TRACTOR SUSPENSION** **MAINTENANCE RECOMMENDATIONS**

The 102 Tractor Suspension, by design, requires a minimal amount of Maintenance. However, suspensions in over-the-road operations require periodic checks to assure continued trouble free performance.

Our recommended 180 day inspection procedure is to :

1. Check  $\frac{3}{4}$ " u-bolt nuts to assure maintenance of 300 ft. lbs. torque.
2. Check all hanger mounting bolts to assure tight fit of hanger to frame. For specific torque recommendations, consult the vehicle service manual or manufacturer.
3. Check equalizer nut (equalizer bolt) to assure that 600 ft. lbs. torque is maintained.
4. Check torque arm bolts to assure that 160-200 ft. lbs. Torque is maintained.
5. Check  $\frac{3}{4}$ " torque arm clamp nuts to assure that 125-150 ft. lbs. torque is maintained. Insure the clamp is directed away from the spring to prevent possible interference during operation.
6. Check fit of springs to hangers and equalizer to assure continued good "ride" characteristics of Reyco suspension.

We recommend, during pre-delivery and after the first 1,000 miles of operation, that all of the above items be checked, including a check of the suspension alignment.

In addition to checking alignment during pre-delivery and at the first 1,000 miles of operation, suspension alignment should be checked when any one of the following conditions prevail:

1. Discovery of a loose suspension fastener. (Loose is defined as any torque below the recommended torque).
2. Discovery of elongated holes in a suspension component.
3. When bushings are being replaced.
4. Excessive or abnormal tire wear.

To insure an accurate torque reading, the torque tool used for checking torque must provide a correct measurement. Also, the nut and bolt should be dry (free of any lubrication) and clean (free of any dirt, grit, rust, etc.).

### T-630 Hose Contents

Part #	Qty	Hose Placement	Contents	
			Qty	Part #
81929	1	Left Wheel Motor (rear port) to Right Side Top Port Sunstrand Pump	1	BA12FR12
			1	BA12FRC12
			31"	FC136-12
81930	1	(65 ½") Left Wheel Motor (front port) to Left Port Sunstrand Pump bottom Tee – Center Port	2	1BA12FR12
			66.5"	FC136-12
81931	1	Vickers Pressure Right Side Outside Adapter Line to Auger Valve	2	1AA16FR16
			219"	GH781-16
81932	2	Auger Valve to Auger Motor (Lines to Cross)	2	1AA16FR16
			93.5"	GH781-16
81933	1	Auger Valve Return Line	2	1212-20S
			2	FJ8706-2020S
			189"	FC300-20
81934	1	Air Compressor to Air Tank	2	1206-10S
			2	63-473A-10
			2	900568-10B
			116"	2807-10
81935	1	Lower Articulate Pin Grease Line	1	1AA4MP4
			1	1AA4FJ4
			18"	GH781-4
81936	1	Return Line for Fuel	1	1AA4MFA4
			1	1AA5FJ4
			187"	GH781-4
81937	1	Grease Line (Auger Bearing)	1	1AA2MP4
			1	1AA4FJ4
			12"	GH781-4
81938	2	(Under Rear Frame Assembly) 2 Grease Lines (Steering Cylinder)	1	1AA2MP4
			1	1AA4FJ4
			10	GH781-4
81939	1	Upper Articulate Pin Grease Line	1	1AA4MP4
			1	1AA4FJ4
			15"	GH781-4
81940	1	Sunstrand Pump to Suction Filter	34"	2661-20
81941	1	Gate Valve to Vickers Pump	10"	2661-32
81947	1	Upper Turntable Grease Line: Rear Nylatron	1	1AA4FJ4
			1	1AA4MP4
			10.5	GH781-4

### T-630 Hose Contents

Part #	Qty	Hose Placement	Contents	
			Qty	Part #
81948	1	Upper Turntable Grease Line: Front Nylatron	1	1AA4FJ4
			1	1AA4MP4
			22.5	GH781-4
81949	1	Upper Turntable Grease Line: Center Bearing	1	1AA2MP4
			1	1AA4FJ4
			11.5"	GH781-4
81950	2	Cushion Valve to Swing Motor (Top to Top & Bottom to Bottom)	1	1AA8FR8
			1	1AA8MP8
			34.5"	GH781-8
81951	1	Auger Valve Outlet Tee Straight End to Auger Speed Selector	1	1AA12FR12
			1	1AA12FRB12
			31"	GH781-12
81952	1	Two Speed Selector to Pump	2	1AA6FR6
			30"	GH781-6
81953	1	Two Speed Selector Return	1	1AA8FR6
			54"	GH781-6
81954	2	1 – Two-Speed Selector to Left Wheel Motor Bottom	1	1AA6FR6
		1 – Left Motor Bottom to Right Bottom	1	1AA6FRB6
			64"	GH781-6
81955	2	1 - Two Speed Selector to Left Wheel Motor Top	2	1AA6FR6
		1 – Left Motor Top to Right Top	62.5	GH781-6
81957	1	Hot Oil Valve to Oil Cooler	1	1AA8FR8
			1	1AA8FRB8
			23"	GH781-8
81958	1	Bottom of Pump Tee Blocks to Hot Oil Valve	2	1AA8FR8
			90"	GH781-8
81959	1	Bottom of Pump Tee Blocks to Hot Oil Valve	2	1AA8FR8
			72"	GH781-8
81960	2	Torque Hub Grease Line	4	1AA4FJ4
			72"	GH781-8
81961	1	Top Swing Bearing Grease Line	1	1AA4MFA4
			1	1AA4FJ4
			12"	GH781-4
81962	1	Bottom Swing Bearing Grease Line	1	1AA4MFB4
			1	1AA4FJ4
			6.75"	GH781-4



# Auburn Power Wheel Hub

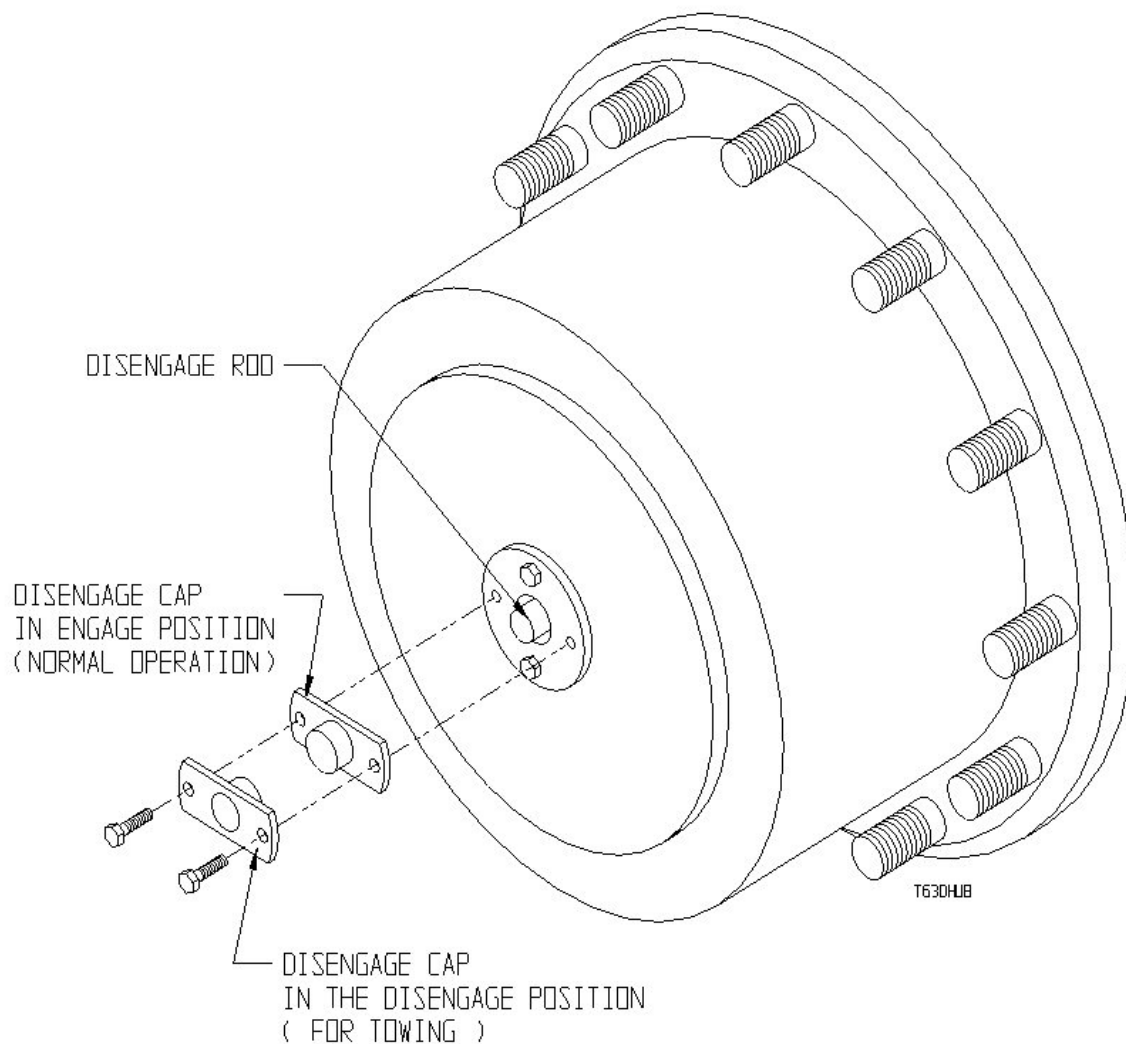
## To Disengage Gearbox for Towing

Remove (2) 1/4" Bolts holding Disengage Cap.

Turn cap over and bolt back on the housing.

Reverse the procedure to re-connect the gearbox for driving. **Caution** must be taken to make certain the Disengage rod is in the out position before re-installing the cap!!!!

Procedure must be done to both gearboxes



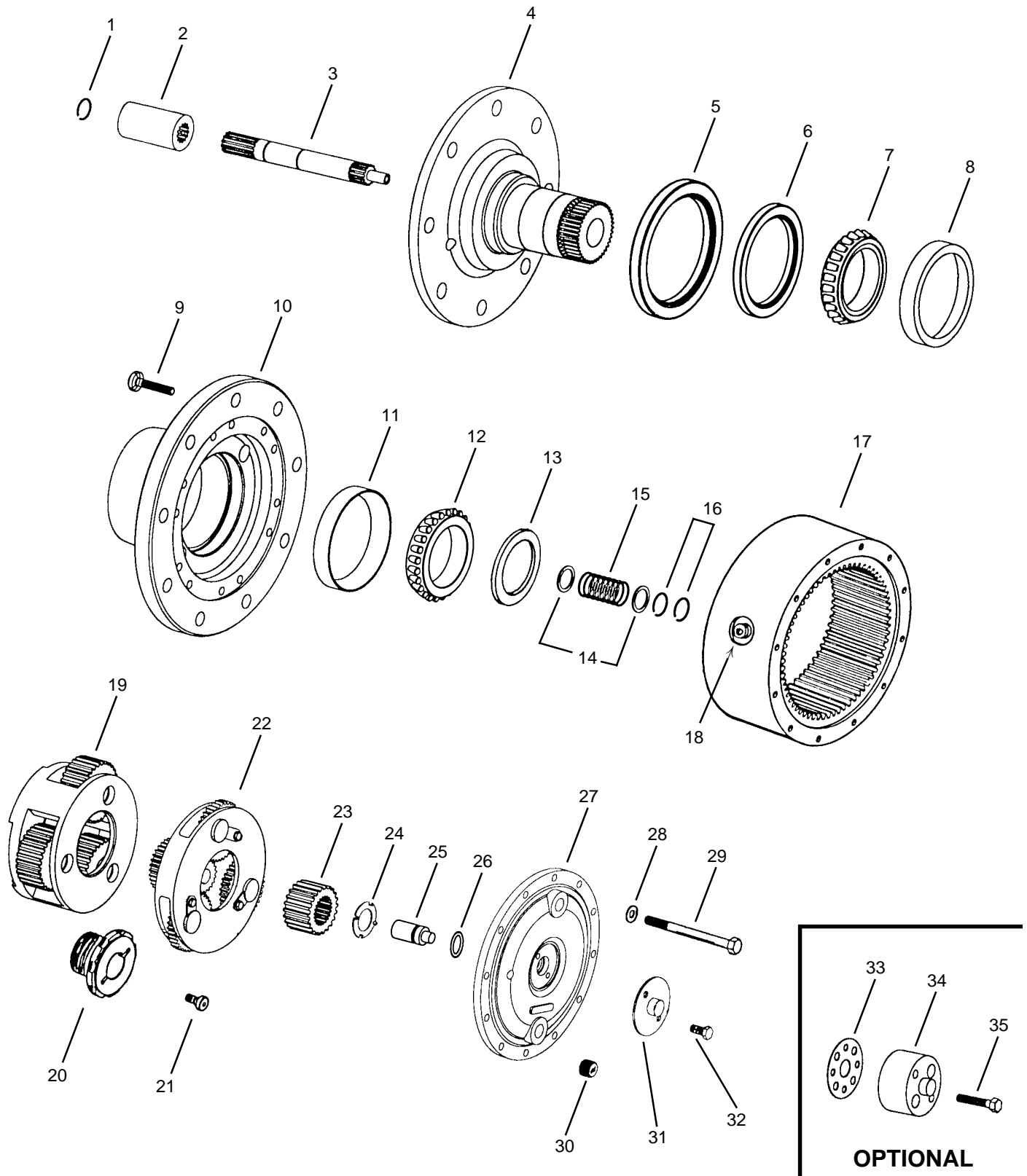
# Power Wheel® Service Manual

## Model 10 Double Reduction Wheel Drives



PHONE: (219) 925-3200

FAX: (219) 925-4725



## IDENTIFICATION

**IMPORTANT:** All Power Wheel units and kits are shipped with a nameplate that includes the Auburn Gear part number and order code as shown.

Example:



In addition to the nameplate, Power Wheel drives are stamped with an identification number which appears on the cover or hub flange as shown.

Example: **6000236-A-4-9**

When ordering parts, the information included on the nameplate or the stamped identification number is necessary to accurately identify the drive and obtain the correct replacement parts. Once this information has been obtained, contact Auburn Gear for the appropriate parts list.

## DISASSEMBLY OF POWER WHEEL

### STEP 1

Slide the coupling (2) from splines on input shaft (3).

### STEP 2

Position the assembly upright on face of spindle (4).

### STEP 3

Remove the disengage cover (31) if necessary.

### STEP 4

Remove twelve bolts (29), flat washers (28) and large cover (27). Disengage plunger (25) usually remains with large cover (27). Remove plunger (25) and "O" ring (26) from cover or end of input shaft (3). The thrust washer (24) will usually remain in position on the thrust face of large cover (27).

### STEP 5

Remove primary sun gear (23) from end of input shaft (3).

### STEP 6

Remove the primary carrier assembly (22).

### STEP 7

Remove the input shaft (3) from the assembly. The disengage spring (15), thrust washers (14), and retaining rings (16) will remain intact on the input shaft. Remove these components only if replacement is required.

### STEP 8

Remove the bearing nut lock screw (21).

### STEP 9

Remove the secondary carrier assembly (19). Removal is accomplished by loosening the lock screw (21) and bearing locknut (20) until the carrier assembly can be removed from spindle (4) splines. Loosen lock screw (21) with 3/16 hex drive. It may be necessary to remove the ring gear (17) first, if difficulty is encountered in removing the carrier. **NOTE:** A special service tool is required for removal of the bearing locknut. Contact Auburn Gear for procurement of service tool, part number 592Y.

### STEP 10

Remove the ring gear (17). It may be necessary to strike ring gear (17) with a rubber mallet to loosen from hub.

### STEP 11

Remove thrust plate (13) from in front of the tapered bearings and lift hub (10) from spindle (4). If bearings are not a loose fit, it may be necessary to press spindle from hub.

### STEP 12

Remove the oil seal (6) and bearing cones (7 & 12) from hub (10). Inspect bearing cups (8 & 11) in position and remove only if replacement is required.

## ASSEMBLY OF POWER WHEEL

### STEP 1

Press new bearing cups (8 & 11) in each side of the hub (10). It is recommended that bearing cups (8 & 11) and cones (7 & 12) be replaced in sets.

### STEP 2

Assemble bearing cone (7) into cup (8) at seal end of hub (10) and press a new seal (6) into hub (10). Install boot seal (5) on hub (10) if unit is so equipped.

### STEP 3

Position spindle (4) upright on bench. Lubricate lips of seal (6) and lower hub (10) onto spindle (4). Hub (10) should be centered as it is lowered over spindle (4) to prevent seal damage.

### STEP 4

Assemble bearing cone (12) over spindle (4) and into bearing cup (11). Replace thrust plate (13) over spindle end splines and on bearing cone (12).

### STEP 5

Assemble secondary carrier assembly (19) splines over splined end of spindle (4). Install bearing locknut (20). Tighten locknut to 75 lb. ft. (101.9 Nm) while rotating the hub to seat bearings. Loosen the locknut 1/2 turn then retighten locknut to 85 – 90 lb. ft. (115.2 – 121.9 Nm) while rotating the hub. Loosen the locknut to nearest locking notch and secure with lock screw (21). Tighten lock screw to 20 – 25 lb. ft. (27.2 – 34.0 Nm).

### STEP 6

Clean mating surfaces and apply a bead of silicone sealant to face of hub (10) that mates with ring gear (17). (See instructions on sealant package) Assemble ring gear (17) to hub (10) being careful to align all bolt holes.

### STEP 7

Assemble a washer (14), spring (15), a second washer (14), and a retaining ring (16) in the middle groove of input shaft (3). Install a second retaining ring (16) in groove near small end of input shaft (3).

### STEP 8

Place the input shaft (3) down into spindle (4) with the snap ring end of the shaft up.

### STEP 9

Assemble the primary carrier assembly (22) into the ring gear (17). It will be necessary to rotate carrier to align secondary sun gear (part of primary carrier assembly (22)) with planet gear teeth in secondary carrier assembly (19). Assemble primary sun gear (23) over input shaft (3). Rotate primary sun gear (23) to align input shaft (3) to gear splines and gear teeth in primary carrier assembly (22).

### STEP 10

Lubricate "O" ring (26) and assemble in groove inside cover hole, push plunger (25) into cover with pointed end facing inside of unit.

### STEP 11

Assemble the thrust washer (24) with tangs engaged with cover (27). **NOTE:** A small amount of grease applied to the back side of thrust washer (24) will hold washer in place. Apply a bead of silicone sealant to end face of ring gear (17). Assemble cover (27) aligning holes of cover and ring gear. Install the twelve Grade 8 bolts (29) and flat washers (28) which retain cover (27) and ring gear (17) to hub (10). Torque bolts to 120 – 130 lb. ft. (163.2 – 176.8 Nm).

#### STEP 12

Assemble the disengage cover (31) with dimpled center protruding out if wheel is to be used to drive the vehicle. Assemble and torque the two 5/16 - 18 x 1/2 inch bolts (32). Torque bolts to 10 - 20 lb. ft. (13 - 27 Nm).

#### STEP 13

If required, assemble a new retaining ring (1) into groove in inside diameter of coupling (2). Invert the Power Wheel assembly and assemble the coupling (2), with end nearest retaining ring out onto the input shaft (3). **NOTE:** Coupling (2) must be assembled to input shaft so that end with retaining ring is nearest motor or spindle side of drive.

#### STEP 14

After motor is assembled to drive or drive is sealed at spindle, fill with lubricant to proper level and replace all plugs.

**NOTE:** When installing a hydraulic motor to the Power Wheel drive it is necessary to place an "O" ring or gasket (not supplied by Auburn Gear) between the motor and the planetary drive. "O" ring sizes: SAE A 2-042, SAE B 2-155, SAE C 2-159.

## CARRIER ASSEMBLIES

It is recommended that the secondary and primary carrier assemblies (19 & 22) be serviced in their entirety to protect the integrity of the Power Wheel drive.

## LUBRICATION RECOMMENDATIONS

**IMPORTANT:** POWER WHEEL PLANETARY DRIVES ARE SHIPPED WITHOUT LUBRICANT AND MUST BE FILLED TO THE PROPER LEVEL PRIOR TO START UP.

Observe lubrication recommendations given by the original equipment manufacturer. When specific recommendations are not available, use mild extreme pressure lubricant API-GL-5, No. 80 or 90 when filling the Power Wheel under normal temperature ranges between 0 - 120°F (-18 to 49°C). Power Wheel is to be half full of oil when unit is mounted level and horizontal. Use drain and fill plugs located in cover and ring gear. Oil is to be changed after first 50 hours of operation with subsequent changes every 1000 hours or yearly, whichever comes first. If unit is to be operated vertically, if ambient conditions are outside the specified range, or if the oil temperature exceeds 200°F (93°C) contact Auburn Gear for oil and level recommendations.

## TOWING VEHICLE

**CAUTION:** The Power Wheel will not normally be damaged by towing; however, the hydraulic drive components may be damaged unless the Power Wheel is disengaged from the drive motor. Road speeds in excess of 25 MPH should be avoided unless clearly specified to be permissible by the equipment manufacturer.

## TO DISENGAGE POWER WHEEL

**CAUTION:** For units equipped with the standard spring disconnect, assemble the disengage cover (31) with the dimpled center protruding inward. For units equipped with the optional quick disconnect, push in center plunger of disconnect. **PARKING BRAKE WILL NOT FUNCTION IF UNIT IS DISENGAGED.**

## STORAGE

A protective film is applied to the Power Wheel at the factory to prevent rust during shipment. Additional protection may be required if the Power Wheel is to be stored for an extended period of time.

## SEALING COMPOUND

Silastic RTV732 sealer and General Electric Silimate RTV No. 1473 or RTV No. 1503 are currently recommended for sealing gasket surfaces. Sealant should be applied in a continuous bead, which should be centered on the surface to be sealed but should move to the inside of the hole at each bolt hole location. For service requirements order Auburn Gear part number 604101.

## SPECIFICATIONS

Maximum intermittent output torque .....	180,000 lb. in. (20,340 Nm)
Maximum input speed .....	5,000 RPM
Oil capacity .....	150 oz (4,435 ml)

ITEM NO.	DESCRIPTION*	NO. USED IN ASS'Y.	ITEM NO.	DESCRIPTION*	NO. USED IN ASS'Y.
1	Retaining Ring	1	19	Secondary Carrier Assembly	1
2	Coupling	1	20	Locknut (Serviced as part of the Carrier Assembly)	1
3	Input Shaft	1	21	Lock Screw 618304 (Serviced as part of the Carrier Assembly)	1
4	Spindle	1	22	Primary Carrier Assembly	1
5	Boot Seal 604411	1	23	Primary Sun Gear	1
6	Oil Seal 604404	1	24	Thrust Washer	1
7	Bearing Cone 613305	1	25	Disengage Plunger	1
8	Bearing Cup 613306	1	26	"O" Ring 614101	1
9	Wheel Bolt	12	27	Large Cover	1
10	Hub	1	28	Flat Washer 604703	12
11	Bearing Cup 613313	1	29	Hex Head Bolt (Grade 8)	12
12	Bearing Cone 613312	1	30	Pipe Plug 03-04-101-09	1
13	Thrust Plate 619304	1	31	Disengage Cover 14-02-039-005	1
14	Washer	2	32	Hex Head Bolt 618305	2
15	Disengage Spring 615603	1	33	Quick Disconnect Gasket	1
16	Retaining Ring	2	34	Quick Disconnect Assembly	1
17	Ring Gear	1	35	Hex Head Bolt	2
18	Magnetic Plug 14-00-052-002	1			

\* Contact Auburn Gear with part number and order code of drive to obtain the appropriate parts list. Refer to parts list for the specific part numbers and quantities.

### Model 10 Power Wheel® Service Kits

Part No.	Description	Included Items
592Y	Model 10 Bearing Locknut Tool	Not Shown

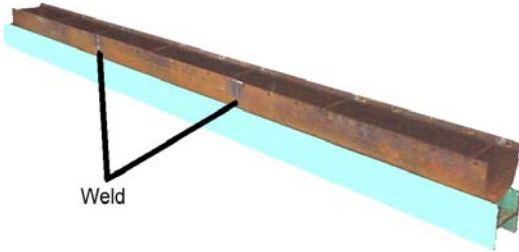


**Bill of Materials for Part Number: 60001861 (Order Code: 0W2B13519ZR ~ 10" P.W. - 1ST A)**  
 there is no service manual available for this part number

Part	Description	Need	Pack
6079146	SPINDLE ~ #10 - INT B/N - 1ST	1	1
604411	SEAL-BOOT ~ #10	1	1
604404	SEAL-OIL, MODEL 10	1	1
608938	COUPLING ~ #10 - 1ST ARTICLE R	1	1
613305	BEARING-CONE	1	1
613306	BEARING-CUP	1	1
613312	BEARING-CONE	1	1
613313	BEARING-CUP	1	1
617930	HUB ~ 10"	1	1
619304	WASHER-THRUST	1	1
604702	WASHER-SPR BACK UP	2	1
615603	SPRING-DISENGAGE	1	1
618914	SHAFT-INPUT ~ #10	1	1
613914	RING-RETAINING	2	1
10-00-041-002	COMPOUND-SEALING - 10.3 OZ. CA	1	1
603924	COVER ~ 10" WD	1	1
614101	RING-O (SVC = 10/PKG)	1	10
14-02-039-005	COVER-DISENGAGE ~ 6"	1	1
618305	BOLT-HEX HEAD ~ 5/16-18 X. 5	2	1
610801	PLUNGER	1	1
604703	WASHER-FLAT	12	1
0009430269	BOLT-HEX HEAD ~ 9/16 X 12 X 6"	12	1
14-00-191-003	PLUG-SHIPPING, SAE B, 4.06" O.	1	1
14-00-052-002	PLUG-PIPE ~ 1/2-14 MAGNET (SV	1	2
03-04-101-09	PLUG-PIPE ~ 1/8-27	1	1
616217	GEAR-RING ~ 10"	1	1
616564	GEAR-PRI SUN ~ #10	1	1
665963	ASSY-PRI CARRIER ~ 10"	1	1
665964	ASSY-SEC CARRIER ~ 10"	1	1
14-00-193-003	WASHER-THRUST (SVC = 5/PKG)	1	5
618310	BOLT-WHEEL ~ 3/4-16 NF2A (SVC	12	10

# T-630 Chute Kit Assembly and Installation

81990      21ft Chute Kit  
81990-12    22ft Chute Kit



A piece of beam or channel works well to keep chute pieces aligned. Aligning center bend lines on bottom, work from center around to weld the three sections together as shown, inside and out. Grind outside flat where it will slip up into chute channels.



Cut spacer rods from scrap rebar or similar about 14-1/4" long. Squeeze chute to spacers and tack weld. Shown below.

The chute is ready to install.

Remove Auger and old Chute from T-630. Clean concrete build up from all surfaces where new components will mate.



Caulk one Chute Bolt Flange and install to rear of hopper.



Install Chute into position, resting on Chute Bolt Flange just installed making sure bolt holes are aligned.

Start about the middle of the Chute installing bolts on each side, but do not tighten. Work toward the discharge end of the chute installing the rest of bolts, still not tightening. Install the Bearing Cap and Chute Bolt Flange, leaving them loose also.



## Next steps critical to maintain chute alignment.



Level the Chute Channels to the level of T-630. Use weights or crane to maintain level.



Loosely install bolts from middle of chute toward hopper as far as easily reached from outside hopper. Caulk each side of Chute from hopper to just in front of cab.



From inside hopper, caulk each side of the Chute.

Loosely install all remaining bolts. Then tighten all bolts in the hopper area. Break out temporary spacers as you go.



Now back outside the hopper, caulk about 1/3 of remaining chute area. Tighten bolts to near the end of the caulk. Breaking out spacers. Caulk another 1/3 and tighten, removing spacers.

Caulk the remaining Chute and tighten the rest of the bolts. Tighten Bearing Cap and Chute Bolt Flange.



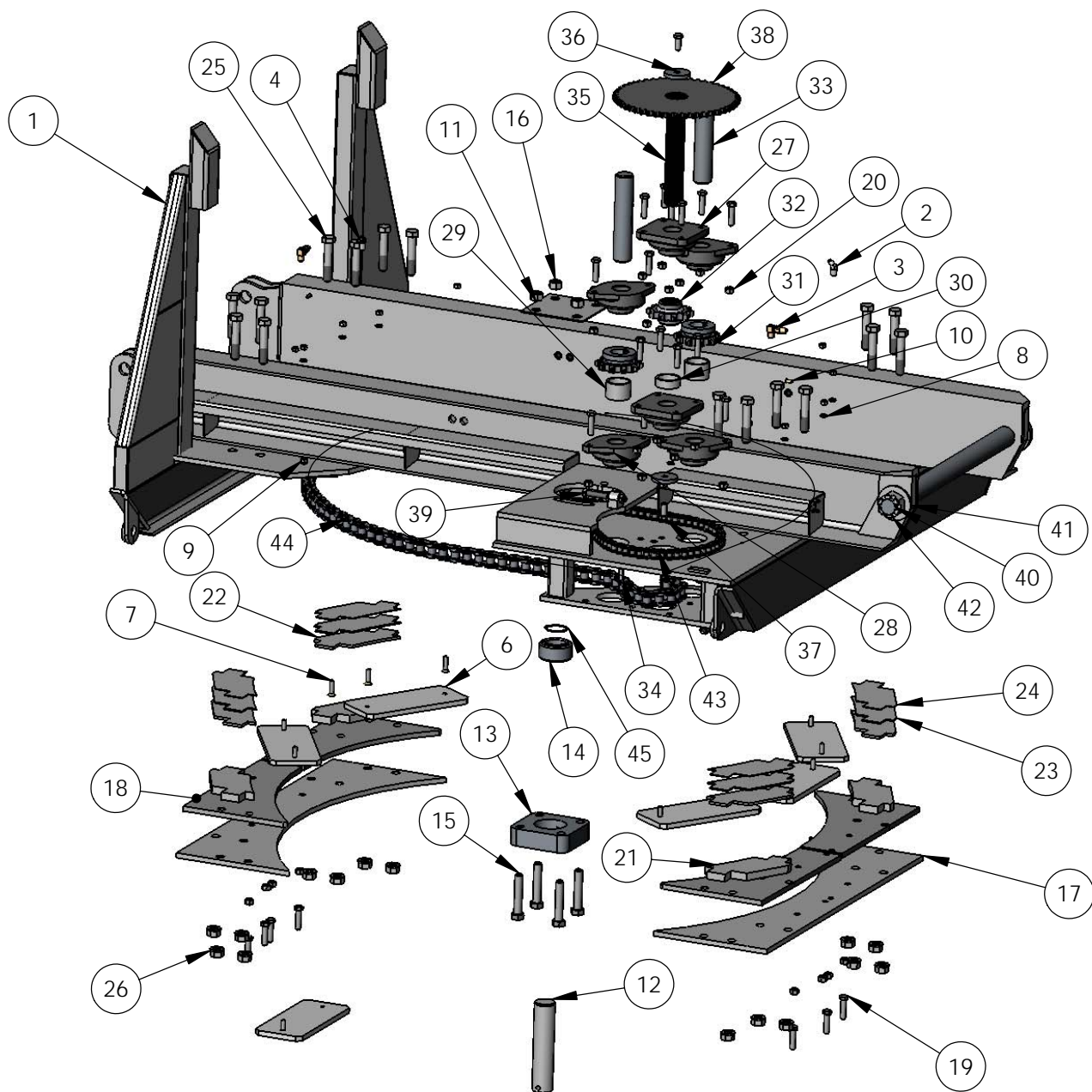
Weld Chute Bolt Flanges Front and Rear.



Level bottom of Spout with top of Chute and weld.

Cut Chute out for Spout after welding.



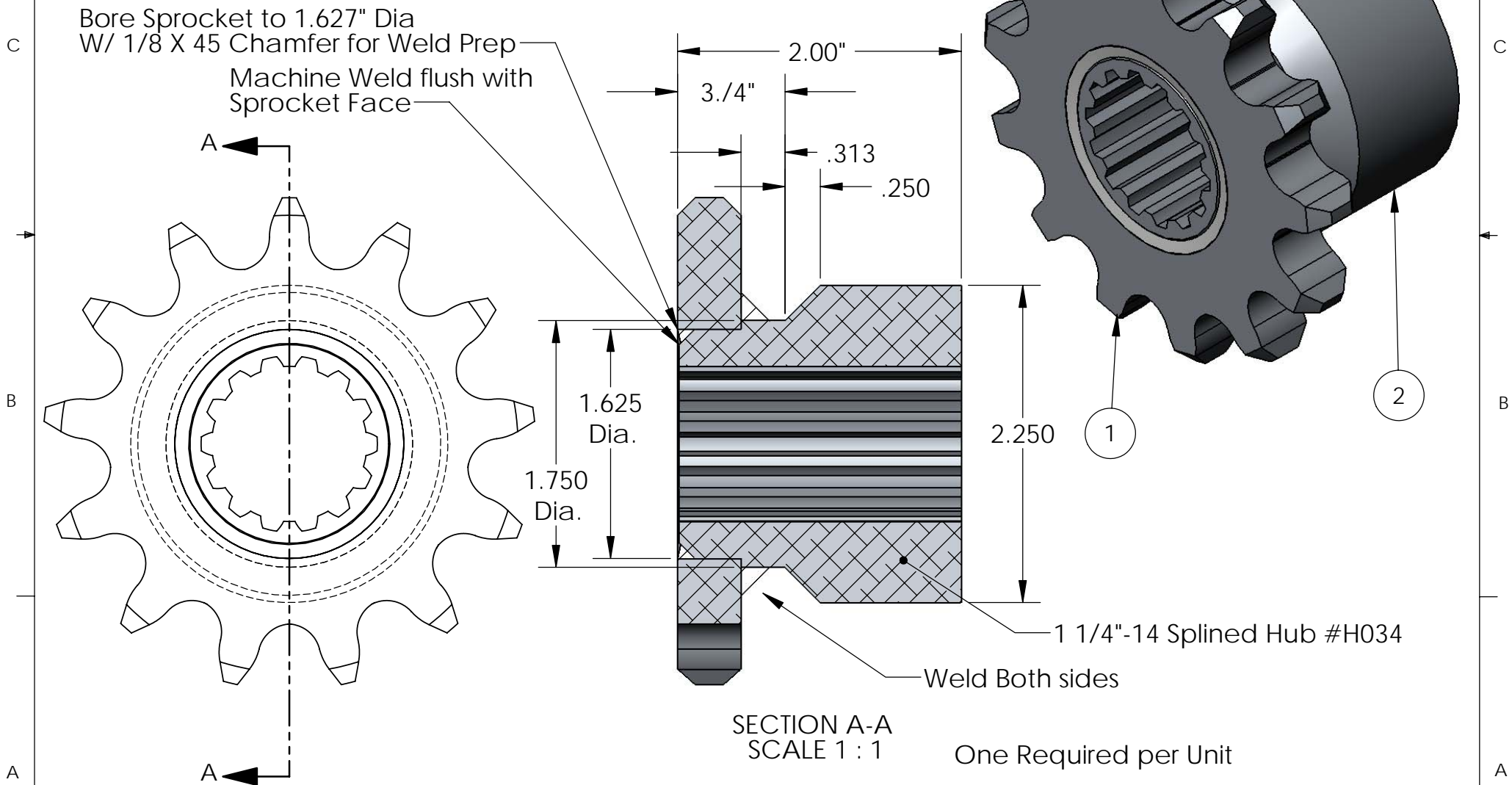


## UPPER TURNTABLE ASSEMBLY

81250KM few

ITEM NO.	PART NUMBER	DESCRIPTION	Manual/QTY.	ITEM NO.	PART NUMBER	DESCRIPTION	Manual/QTY.
1	812661	Upper Tt Fab Assembly	1	23	p81290	Bracket 10 Ga. Spacer Slide	4
2	2023-4-4S	Adaptor, Aeroquip	1	24	p81290	Bracket 14 Ga. Spacer Slide	4
3	205102	BW 90 Deg. Elbow 205102	2	25	34-4CS	Screw Cap .75 X 4	16
4	2024-4-4S	Adaptor, Aeroquip	1	26	34FN	Nut Flanged L. 3/4-10	16
5	14GF-ST	Grease Fitting 1/4" Strt.	3	27	80502	Bearing Swing Assy. Center	2
6	812751	Bearing Nylatron Upper Tt	6	28	80501	Bearing Swing Assy.	4
7	80546	3/8-16 X 1 1/2" Brass CS Bolt	12	29	81274	Spacer Tt Drive 1-5/8"	2
8	38LW	3/8" Lock Washer	12	30	81303	Spacer .8125 Tt Drive	1
9	38N	3/8-16 Hex Nut	12	31	81306-01	Sprocket 100 Outer-lower Swing	2
10	246089	BW Tube Insert 246089	2	32	80408-01	Sprocket Splined Lower Swing	1
11	P81229	Up Tt Pivot Brg. Cover	1	33	81295	Shaft Idler Tt Sprocket	2
12	81265	Shaft Turntable	1	34	812951	Keystock Tt Idler Shaft	2
13	81277	Housing Tt Pivot Bearing	1	35	81305	Shaft 1-3/4 8/16 DP 13 Tooth	1
14	80306	Bearing Hopper Pivot	1	36	81285	Retainer Swing Shaft Spr.	2
15	34-4CS8F	Screw Cap .75 X 4 Gr8	4	37	12-114CS	1/2-13 X 1 1/4" Cap Screw	2
16	34SLNF	Nut Self Lckg Fine .75	4	38	80407-01	Sprocket Splined Swing Drive	1
17	81287	Bracket TT Hook Slide	2	39	812862	Bolt Tt Swing Motor Adj.	1
18	81253	Bearing Nylatron Hook Slide	4	40	8102	Hopper Tt Shaft Welded	1
19	12-2CS	1/2-13 X 2 Hex Cap Screw	24	41	112FW	1 1/2" Flat Washer	1
20	12SLN	1/2-13 Self Locking Hex Nut	25	42	112CN	1 1/2"-12 Castel. Nut	1
21	p81290	Bracket 3/4 Pl. Spacer Slide	4	43	81293	Tt Chain Kit (#60)	1
22	p81290	Bracket 1/4" Pl. Spacer Slide	4	44	81292-01	Chain Kit Tt(#100)	1
45	Truarc 5100-200 - S2	Retaining Ring T.t. Ctr. Pl	1	45	Truarc 5100-200 - S2	Retaining Ring T.t. Ctr. Pl	1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	80402	60A13 Sprocket	1
2	81316	03-32-00034 Hub, Splined	1

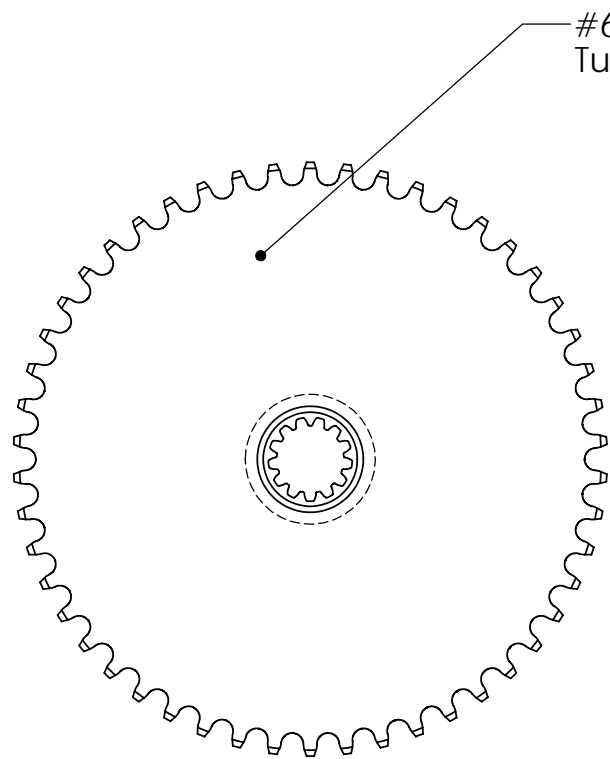


80406	DR. BY FEW
T-630	DATE 2/16/2006
Sprocket Splined Swing Motor	SHOP #
	80406

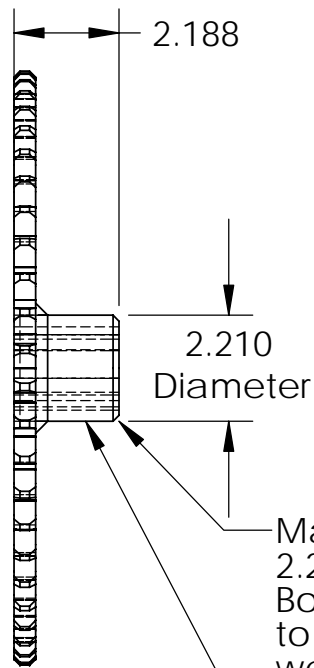


MACHINE & STEEL  
SERVICE INC.  
P.O. BOX 492810 LEESBURG, FLA. 34749-2810

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	6050x		1
2	80403	Hub 2.210 OD x 2-3/16 w/ 8/16 Spline	1
3	bead6		1

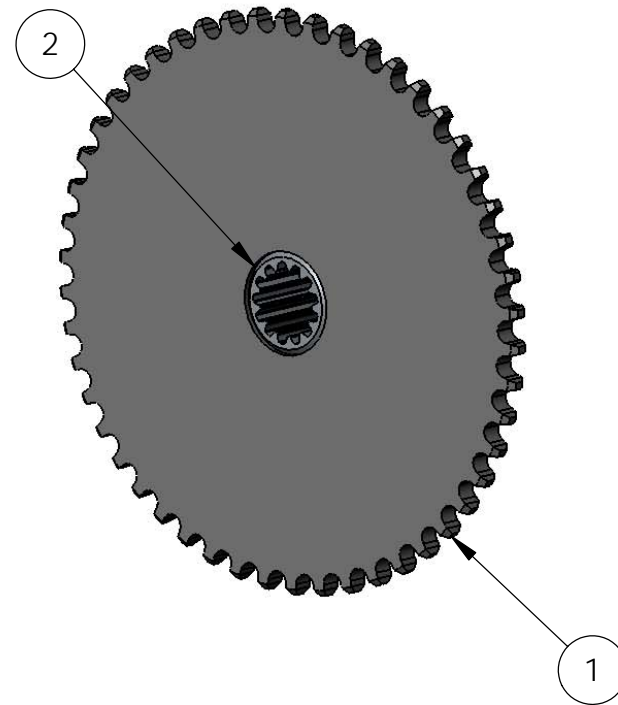


#60-A-50 Sprocket  
Tucker Part # 80403-01



Machine Hub to  
2.210" O.D. X 2 3/16" Long  
Bore Sprocket for snug fit  
to hub. Assemble and  
weld both sides

Hub 2.210 OD x 2-3/16 w/ 8/16 Spline  
Tucker Part # 80403



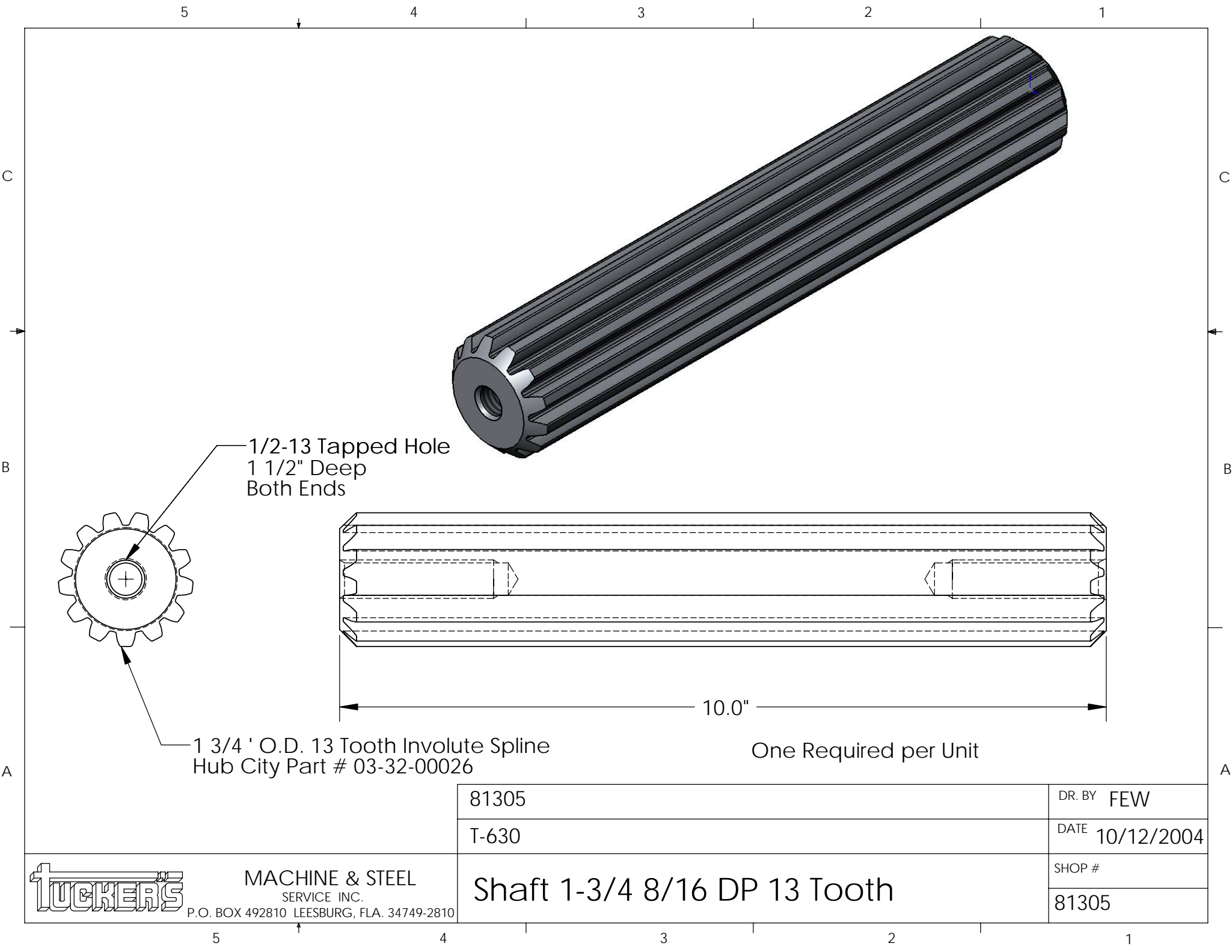
One Required per Unit

80407-01	DR. BY few
T-630	DATE 2/16/2006
Sprocket Splined Swing Drive	SHOP #
	80407-01



MACHINE & STEEL  
SERVICE INC.

P.O. BOX 492810 LEESBURG, FLA. 34749-2810



1/2-13 Tapped Hole  
1 1/2" Deep  
Both Ends

1 3/4" O.D. 13 Tooth Involute Spline  
Hub City Part # 03-32-00026

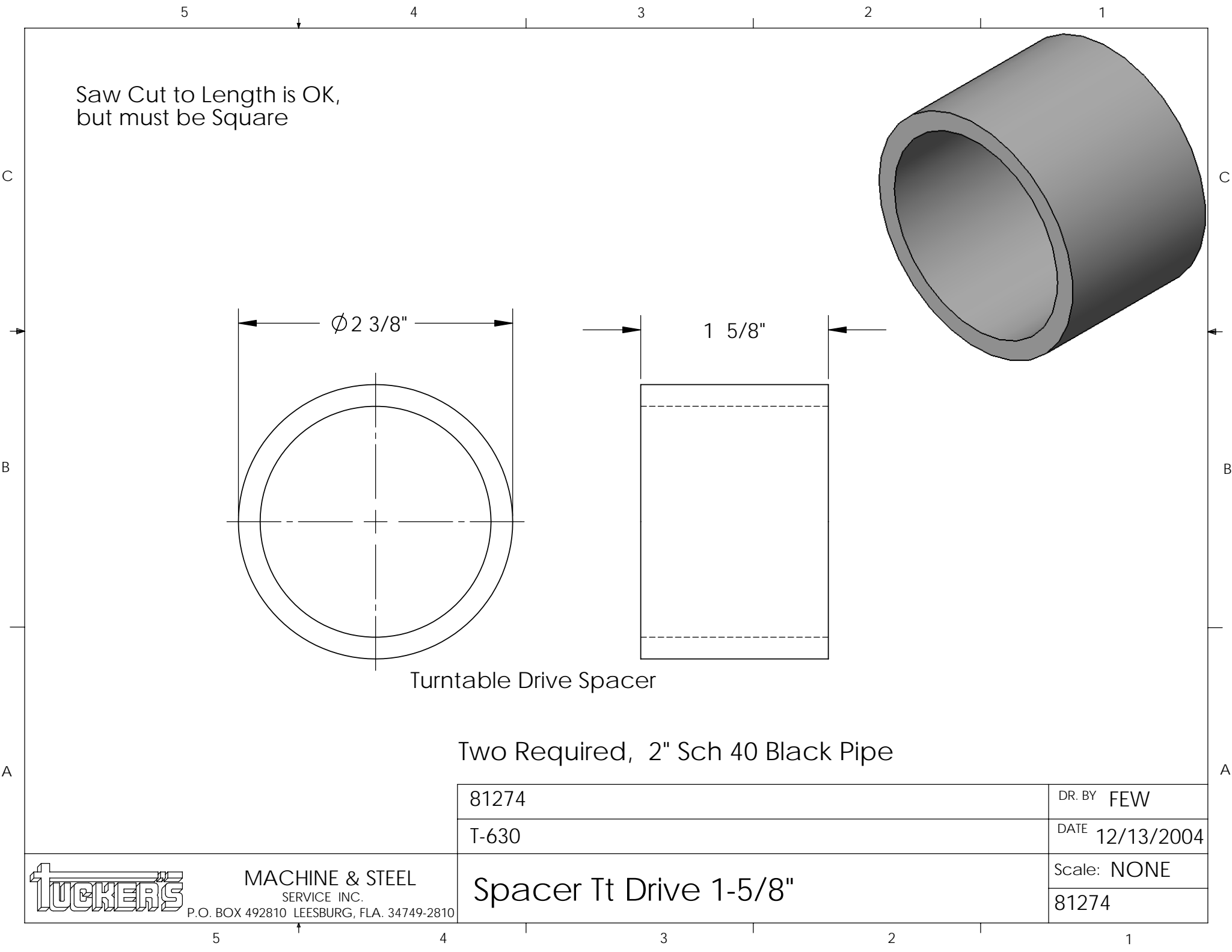
10.0"

One Required per Unit

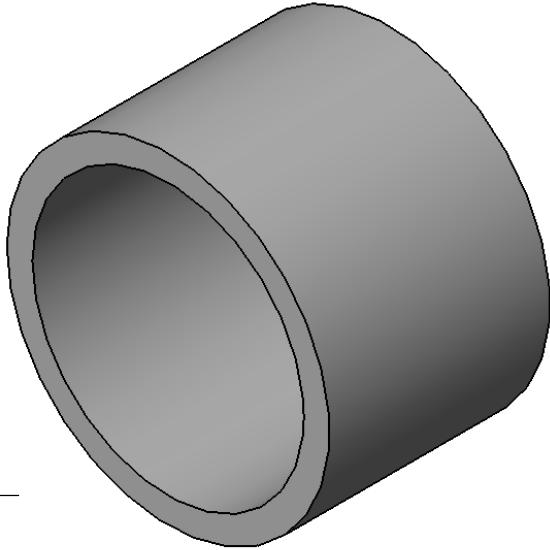
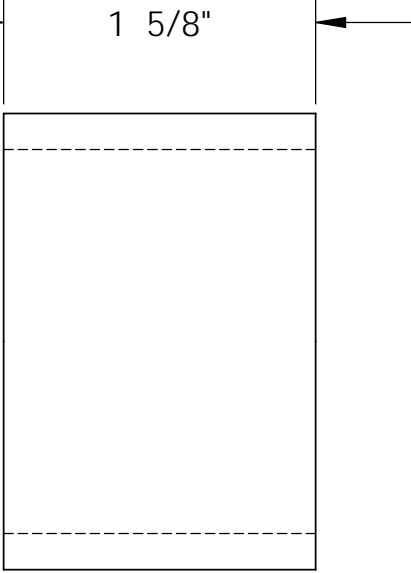
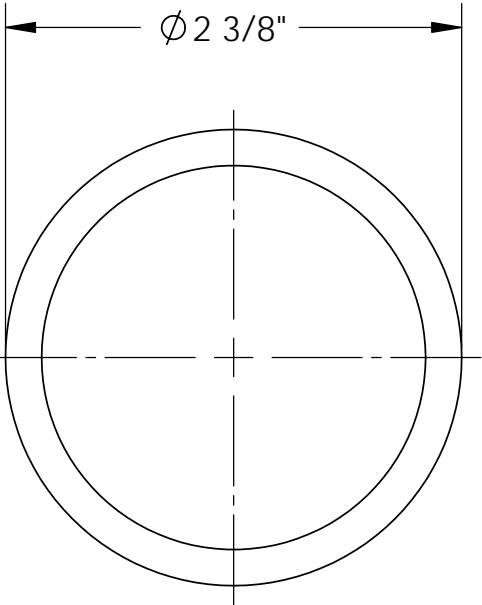
81305	DR. BY FEW
T-630	DATE 10/12/2004
Shaft 1-3/4 8/16 DP 13 Tooth	SHOP #
	81305



MACHINE & STEEL  
SERVICE INC.  
P.O. BOX 492810 LEESBURG, FLA. 34749-2810



Saw Cut to Length is OK,  
but must be Square



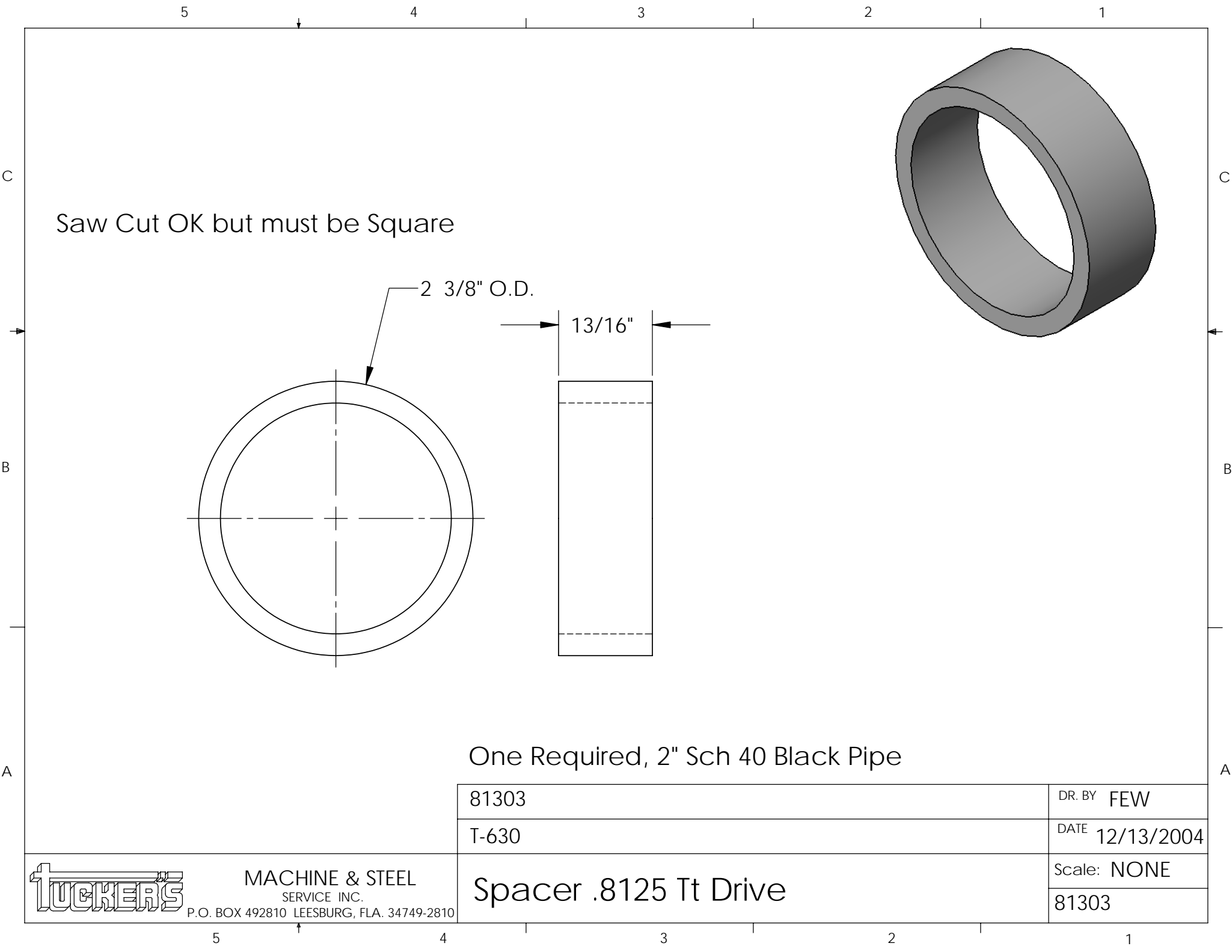
Turntable Drive Spacer

Two Required, 2" Sch 40 Black Pipe

81274	DR. BY FEW
T-630	DATE 12/13/2004
Spacer Tt Drive 1-5/8"	Scale: NONE
	81274



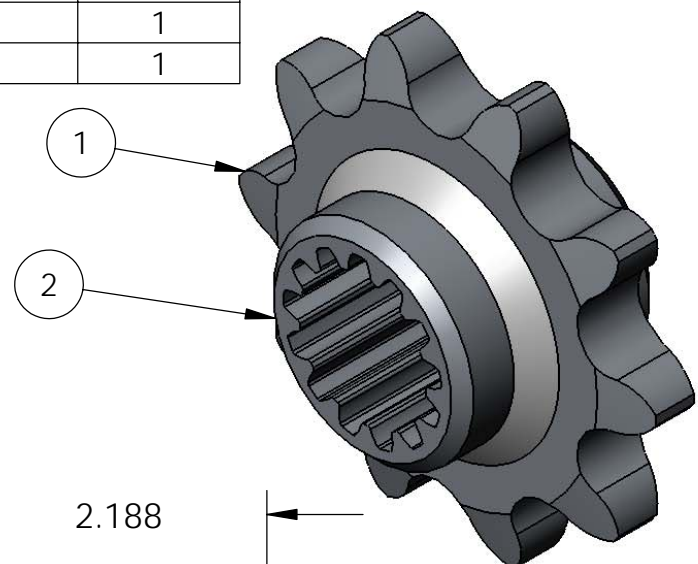
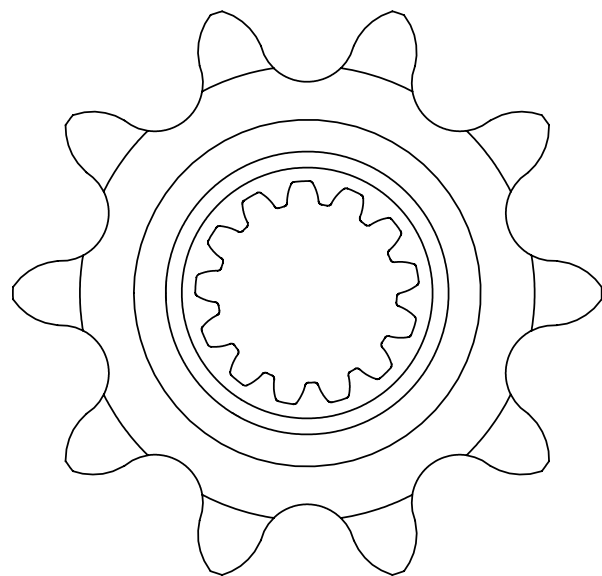
MACHINE & STEEL  
SERVICE INC.  
P.O. BOX 492810 LEESBURG, FLA. 34749-2810



MACHINE & STEEL  
SERVICE INC.  
P.O. BOX 492810 LEESBURG, FLA. 34749-2810

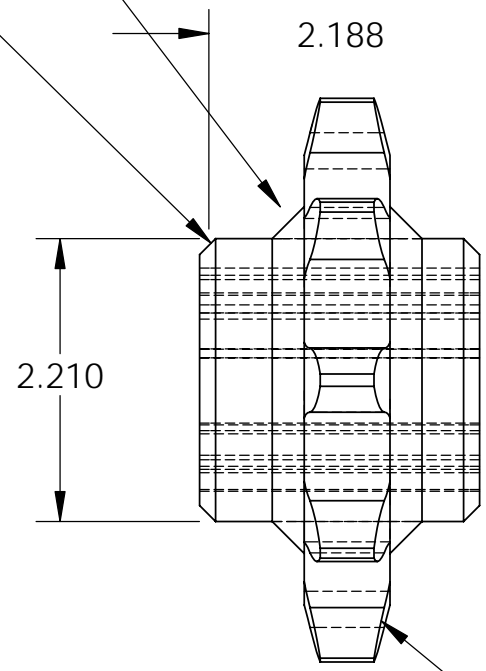
81303	DR. BY FEW
T-630	DATE 12/13/2004
Spacer .8125 Tt Drive	Scale: NONE
	81303

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	80400-01	100 A 10 Sprocket	1
4	80403	Hub 2.210 OD x 2-3/16 w/ 8/16 Spline	1



Weld Both Sides

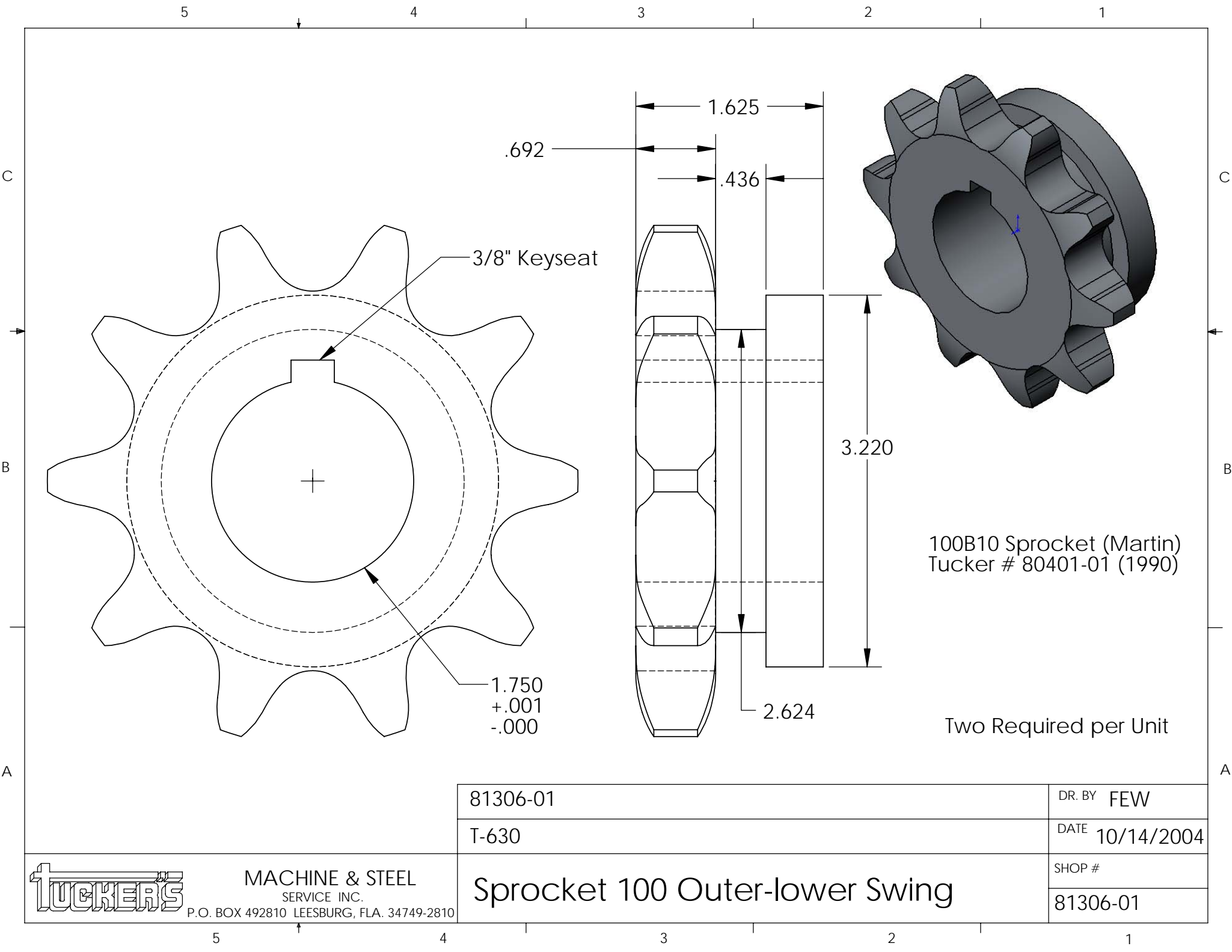
Turn O.D. of Hub to 2.210 Dia and Bore Sprocket for snug fit.



Sprocket Centered on Hub

80408-01	DR. BY few
T-630	DATE 2/16/2006
Sprocket Splined Lower Swing	SHOP #
	80408-01

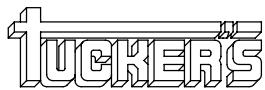




100B10 Sprocket (Martin)  
Tucker # 80401-01 (1990)

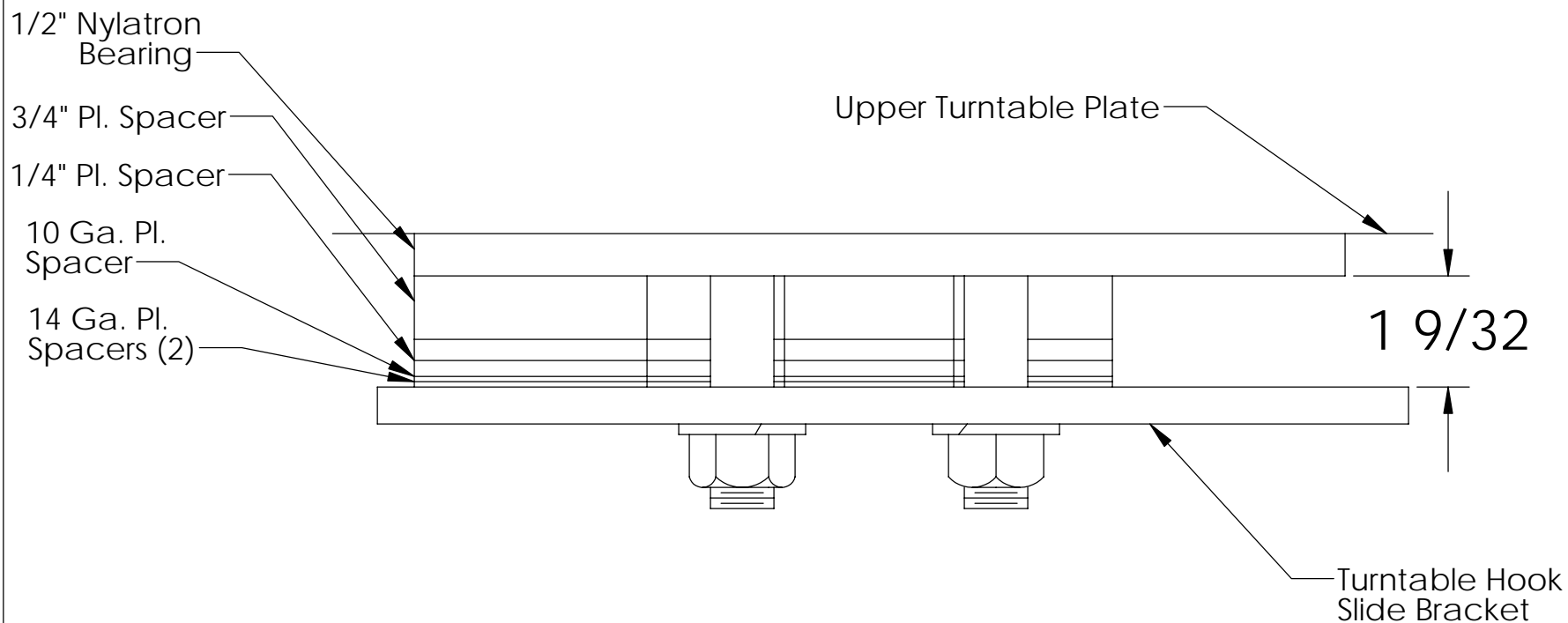
Two Required per Unit

81306-01	DR. BY FEW
T-630	DATE 10/14/2004
Sprocket 100 Outer-lower Swing	SHOP #
	81306-01



MACHINE & STEEL  
SERVICE INC.  
P.O. BOX 492810 LEESBURG, FLA. 34749-2810

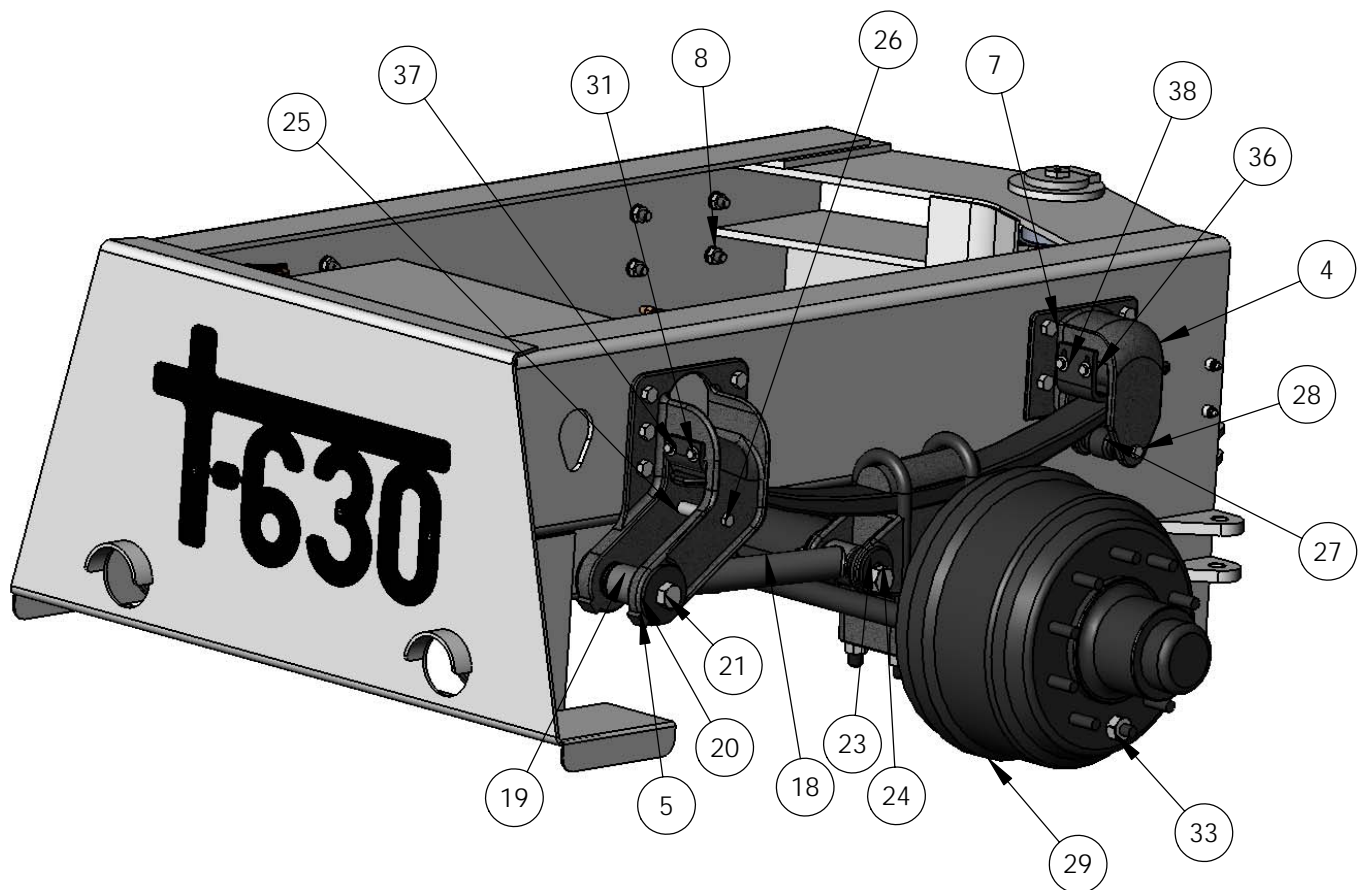




### SPACERS REQ. PER T-630

- 4 - Req. - 3/4"Pl. Part #81288
- 4 - Req. - 1/4"Pl. Part #81289
- 4 - Req. - 10 Ga. Pl. Part #81290
- 8 - Req. - 14 Ga. Pl. Part #81296

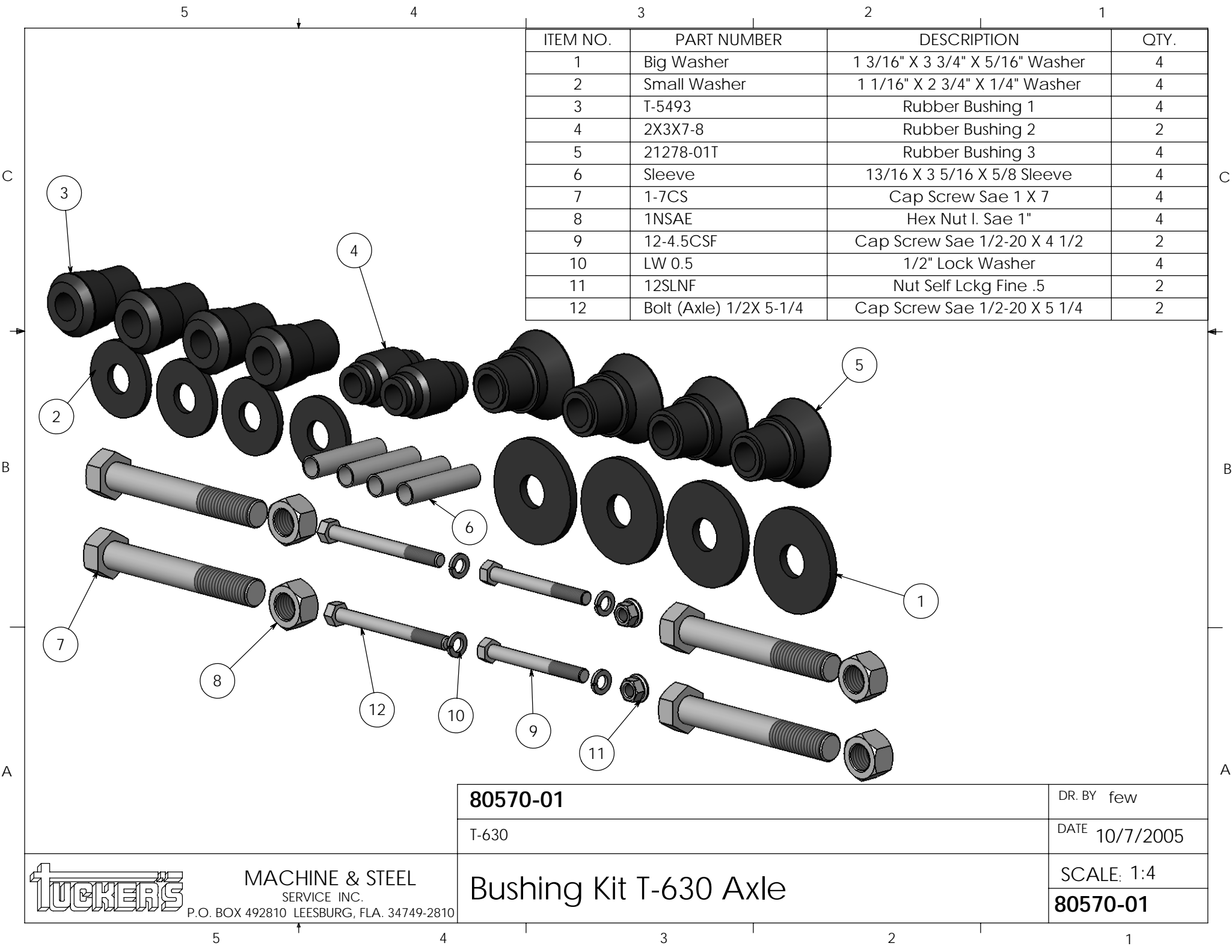
## SPACERS - SLIDE BRACKET



## FRONT SUSPENSION

81205M few

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
4	81185 Spring Hanger	Spring Hanger Bracket LR <b>Reyco#2252301(Left Rear Shown)</b>	2
5	81186LH	Spring Hanger RH <b>Reyco # 2252102 (Not Shown)</b>	1
6	81186 RH	Spring Hanger Bracket LH <b>Reyco # 2230101 (Left Front shown)</b>	1
7	58-134CS8F	Screw Cap 5/8 x 1 3/4 GR 8 Fine	20
8	58FNF	Nut Flange L. Sae 5/8-18	20
18	80570-10	Torque Arm T-630 <b>Reyco # T7643</b>	2
19	21278-01T	Rubber Bushing 3 <b>Reyco # T5493</b>	4
20	Big Washer	1 3/16" X 3 3/4" X 5/16" Washer	4
21	1-7CS	Cap Screw Sae 1 X 7	4
22	1NSAE	Hex Nut I. Sae 1"	4
23	T-5493	Rubber Bushing 1	4
24	Small Washer	1 1/16" X 2 3/4" X 1/4" Washer	2
25	Sleeve	13/16 X 3 5/16 X 5/8 Sleeve	4
26	12-4.5CSF	Cap Screw Sae 1/2-20 X 4 1/2	2
27	2X3X7-8	Rubber Bushing 2	2
28	12-5CSF	Cap Screw Sae 1/2-20 X 4 1/2	2
29	81762	Front Axle Assembly	1
31	38-114CS	Cap Screw .375 X 1.25	20
33	80343	Nuts Right Hand Wheel	2
36	80570-11	T-630 Hanger Wear Pad	4
37	38FW	Washer Flat .375	4



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	Big Washer	1 3/16" X 3 3/4" X 5/16" Washer	4
2	Small Washer	1 1/16" X 2 3/4" X 1/4" Washer	4
3	T-5493	Rubber Bushing 1	4
4	2X3X7-8	Rubber Bushing 2	2
5	21278-01T	Rubber Bushing 3	4
6	Sleeve	13/16 X 3 5/16 X 5/8 Sleeve	4
7	1-7CS	Cap Screw Sae 1 X 7	4
8	1NSAE	Hex Nut I. Sae 1"	4
9	12-4.5CSF	Cap Screw Sae 1/2-20 X 4 1/2	2
10	LW 0.5	1/2" Lock Washer	4
11	12SLNF	Nut Self Lckg Fine .5	2
12	Bolt (Axle) 1/2X 5-1/4	Cap Screw Sae 1/2-20 X 5 1/4	2

80570-01	DR. BY few
T-630	DATE 10/7/2005
Bushing Kit T-630 Axle	SCALE: 1:4
	80570-01



MACHINE & STEEL  
SERVICE INC.  
P.O. BOX 492810 LEESBURG, FLA. 34749-2810

# T-630 Front Wheel Stud



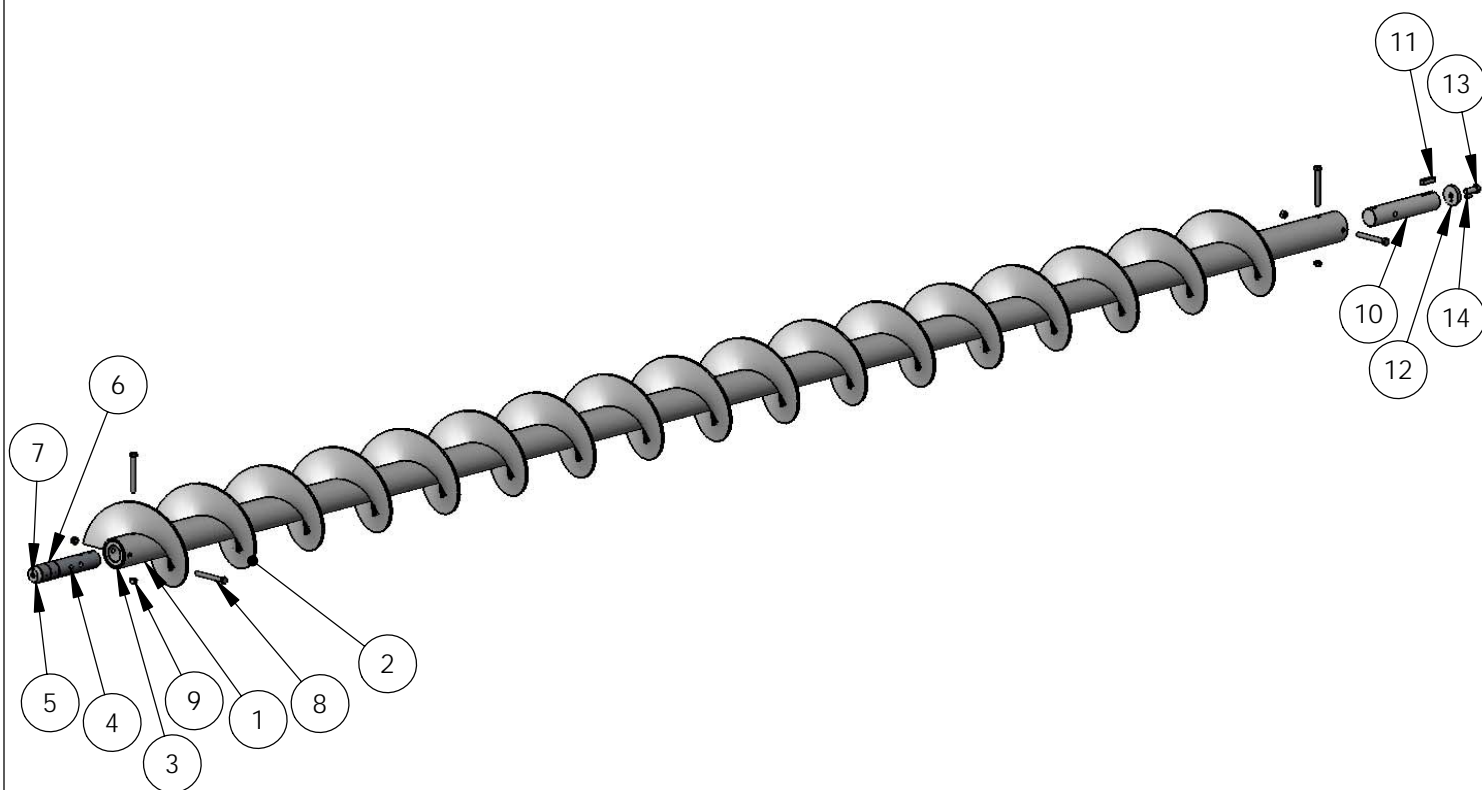
$\frac{3}{4}$ " - 16 THDS.  
BOTH ENDS

## CLIPPED COLLAR SHOULDER STUDS

**EUCLID No. E-5560-R**

**DOORMAN No. 610 044**

**BUDD No. 19004-5**

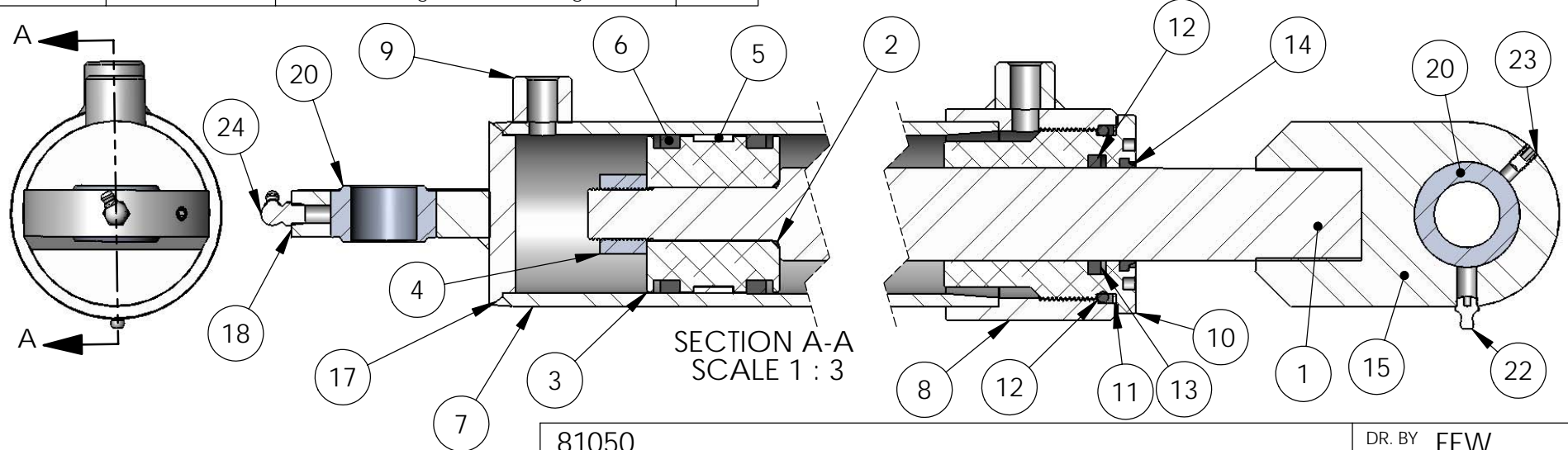
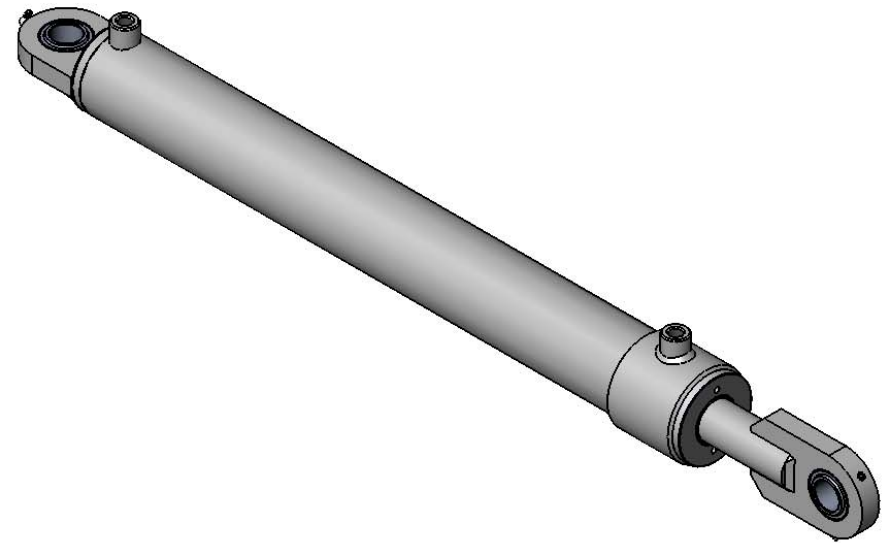


## T-630 AUGER

81020KM few

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	81020K-01	4" Sch. 80 Pipe (22')	1
2	81028	Flights W/ Hard Surface	17
3	81027D	Pipe Sleeve Auger Drilled	2
4	81977-9	Front Drive - Rear Idler Shaft	1
5	81977-10	Front Drive - Rear Idler Shaft Bullet	1
6	80311	Rear Auger Seal - Inner Ring	2
7	12-1SHCS	Screw Socket Cap 1/2 X 1	1
8	58-512CS8	Bolts Auger	4
9	58SLN	Nut Self-lock .625	4
10	81977-3	Front Drive Auger Drive Shaft	1
11	81977-3KEY	Front Drive - Shaft Key	1
12	81029	Washer Idler Shaft	1
13	34-2CS	Screw Cap .75 X 2	1
14	12-1TP	Pin Tension 1/2 X 1	1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	81053	Rod (cyl.) Machined T-630	1
2	81050-17	Piston/Rod O Ring No. 568-022	1
3	81052	Piston Hyd. Cyl. T-630	1
4	81050-10	1"-14 Nylock Nut	1
5	81050-16	Piston Wear Ring No. 612-300-075	1
6	81050-15	Piston Polypak No. U25-2.50-37B	2
7	81054	Cylinder (hyd.) Mach. T-630	1
8	81055	Sleeve Cyl. Head T-630	1
9	81057	1/2" Pipe Half Coupling, High Pressure	1
10	81051	T-630 Cylinder Head	1
11	81050-13	Cylinder Head Backer Ring No. 575-337	1
12	81050-14	Cylinder Head O Ring No. 568-337	1
13	81050 -11	Poly Pak No. U25-1.75	1
14	81050-12	Wiper No. ST175	1
17	81056	Plate Hyd. Cyl. End T-630	1
18	81040	Tie Rod End - Cylinder	1
20	80500	Bearing T-630 Hyd. Cyl.	2
15	81041	Rod - Tie Rod End	1
22	18GF-ST	1/8 Straight Grease Fitting	1
23	51618-12SS	5/16-18 X 1/2" Socket Set Screw	2
24	18GF-90	90 Deg 1/8 Grease Fitting	1



Four Required per Unit

81050

DR. BY FEW

T-630

DATE 3/22/2005

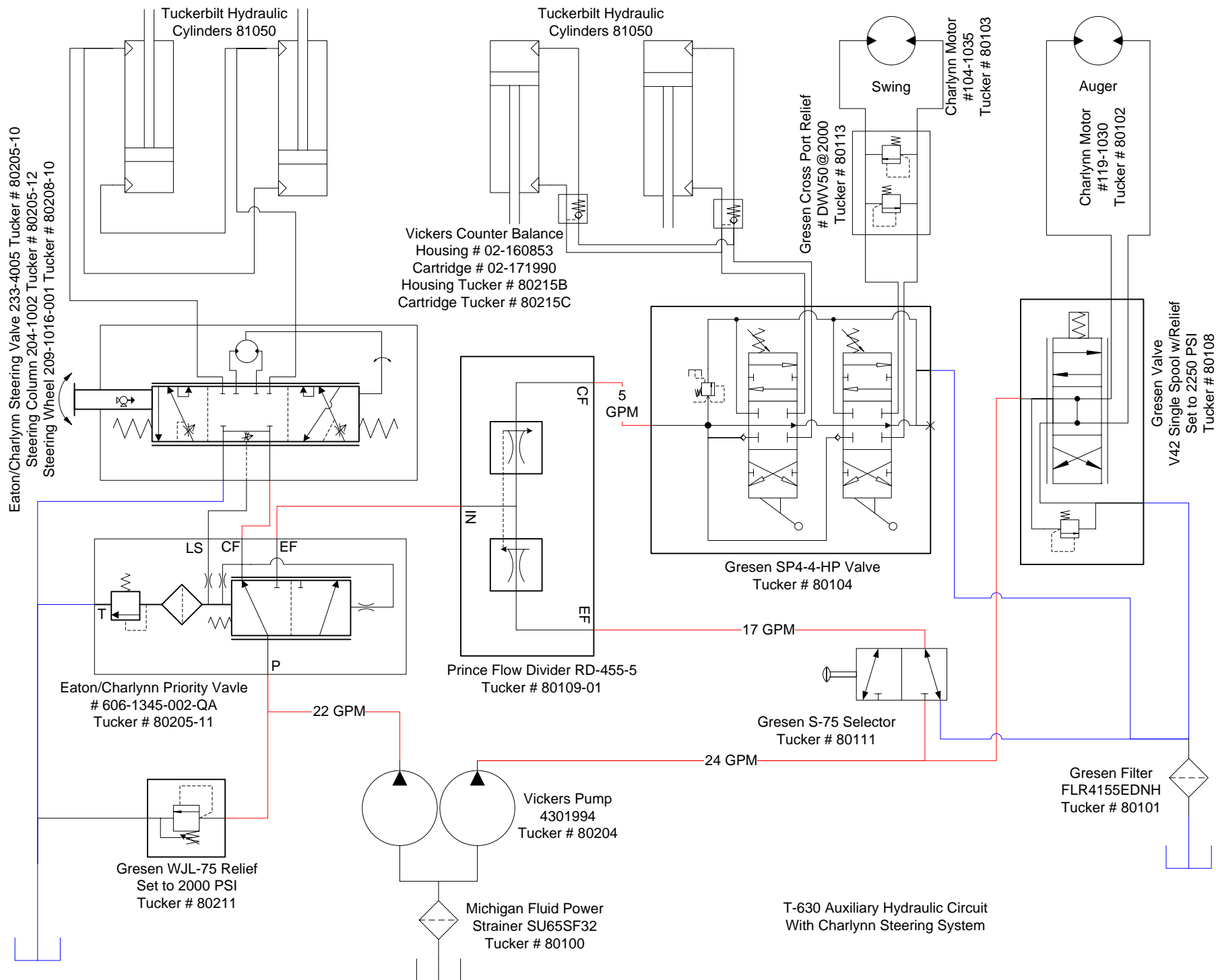


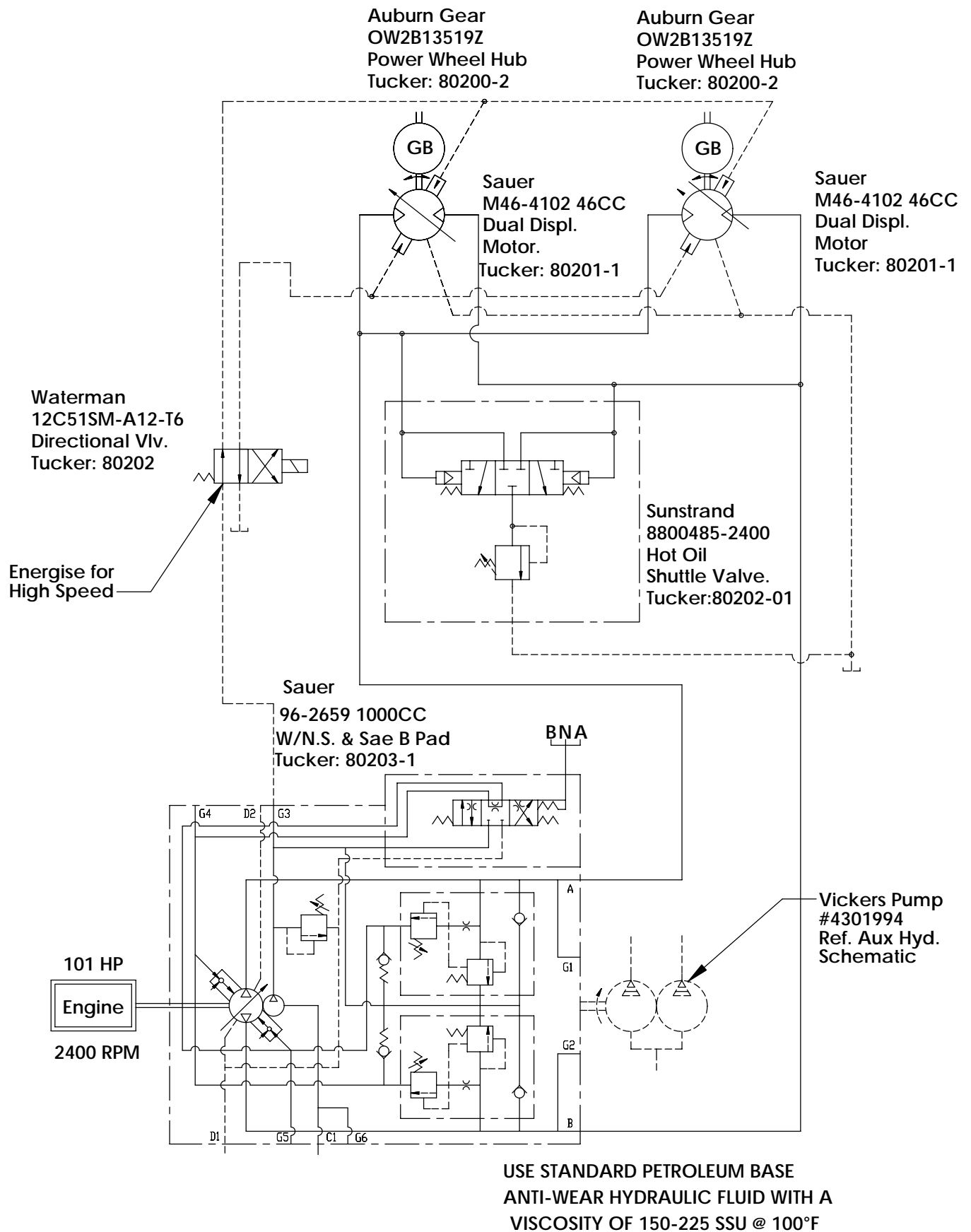
MACHINE & STEEL  
SERVICE INC.  
P.O. BOX 492810 LEESBURG, FLA. 34749-2810

Hyd. Cylinder T-630

Scale: 1/3

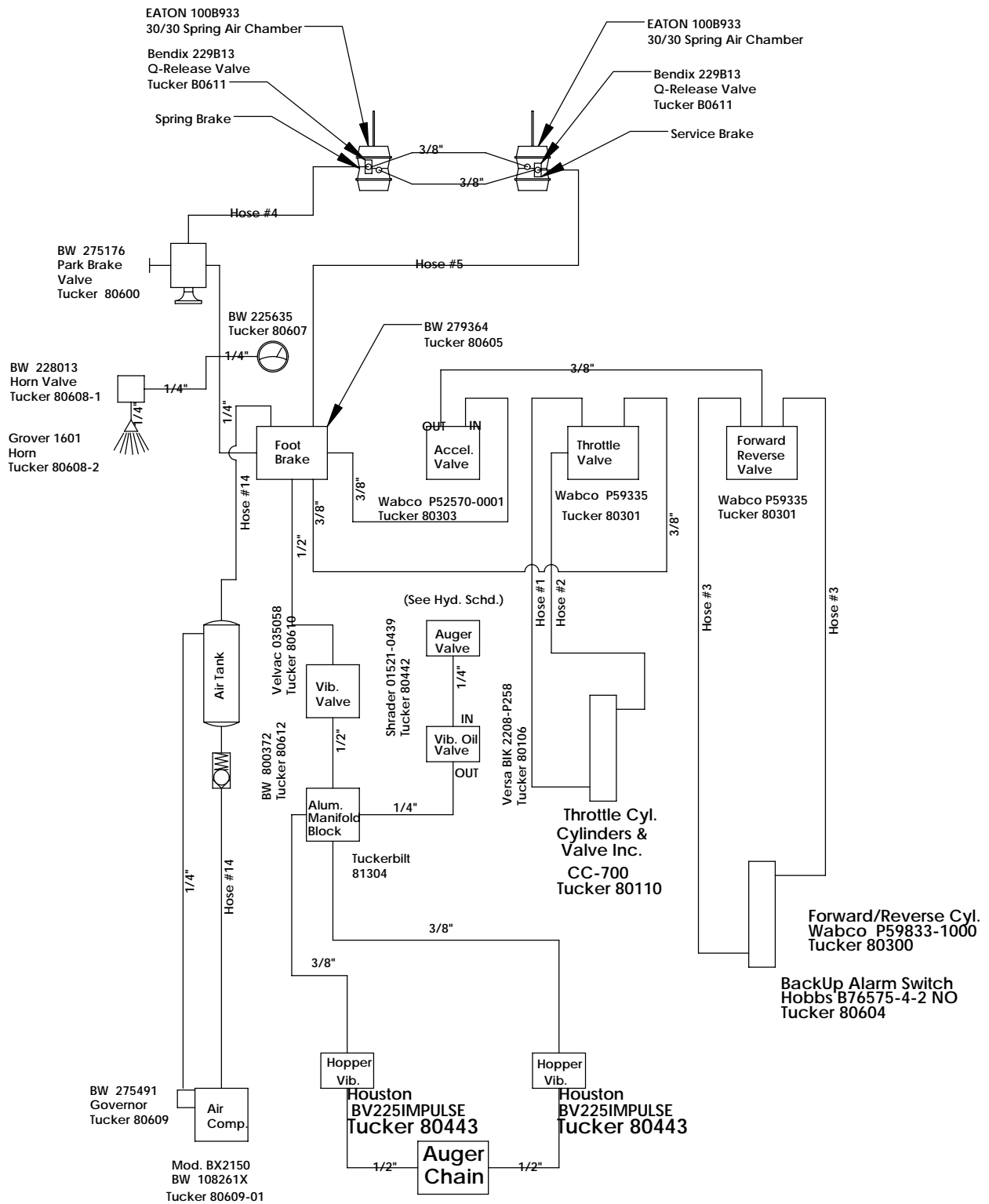
81050





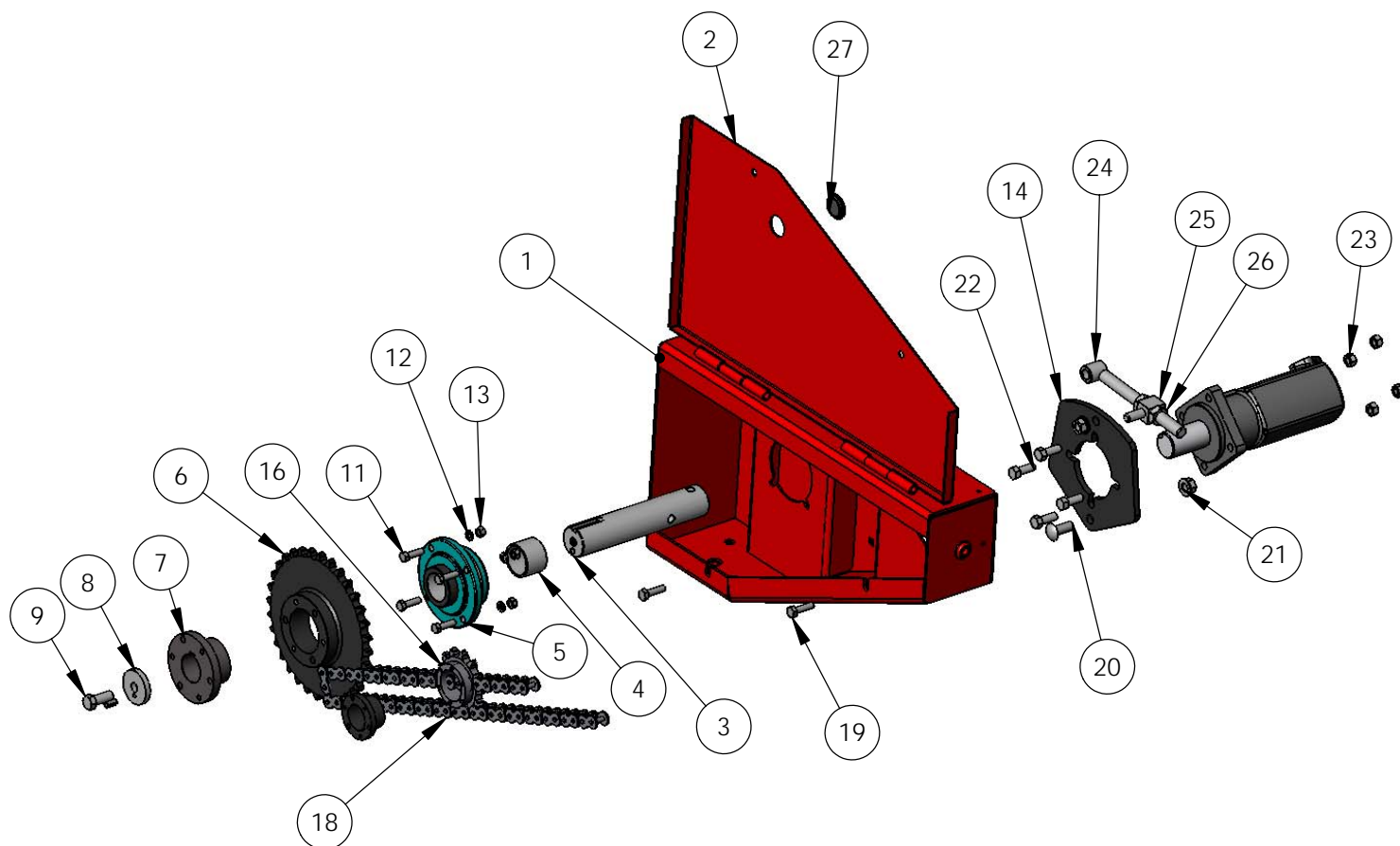
# TWO SPEED PROPEL CIRCUIT





## AIR LINE SCHEMATIC

**Note:**  
BW = Bendix - Westinghouse



## FRONT AUGER DRIVE

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	81977-1	Front Auger Drive Housing Assy	1
2	81977-2	Front Auger Drive Cover Assy	1
3	81977-3	Front Drive Auger Drive Shaft	1
4	81977-4	Front Drive Shaft Spacer	1
5	80305	Bearing Auger	1
6	80405A	Sprocket Auger Shaft	1
7	80405B	Bushing Auger Shaft Spr.	1
8	81029	Washer Idler Shaft	1
9	34-2CS	Screw Cap .75 X 2	1
10	12-1TP	Pin Tension 1/2 X 1	1
11	12-134CS	Screw Cap .5 X 1.75	4
12	LW 0.5	Washer Lock .5	4
13	12N	1/2-13 Hex Nut	4
14	81459	Plate Auger Motor Mount	1
15	80102	Motor Auger	1
16	80404A	Sprocket Auger Motor	1
17	80404B	Bushing Auger Mtr. Spr.	1
18	81807	Chain Kit Auger (28 Links #100)	1
19	12-2FTB	Fast Thread Bolt .5 X 2	2
20	34-2CB	Carriage Bolt 3/4 X 2	1
21	34FN	Nut Flanged L. 3/4-10	2
22	58-134CS8F	Screw Cap 5/8 x 1 3/4 GR 8 Fine	4
23	58SLN	Nut Self-lock .625	4
24	81977-6	Front Drive Motor Adj Bolt Assy	1
25	81977-7	Front Auger Drive Motor Adj Block	1
26	1JN	1-8 Nit Jam Nc 1	2
27	80216	Plug Auger Chain Insp.	1

# BUSHING INSTALLATION INSTRUCTIONS

**IMPORTANT: DO NOT USE LUBRICANTS IN THIS INSTALLATION**

## TO INSTALL BUSHING:

1. Remove all paint, oil, grease, etc. from tapered surface of bushing and bore of mating parts.
2. If bushing has a keyway, install shaft key. ( If a rectangular key is required, one will be furnished with the bushing.)
3. Select **Standard** or **Reverse** mounting assembly. See Figures 1 and 2.

**Note: If bushing does not slide on shaft freely, wedge a screwdriver blade into the saw cut at the Flange OD to open the bore of the bushing. Caution: Excessive wedging will split the bushing.**

4. **Standard Mount** – Slide bushing on shaft, flange first. If using the setscrew, gently snug it against the key. **DO NOT TIGHTEN SET SCREW TIGHT YET, Excessive Torque will cause mating part to be eccentric.** Position mating part in place on bushing Aligning drilled holes in mating part with tapped holes in bushing flange. Using lockwashers, install capscrews thru the mating hub and into the bushing flange. (**Note:** M thru S bushings can only be Standard Mounted. Be sure the two tapped holes in the mating hub **do not** align near the bushing saw cut. If they Do, rotate the bushing 90 degrees).
5. **Reverse Mount** – Place mating part over and onto shaft as far as possible with large bore end of taper outward . Slide bushing onto shaft so tapered end will engage into the mating part. If using the setscrew, gently snug it against the key. **DO NOT TIGHTEN SET SCREW TIGHT YET, Excessive Torque will cause mating part to be eccentric.** Align drilled holes in bushing flange with tapped holes in mating part. Using lockwashers, install the capscrews thru the bushing flange and into the mating hub.
6. **Use a Torque Wrench.** Tighten all capscrews evenly and progressively in rotation to the torque value listed in the table. **Excessive wrench torque, closing the gap between the bushing flange and mating hub, or the use of lubricants will break the mating hub.**

## To Remove Bushing:

1. Loosen and remove all capscrews.
2. For **Standard Mount**, thread capscrews into tapped holes in mating part to jack against bushing flange. For **Reverse Mount**, thread capscrews into tapped holes in bushing flange to jack against mating hub. Tighten bolts evenly and progressively in rotation to separate the two components.
3. Loosen setscrew to slide bushing from shaft.

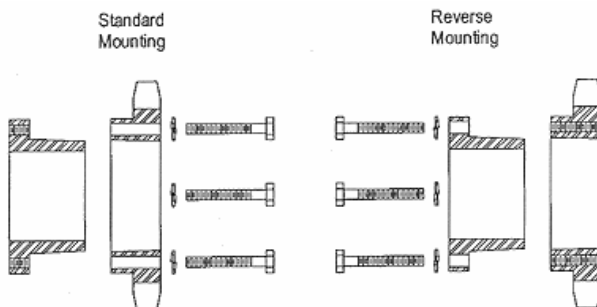
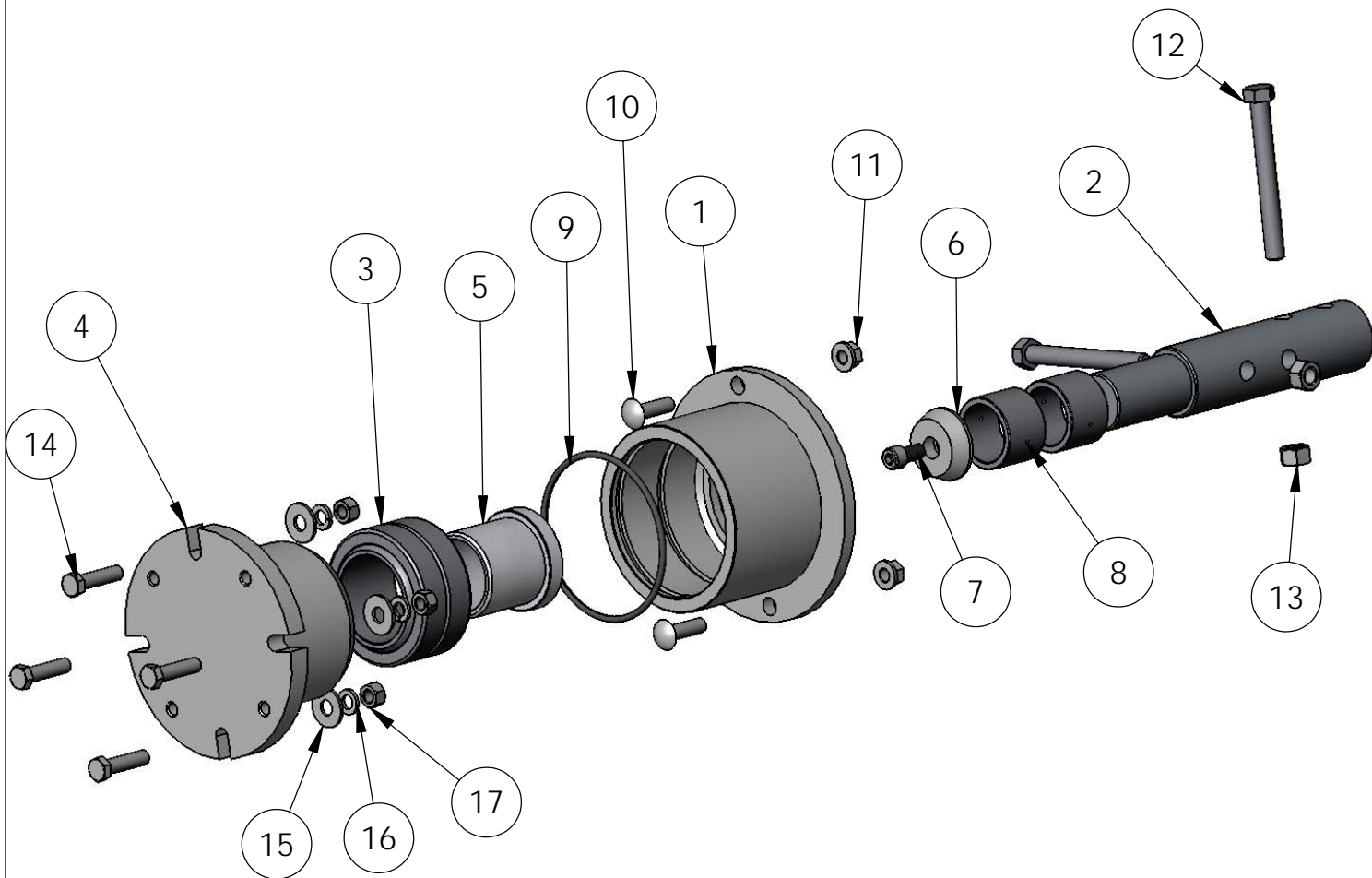


Fig. 1

Fig. 2

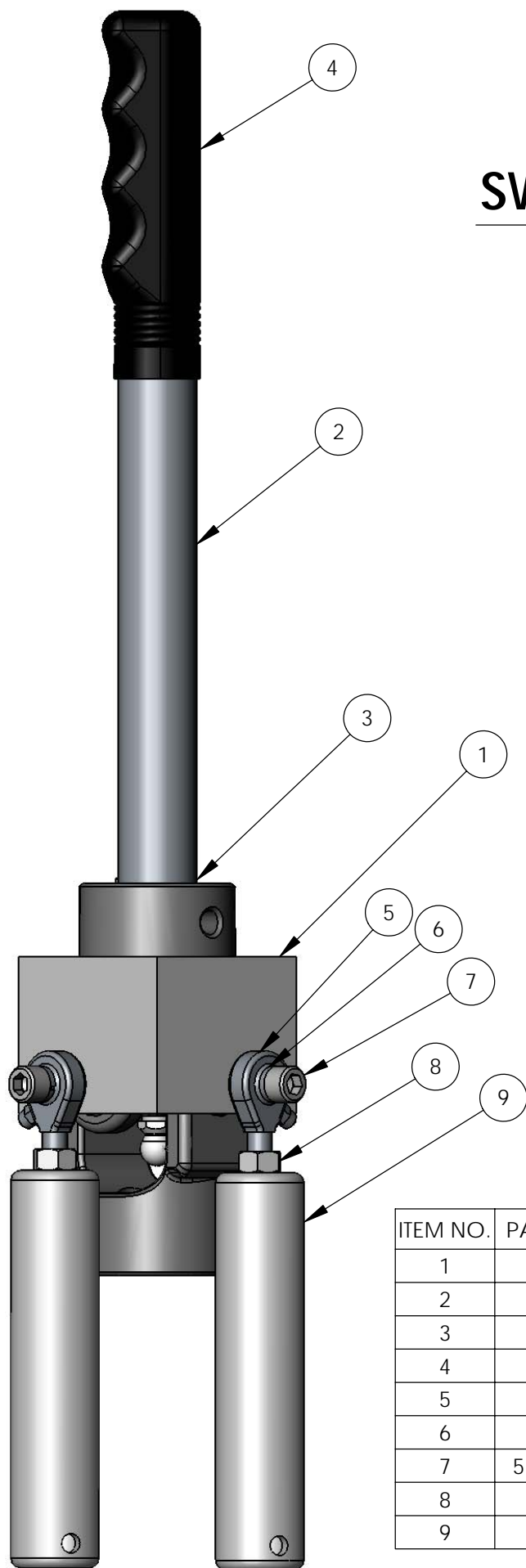
Screw Tightening Information		
Tapered Bushing	Size & Thread of Capscrew	Ft.-Lbs. To Apply With Torque Wrench
SK	5/16-18	15 ( 180 in.)
E	½-13	60



## FRONT DRIVE REAR BEARING HOUSING KIT

81977-12M

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	81977-8	Front Drive - Rear O-Ring Housing	1
2	81977-9	Front Drive - Rear Idler Shaft	1
3	80312	Rear Auger Seal - Bearing	1
4	81977-11	Front Drive - Rear Bearing Housing	1
5	80313	Rear Auger Seal - Composite Brg	1
6	81977-10	Front Drive - Rear Idler Shaft Bullet	1
7	12-1SHCS	Screw Socket Cap 1/2 X 1	1
8	80311	Rear Auger Seal - Inner Ring	2
9	568-357	O-ring 568-357	1
10	12-134CB	Bolt Carr. 1/2" X 1-3/4"	2
11	12FN	Nut Flanged L. 1/2-13	2
12	58-512CS8	Bolts Auger	2
13	58SLN	Nut Self-lock .625	2
14	12-2CS	1/2-13 X 2 Hex Cap Screw	4
15	12FW	Washer Flat .5	4
16	LW 0.5	Washer Lock .5	4
17	12N	1/2-13 Hex Nut	4

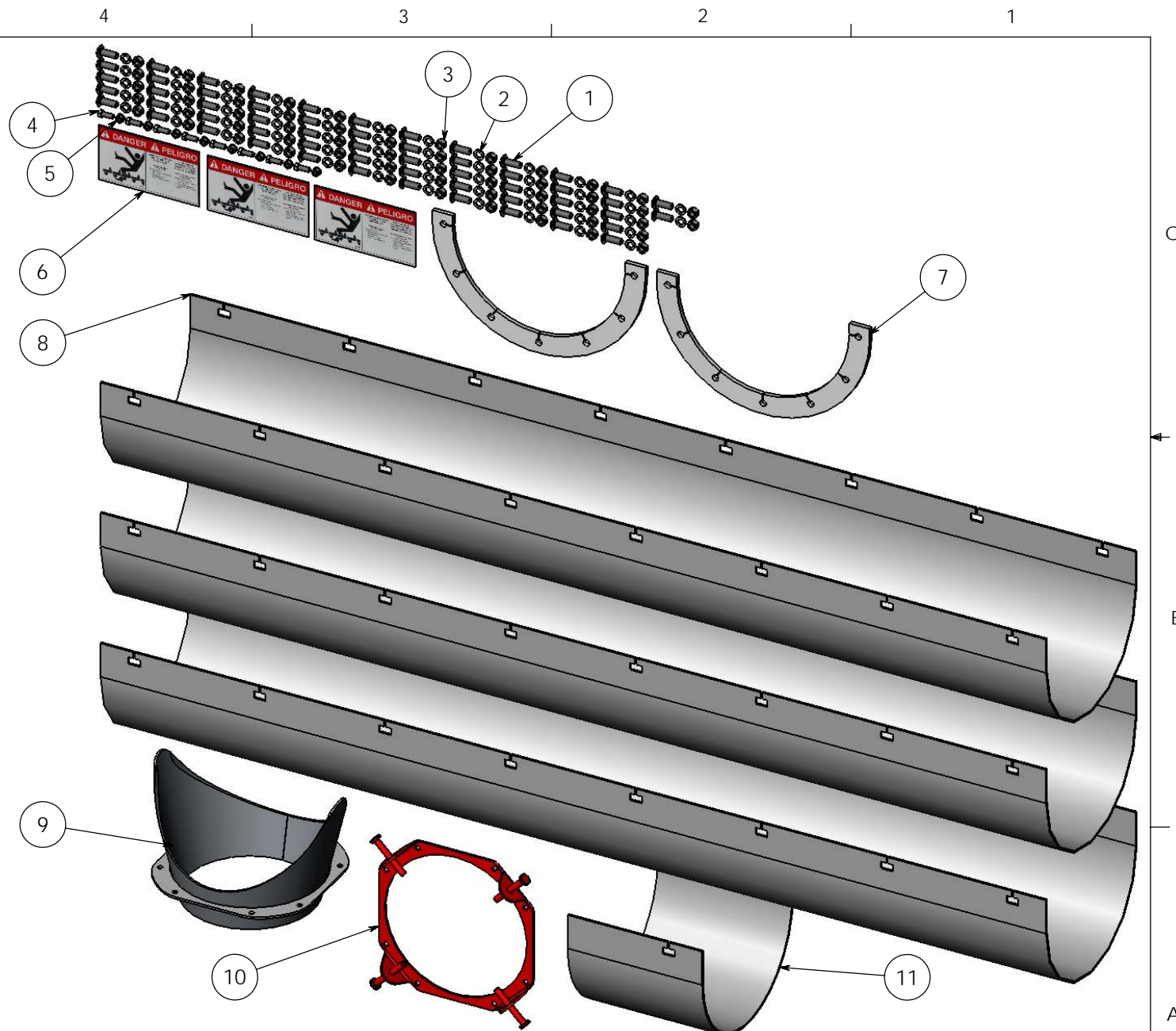


## SWING LIFT UNIVERSAL

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	81615	Universal Assy. Lift-swing	1
2	81616	Handle Lift-Swing	1
3	595-064	Key Woodruff 1/4" X 1"	1
4	80348	Grip Black Rubber	1
5	80506	Tie Rod End For.-Rev. Cyl.	2
6	516HCLW	Lockwasher Hi-Collar 5/16	2
7	516-78SHCSF	Screw Cap SKT SAE 5/16X7/8	2
8	516NF	5/16-24 Nut	2
9	81608	Link Connect Lift-swing	2

81857-1M  
few

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	12-112CB	Bolt Carriage 1/2 x 1 1/2	57
2	LW 0.5	Washer Lock .5	57
3	12N	1/2-13 Hex Nut	57
4	38-1CS	Screw Cap .375 X 1	8
5	38FN	Nut Flanged L.3/8-16	8
6	80154	Label Auger Danger	3
7	81524	Flange Chute Bolt	2
8	81525	Chute Skin	3
9	819781	Spout Assembly	1
10	8197813	Funnel Flange Assy. T-630 Gate Spout	1
11	81525-12	Chute Skin 12" Section	1



**81990-12**

T-630

DR. BY few

DATE 2/6/2006

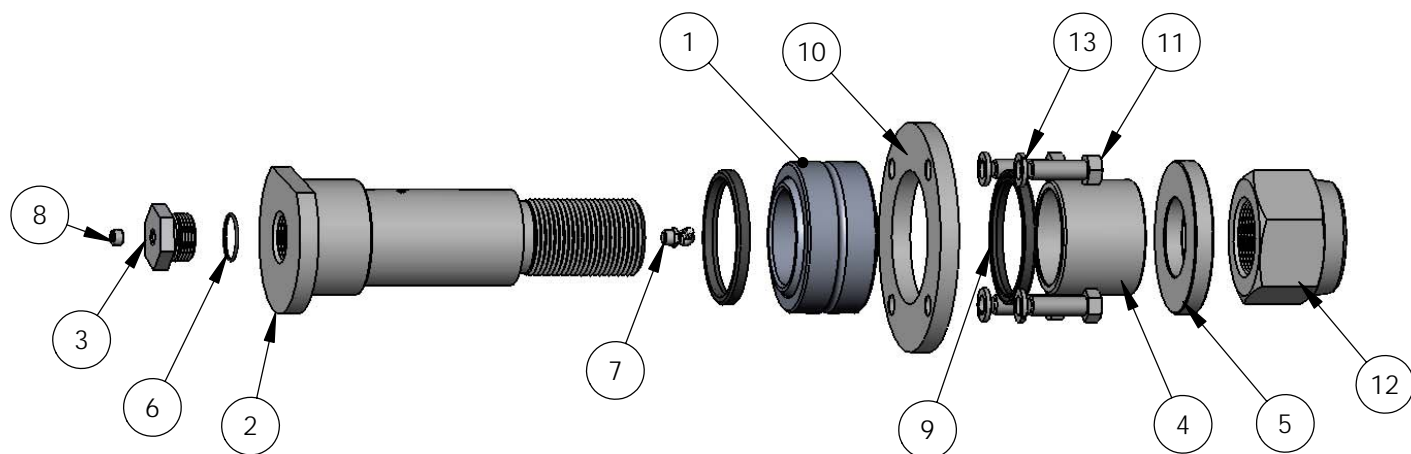
**Chute Liner Kit T-630 - 22'**

SCALE: NONE

**81990-12**

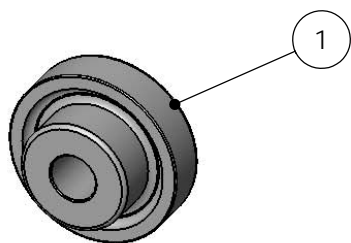


**MACHINE & STEEL  
SERVICE INC.**  
P.O. BOX 492810 LEESBURG, FLA. 34749-2810

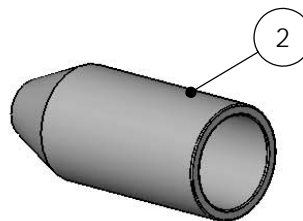


### Kit Top Repair Articulate 81070-TRK

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	80304	Bearing Articulate	1
2	81070	Pin Articulate	1
3	81070-10	Articulate Shaft Thread Plug	1
4	81075	Spacer Articulate Pin	1
5	81076	Washer Articulate Pin	1
6	568-024	O-Ring 568-024	1
7	18GF-90	90 Deg 1/8 Grease Fitting	1
8	2222-2S	1/8" NPT Plug-Aeroquip 2222-2S	1
9	80505	Seal Articulate Pin	2
10	81124	Retainers Top Bearing	1
11	12-112CS	Screw Cap .5 X 1.5	4
12	2-8SLNF	Nut Lock Self Sae 2"-8	1
13	12LW	1/2" Std. Spring Lock Washer	4



Articulate Brg Install Tool  
80170-02

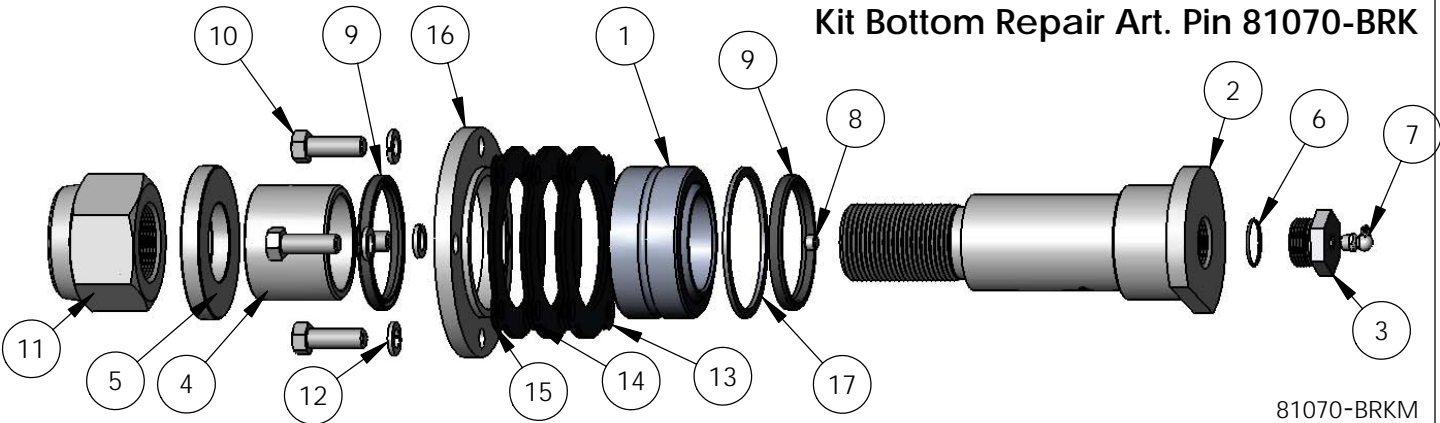


Pin Articulate Alignment Tool  
81070-01

Note: Not part of Repair Kit



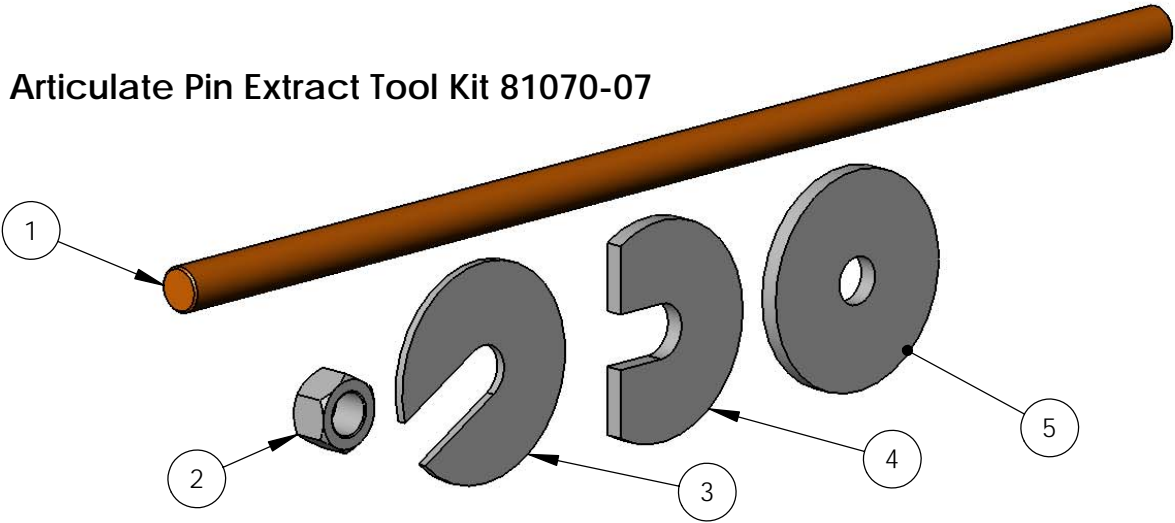
**Kit Bottom Repair Art. Pin 81070-BRK**



81070-BRKM

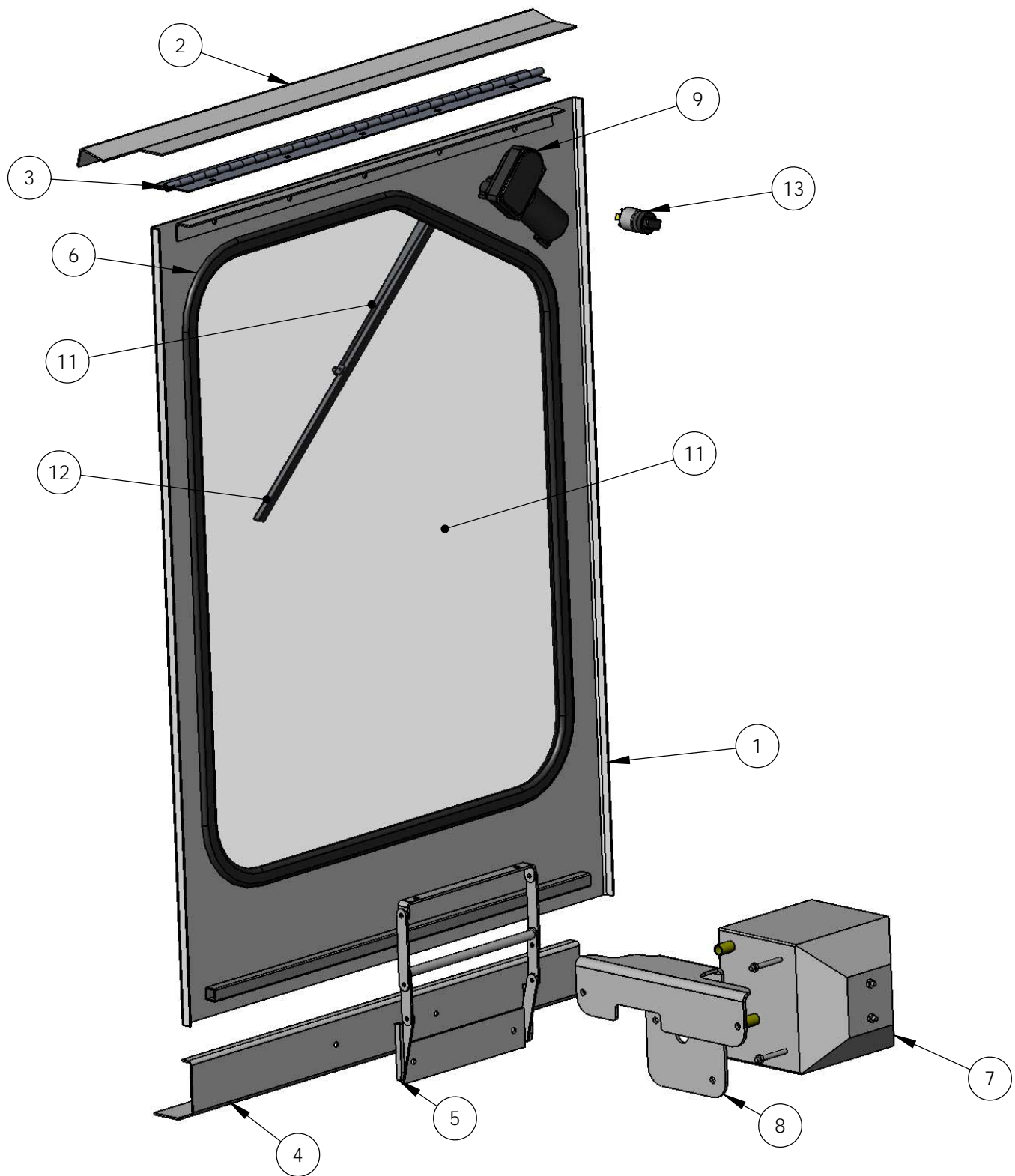
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	80304	Bearing Articulate	1
2	81070	Pin Articulate	1
3	81070-10	Articulate Shaft Thread Plug	1
4	81075	Spacer Articulate Pin	1
5	81076	Washer Articulate Pin	1
6	568-024	O-Ring 568-024	1
7	18GF-90	90 Deg 1/8 Grease Fitting	1
8	2222-2S	1/8" NPT Plug-Aeroquip 2222-2S	1
9	80505	Seal Articulate Pin	2
10	12-112CS	Screw Cap .5 X 1.5	4
11	2-8SLNF	Nut Lock Self Sae 2"-8	1
12	12LW	1/2" Std. Spring Lock Washer	4
13	80307	.005 Shim, Timkin #K21605	3
14	80308	.007 Shim Timkin # K21607	3
15	80309	.020 Shim, Timkin # K21620	2
16	81125	Retainers Bottom Bearing	1
17	81078	Spacer Articulating Bearing	1

**Articulate Pin Extract Tool Kit 81070-07**



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	81070-03	Articulate Pin Extract Rod	1
2	114-SLNF	Nut Self Lock Fine 1.25	1
3	81070.04	Articulate Pin Extract Shim 1/4"	1
4	81070-05	Articulate Pin Extract Shim 1/2"	1
5	81070-06	Articulate Pin Extract Pull Washer	1

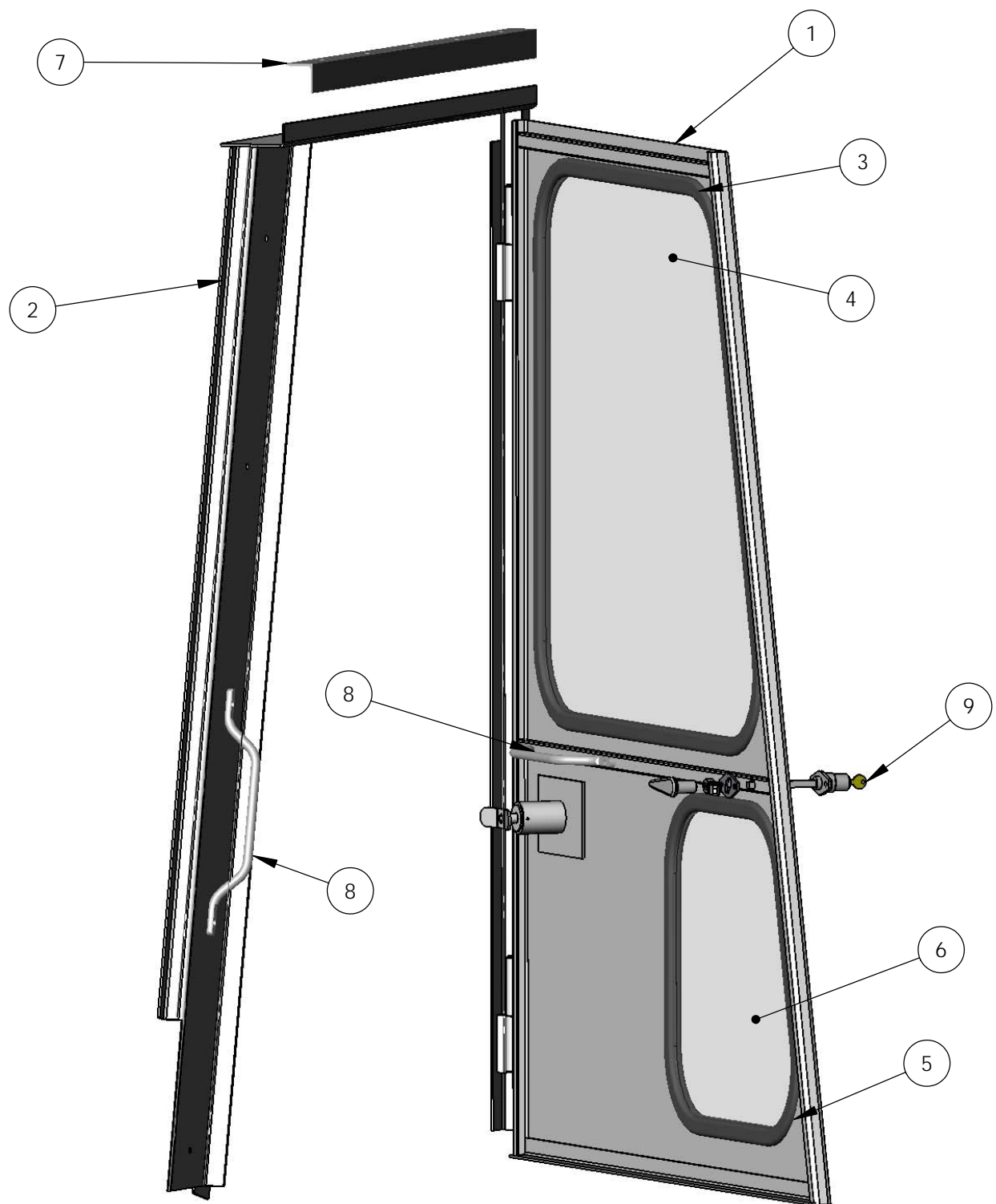




## CAB ENCLOSURE - WINDSHIELD

81987-70M

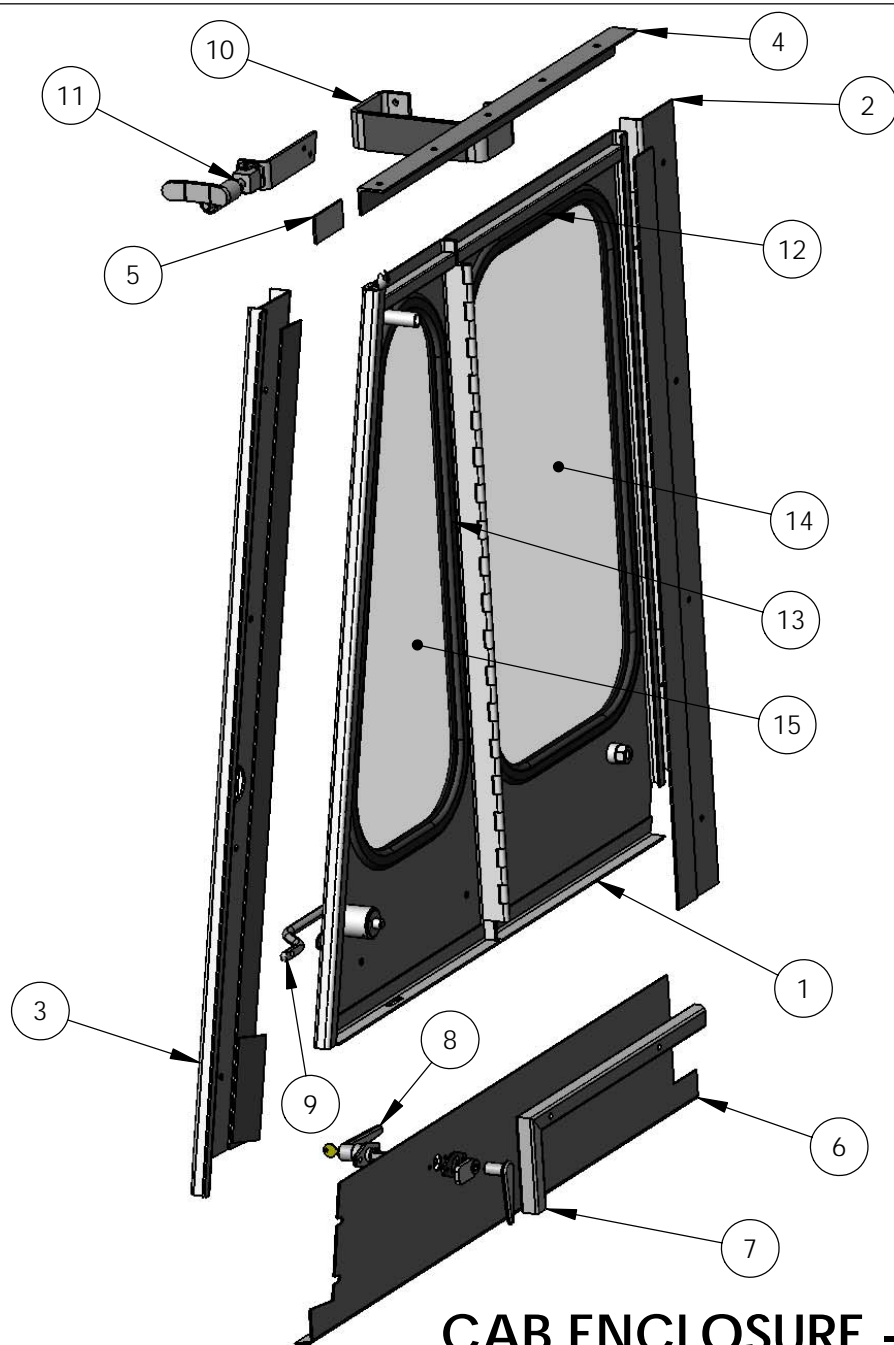
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	81987-70	Windshield Assy.	1
2	81987-75	Drip Edge Windshield	1
3	81987-74	Hinge Windshield	1
4	81987-76	Panel Lower Windshield	1
5	81987-80	Opener Assy. Windshield	1
6	80991WS	T-630 Cab Glass Weatherstripping	1
7	81995-15	Heater Cab T-630	1
8	81987-119	Bracket Cab Heater Mount	1
9	81995-06	Motor Wiper T-630	1
10	91995-02	Arm Wiper T-630	1
11	81995-201	Glass, T-630 Cab Windshield (36 1/2 X 29)	1
12	81995-07	Wiper Blade T-630	1
13	81995-03	Switch Wiper T-630	1



## CAB ENCLOSURE - LEFT DOOR

81987-10M

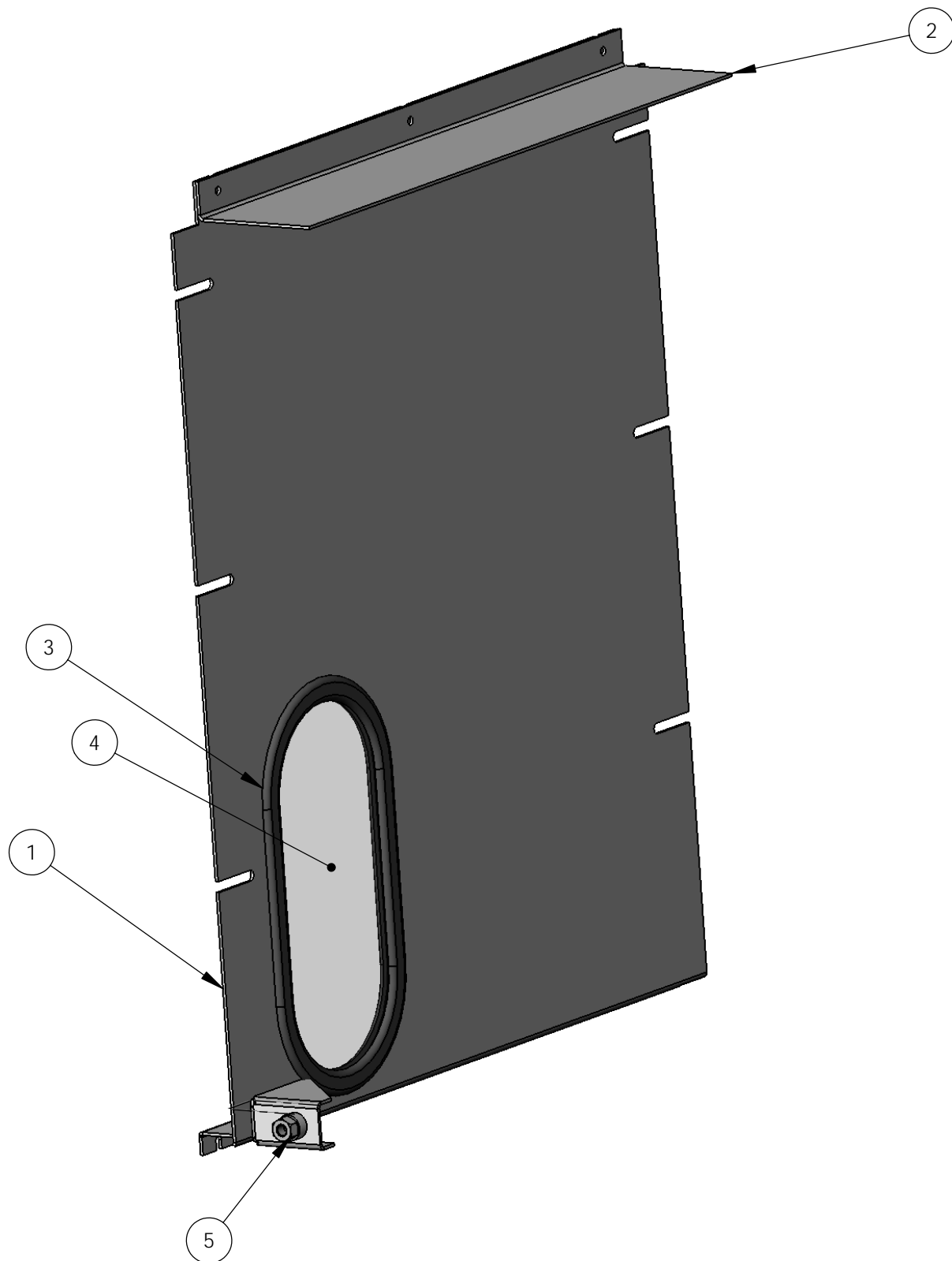
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	81987-10	Door Assy. Left Cab	1
2	81987-30	Frame Assy. L Cab Door	1
3	80991LDL	T-630 Cab Glass WeatherstrippingLDL	1
4	81995-202	Glass, T-630 Cab L. Door Top (31 X 31)	1
5	80991LDS	T-630 Cab Glass WeatherstrippingLDS	1
6	81995-203	Glass, T-630 Cab L. Door Bottom (18 X 18)	1
7	81987-37	Header Left Door Cab	1
8	81995-18	Handle (chrome) T-630 Cab	2
9	81987-200	Left Cab Door Handle Kit - Keyed	1



81987-40M

## CAB ENCLOSURE - RIGHT DOOR

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	81987-40	Door Assy. R. Cab	1
2	81987-60	Frame Assy. Rear R. Dr	1
3	81987-66	Frame Front Assy. R Door	1
4	81987-59	Header Right Door Cab	1
5	Filler Plate	10 GA Filler Plate	1
6	81987-63	Plate Kick R Door Cab	1
7	81987-65	Spacer R Door Kick Plate	1
8	81987-201	Right Cab Door Handle Kit - Keyed	1
9	81995-18	Handle (chrome) T-630 Cab	1
10	81987-100	Stop Assy. Hopper R. Door	1
11	81987-110	Latch Assy. R. Hopper Door	1
12	80991RDL	T-630 Cab Glass Weatherstripping RDL	1
13	80991RDS	T-630 Cab Glass Weatherstripping RDS	1
14	81995-205	Glass, T-630 Cab R. Door Rear (18 X 30)	1
15	81995-204	Glass, T-630 Cab R. Door Front (14 X 30)	1



## CAB ENCLOSURE - REAR

81987-90M

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	81987-90	Plate Cab Rear	1
2	81987-95	Plate Cab Rear Filler Plate	1
3	80991R	T-630 Cab Glass Weatherstripping	1
4	81995-206	Glass, T-630 Cab Rear (8 X 16)	1
5	81987-92	Catch Assy. L Door	1

## Tuckerbilt® T-630 Filters:

### Perkins 1104D Engine Tier III

	Spin On for Sunstrand Suction 10 Micron	Twin Elements 10 Micron	Enginaire Air Filter www.enginaire.com	Fuel	Fuel/Water Separator	Oil
Gresen	7520-001	3293-001	*NA	*NA	*NA	*NA
Donaldson	P550388	P553293			P556245	P554407
Perkins 1104D	*NA	*NA		2656F843	2656F501	2654407
Wix	51759	51506				51459
NAPA	1759	1506				
Eng. Air	*NA	*NA	68191-1	*NA	*NA	*NA
Twin Elements Flat Gasket Gresen #		1575-001				
Twin Elements 'O' Ring Gresen #		1576-001				

### CAT 3054C / Perkins 1104C Engine Tier II

	Spin On for Sunstrand Suction 10 Micron	Twin Elements 10 Micron	Air	Fuel	Fuel/Water Separator	Oil
Gresen	7520-001	3293-001	*NA	*NA	*NA	*NA
Donaldson	P550388	P553293			P556245	P554407
Caterpillar 3054C	*NA	*NA	Inner: 233-5184 Outer: 233-5182	934-181	252-6338	7W-2326
Perkins 1104C	*NA	*NA	Inner: 26510381 Outer: 26510380	26560201	26550005	2654407
Wix	51759	51506				51459
NAPA	1759	1506				
Twin Elements Flat Gasket Gresen #		1575-001				
Twin Elements 'O' Ring Gresen #		1576-001				

\*NA Not Applicable

John Deere 4045T with TIER II Electronic Ignition

	Spin On for Sunstrand Suction 10 Micron	Twin Elements  10 Micron	Air	4045T Fuel	4045T Oil
Gresen	7520-001	3293-001	*NA	*NA	*NA
Donaldson	P550388	P553293	P181045		
John Deere	*NA	*NA	*NA	RE509031	RE504836
Wix	51759	51506	42234		
NAPA	1759	1506	2234		
Twin Elements Flat Gasket Gresen #		1575-001			
Twin Elements 'O' Ring Gresen #		1576-001			

John Deere 4045T prior to TIER II Electronic Ignition

	Spin On for Sunstrand Suction 10 Micron	Twin Elements  10 Micron	Air	4045T Fuel	4045T Oil
Gresen	7520-001	3293-001	*NA	*NA	*NA
Donaldson	P550388	P553293	P181045	P550351	P551352
John Deere	*NA	*NA	*NA	RE62418	RE59754
Wix	51759	51506	42234	33531	57243
NAPA	1759	1506	2234	3531	7243
Twin Elements Flat Gasket Gresen #		1575-001			
Twin Elements 'O' Ring Gresen #		1576-001			

\*NA Not Applicable

## T-630 Tier III Engine Wiring – Start Sequence

Start sequence:

Key to Run position: Dash lights – Warning Lamp, Oil Pressure, Stop Lamp, and Wait to Start are controlled by the ECM on the engine. These lights come on for 2 seconds (as a test) and go out. The Low Water and Low Hydraulic lights are timed on for 5 seconds by the Amperite Relay in the Black Box by the engine.

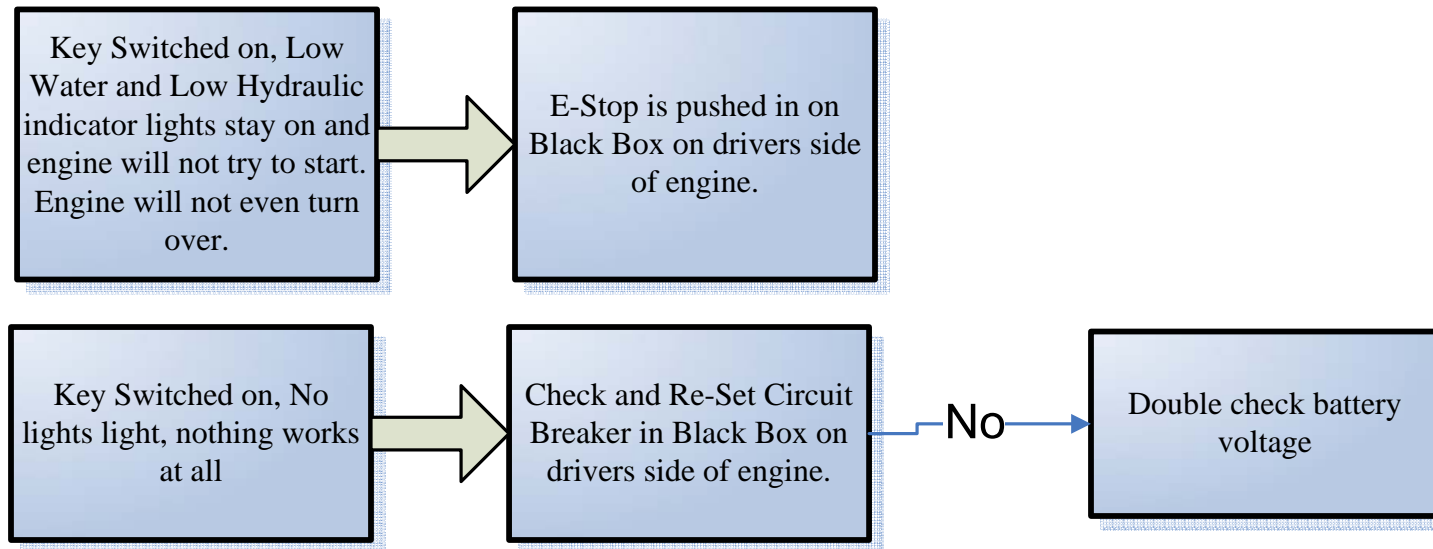
If the Wait to Start light stays on, the ECM is activating the Glow Plugs and you should wait until the ECM turns the Wait to Start light off before trying to start the engine.

Key to Start position: Electric flow to start passes through the key switch to Terminal E on the lower terminal in the black box. From E through the Neutral Start switch on the Main Hydraulic Pump to Terminal 1 on the upper strip. Then through one of the N/C contacts on the E-Stop to the Start Relay in the Black Box. This relay should then energize the starter.

E-Stop pressed:

The Low Water and Low Hydraulic diagnostic lights come on and stay on. The circuit to the ECM indicating the key is on, is opened, and the circuit to activate the starter is opened. (It will not even try to turn the starter)

## Tier III T-630 Engine Trouble Shooting

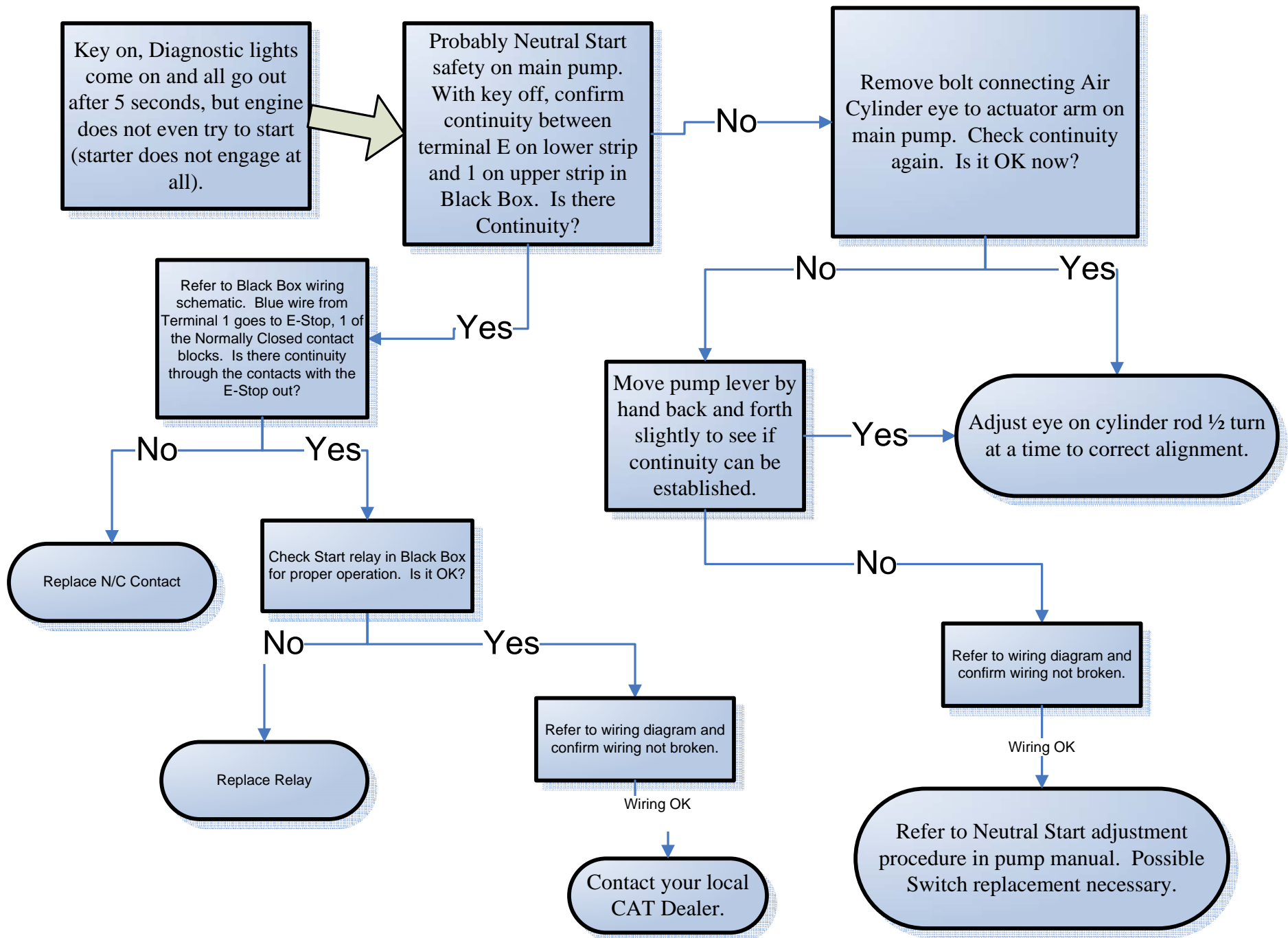


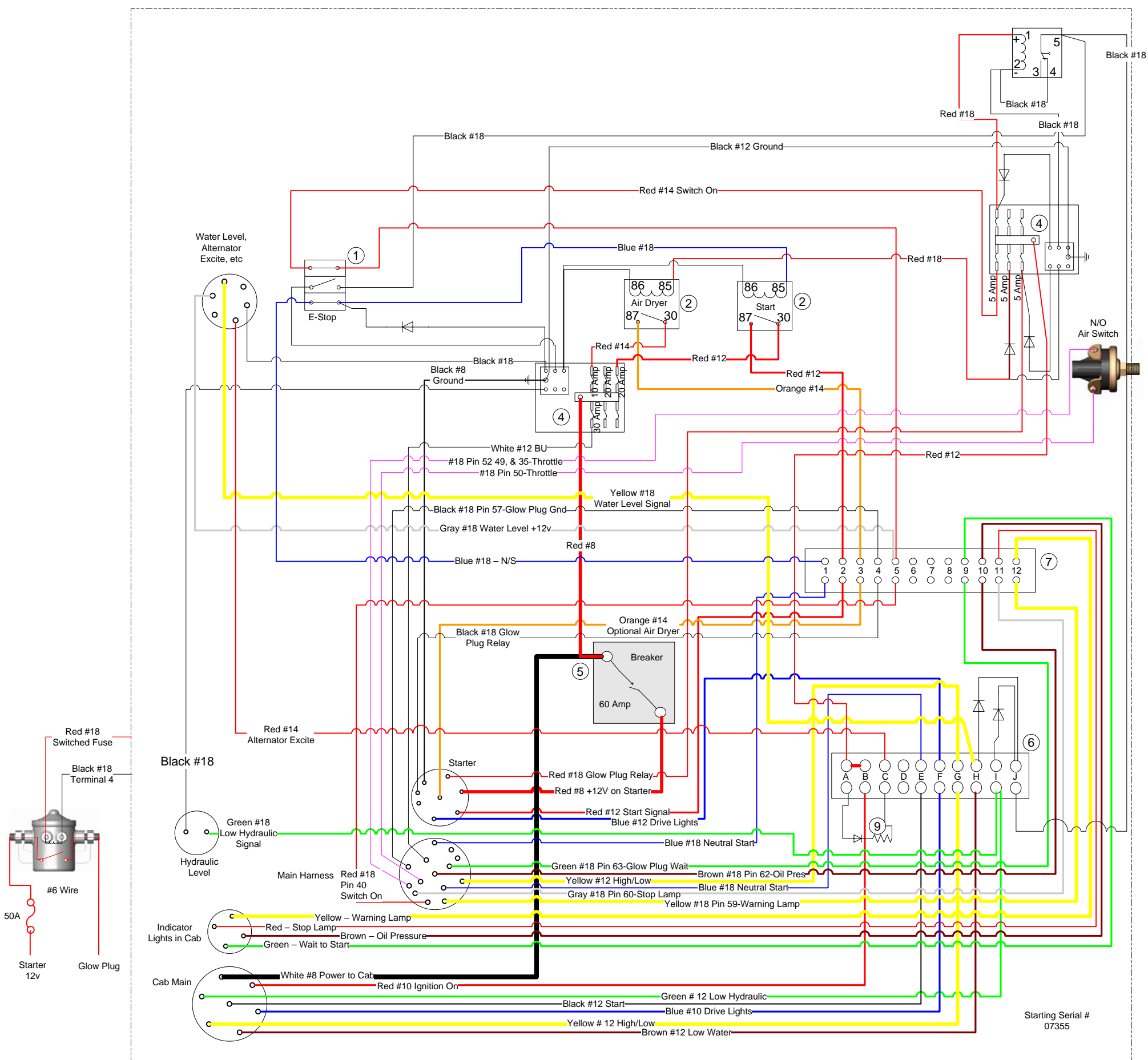
Check all fuses in Black Box by engine.

Check 25 Amp fuse in power wire from Battery to ECM.  
This fuse is near the positive terminal of the battery.

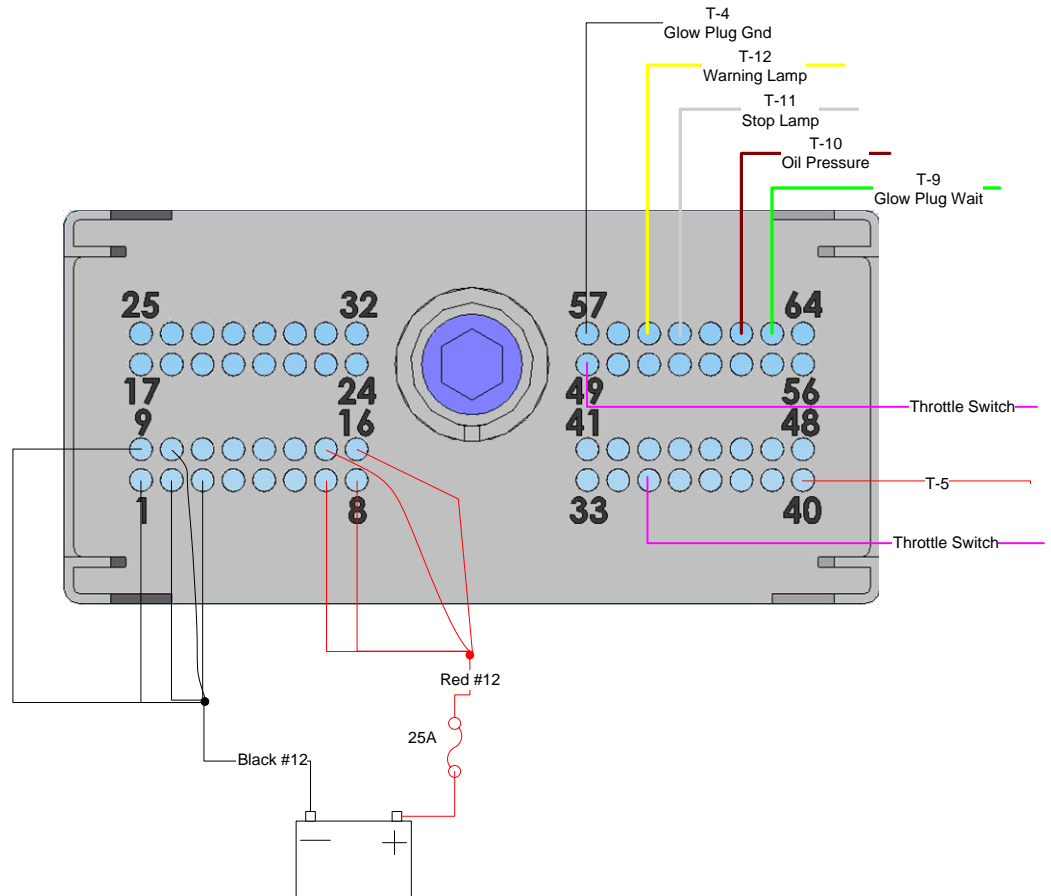


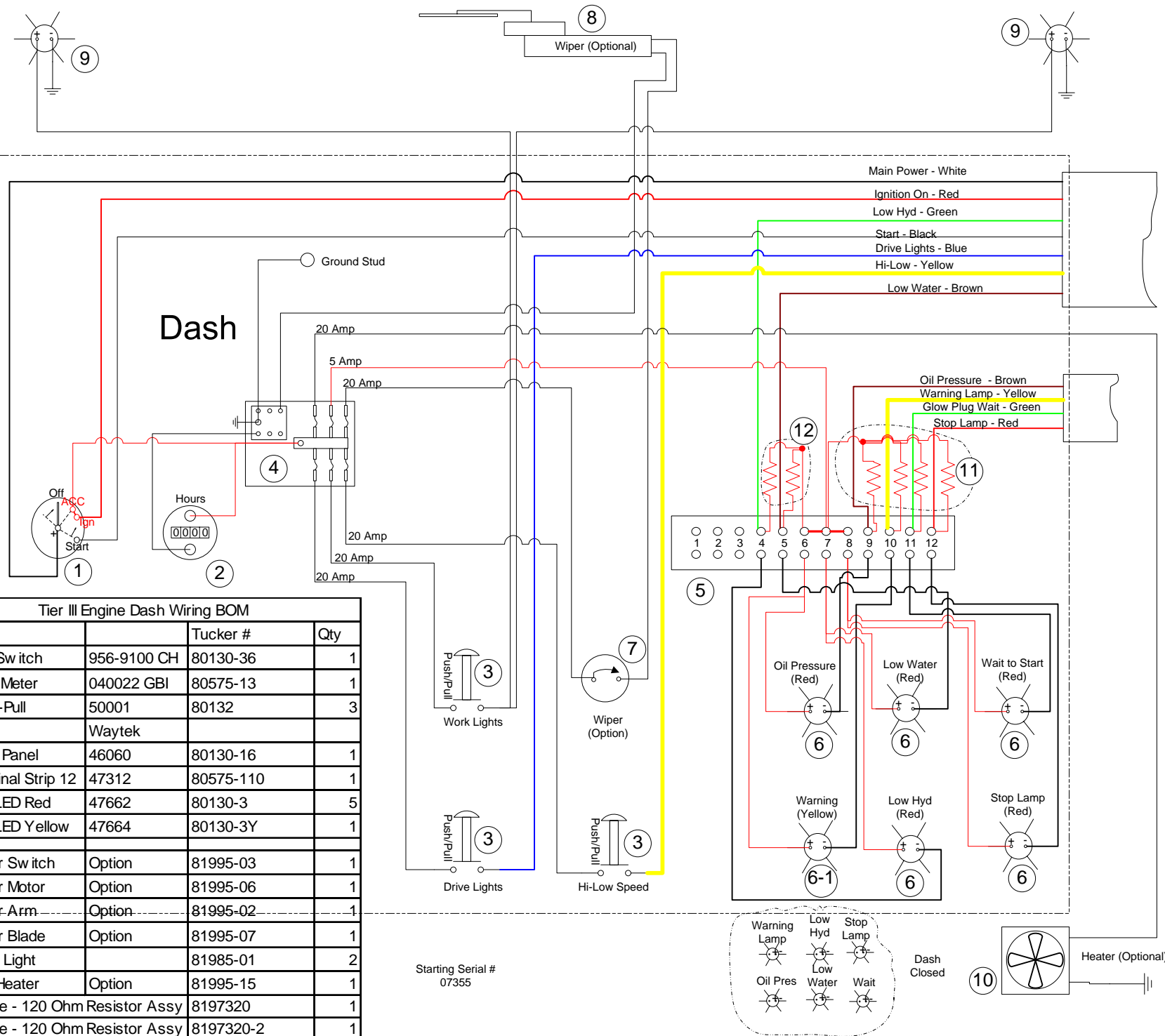
## Tier III T-630 Engine Trouble Shooting

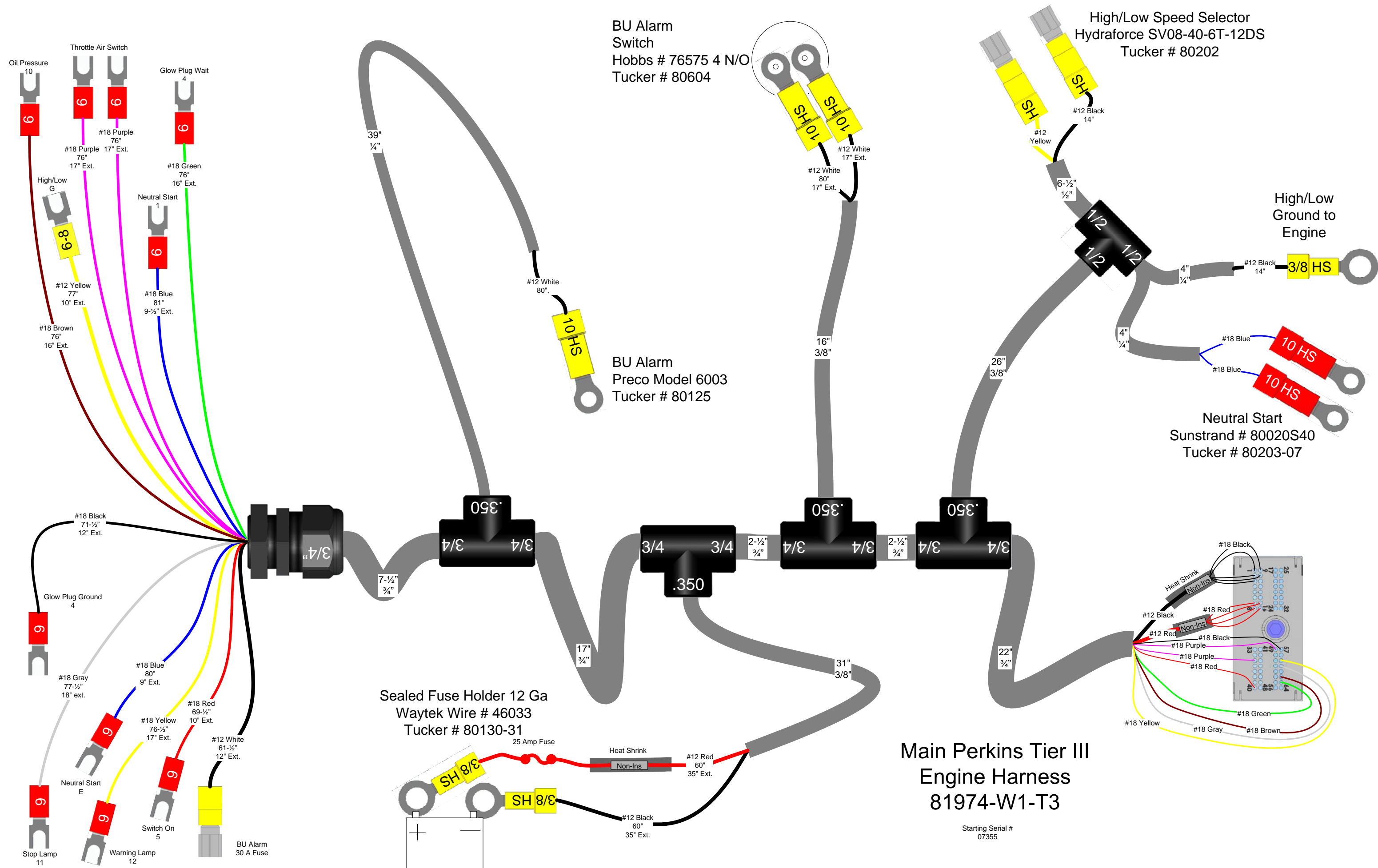


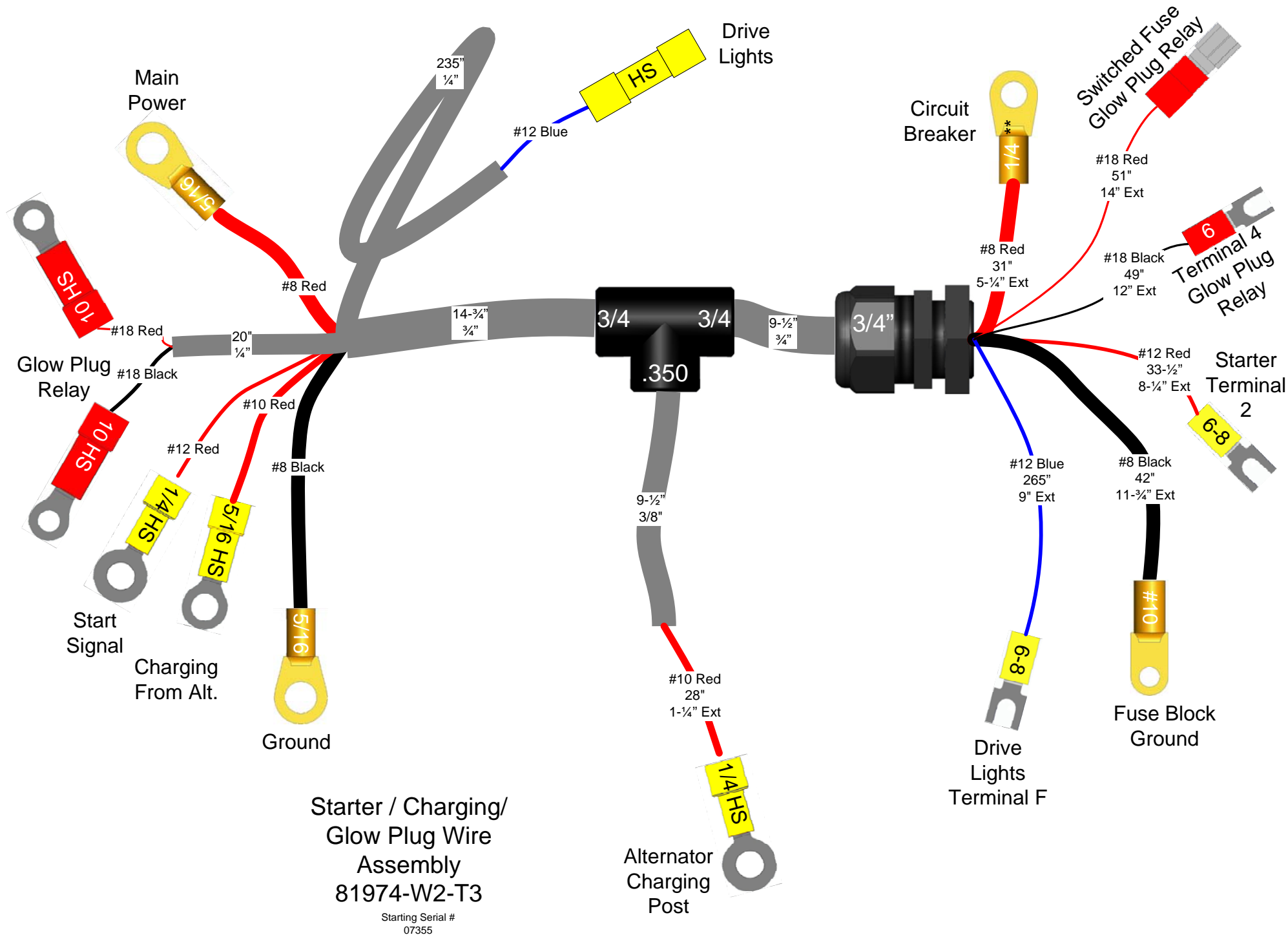


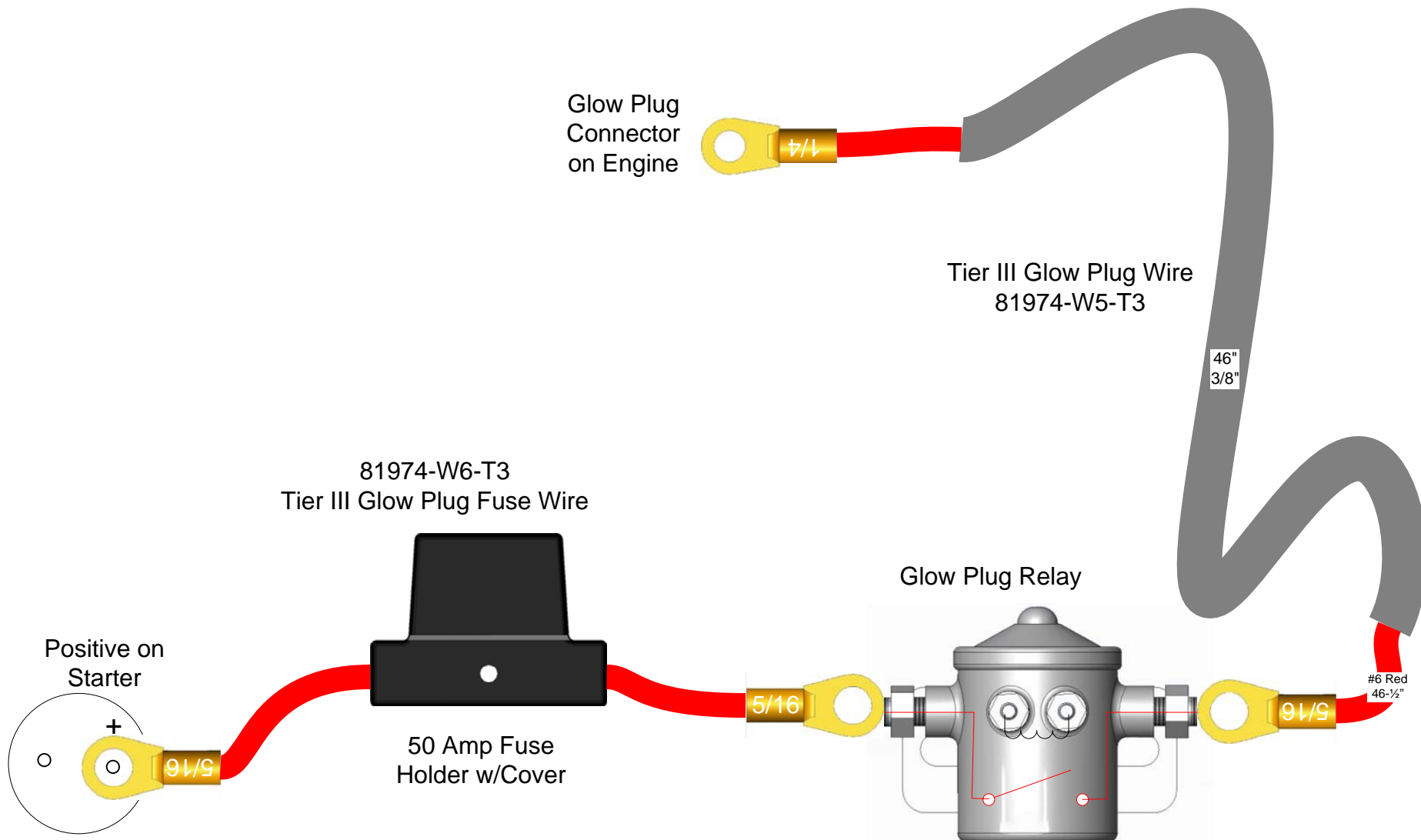
Cat Engine Wiring BOM			
E-Stop	Grainger	Tucker #	Quantity
Push-Pull	6HW12	80575-111	1
NC/NO Contact	6HX35	80575-112-NO-NC	1
Block w /Base	6HZ06	80575-112-NO	1
NO Contact	6HZ09	80575-112-NC	1
Name Plate	6JC63	80575-113	1
Tyco Relay's	Tyco		
Relay	VF7-41F11	80130-12	5
Relay Socket	VCF7-1000	80130-13	5
Terminal 6-10	280755-4	80130-14	2
Terminal 12-10	280756-4	80130-15	2
Amperite Time Delay Relay	12DSPDT5SC	80130-11	1
	Waytek		
Fuse Panel	46060	80130-16	1
Terminal Strip 10	47360	80575-109-10	1
Terminal Strip 12	47312	80575-109	1



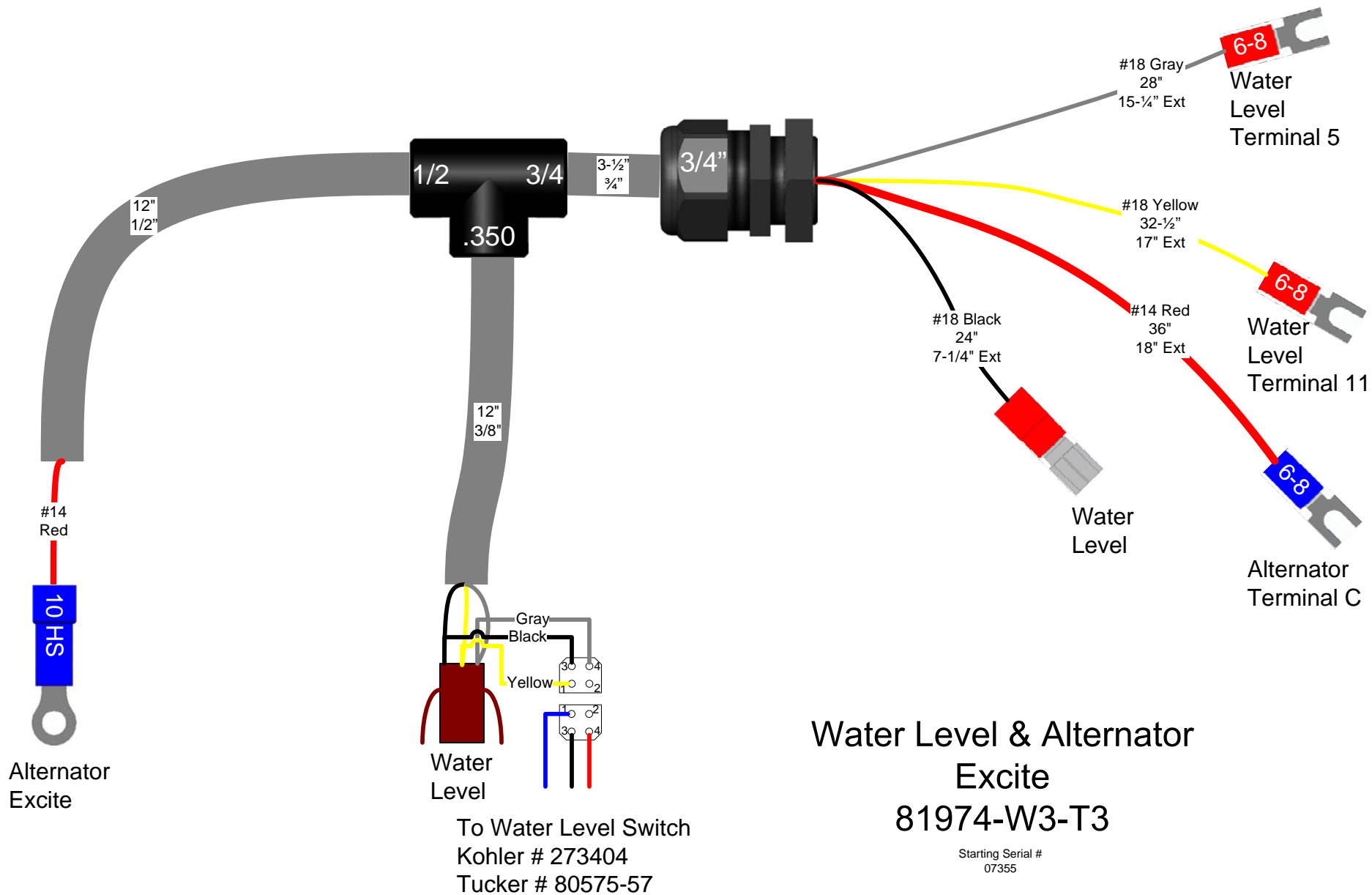




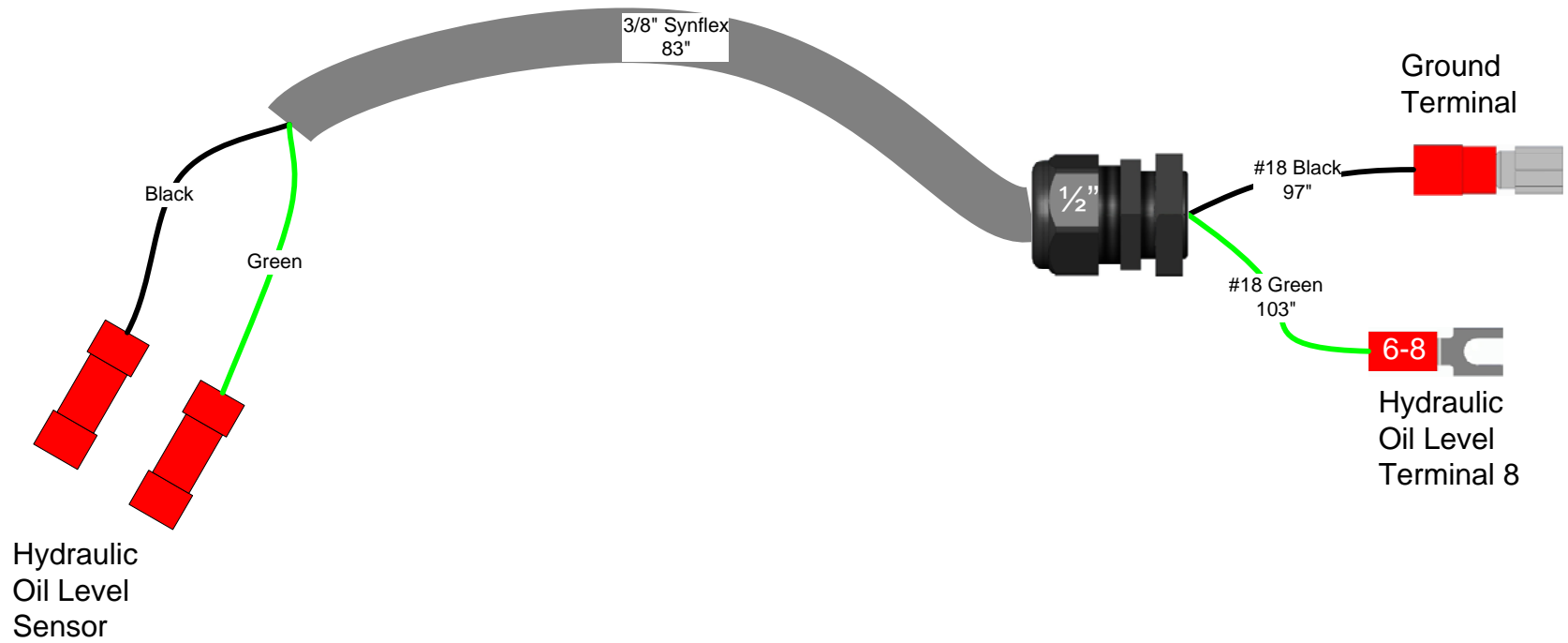




Description	Waytek #	Tucker #
Maxi-Fuse Holder Red 8"-#6 Leads	46024	80130-32
Maxi-Fuse Holder Cover	46028	80130-33
Maxi-Fuse 50 Amp Red	46243	80130-34
	Cole Hersee #	Tucker #
Relay	2411701	80587







## Hydraulic Oil Level 81974-W4

Starting Serial #  
06316