SAFETY PRECAUTIONS

To prevent bodily injury and additional hazards resulting from damage to equipment, SYSTEM SAFETY PRECAUTIONS noted in the Safety Documents at the front of this volume and the following **SPECIAL PRECAUTIONS** MUST BE OBSERVED. Some of these precautions may not apply to your equipment, depending on options:

1. **DO NOT CLIMB, WALK, OR STAND ON OR WITHIN AN OPERATIONAL WIREWOLF®.**

2. **KEEP HANDS, TOOLS, ETC., AWAY FROM THE WIREWOLF® AND THE CONVEYOR MECHANISMS WHEN THEY ARE OPERATIONAL.**

3. **DO NOT ENTER OR PERFORM ANY MAINTENANCE ON THE WIREWOLF® UNLESS THE WIREWOLF AND ASSOCIATE MACHINES ARE TAGGED AND LOCKED OUT MECHANICALLY, ELECTRICALLY AND HYDRAULICALLY.**

4. **DO NOT OPERATE BALE OR MACHINE ACTUATED PHOTO-LIGHTS OR SWITCHES BY HAND.**

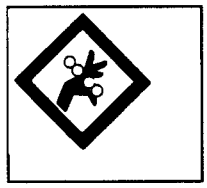
5. **DO NOT BYPASS, DISCONNECT OR IN ANY WAY RENDER A PHOTO-LIGHT OR SWITCH INOPERABLE.**

6. **DO NOT OPERATE THE WIREWOLF® WITHOUT ALL COVERS AND GUARDS IN PLACE.**

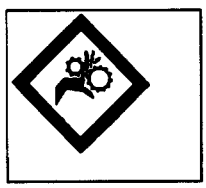
7. **DO NOT PERFORM MAINTENANCE ON ANY PART OF THIS MACHINE WITHOUT FIRST FOLLOWING ESTABLISHED LOCK-OUT/TAG-OUT PROCEDURES.**

HAZARDS

1. **CAUTION - PINCH HAZARD.**



2. **CAUTION – ENTANGLEMENT HAZARD.**



SPECIFICATIONS

The following table lists the machine's operating parameters and specifications.

Operating Parameters And Specifications

ITEM	DESCRIPTION
Capacity:	Air dry metric tons/day; determined by average bale weight
Cycle Time:	40 sec/bale
Availability:	98 percent
Capacity:	88 bales/hour
Wire Cutting Efficiency:	98 percent
Wire Removal Efficiency:	97 percent
Wire Specifications:	
Wire Size Range:	9-14 AWG
Wire Type:	Round or oval
Tensile Strength:	Min. 100,000 psi Max. 180.000 psi
Wire Length:	Max. 300 feet (depending on wire gauge)
Bale Dimensions:	
Length:	36 in. min.; 96 in. max.
Width:	24 in. min.; 84 in. max.
Height:	24 in. min.; 52 in. max.
Weight:	500 – 3,000 pounds
Bale Orientation:	Wires parallel to flow direction
Bale Content:	Waste paper bales: ONP, OCC, OPB, MOW, and MW
Power	
Input:	460/3 Ph/60 Hz
Control:	115 VDC

SPECIFICATIONS(CONTINUED)

Operating Parameters And Specifications (Continued)

ITEM	DESCRIPTION
Noise: C Level	
Hydraulic Unit (at 1 meter):	86 dB
Dewiring Unit (running):	80 dB
Dewiring Unit (coiling):	86 dB
Under Machine (coiling):	90 dB
Noise: A Level:	
Hydraulic Unit (running):	83 dB
Hydraulic Unit (idle):	80 dB
Dewiring Unit (operating):	79 dB*
Dewiring Unit (coiling):	80 dB*
Under Machine (operating):	80 dB*
Under Machine (coiling):	85 dB*
Discharge Side (operating):	72 dB
Discharge Side (coiling):	77 dB*
Weight:	18,000 pounds (8,165 Kg)
Ambient Temperature:	-10 degrees C to +30 degrees

* These numbers are influenced by the Hydraulic Unit.

FEATURES

- Top Mounted Breaker Assembly with hydraulic torque arm actuator
- Bottom Mounted Gathering Assembly
- Bottom Mounted Coiling Assembly (May have left or right discharge conveyor)
- Hydraulic Actuators
- Air Showers on Coiling Assembly and Conveyor Assembly
- Lockout bar

OPERATION SEQUENCE

FUNCTION

The WireWolf® Automatic Dewiring Machine cuts wires from waste paper bales.

DESCRIPTION

The Dewiring Machine consists of a Bale Conveyor Section, Breaker Assembly, Gatherer Assembly, Coiler Assembly, and Coil Conveyor.

BALE CONVEYOR SECTION

The Bale Conveyor Section forms the bed of the dewiring machine. The Conveyor transports material through the machine horizontally, passing over Head and Tail Pulley Assemblies along a Slider Bed.

Conveyor Belt. The Conveyor Belt is a continuous loop of belt material with a notched "C" section/"V" guide down the center, back of the belt. The belt has a low-friction bottom to accommodate the slider bed. Air showers direct compressed air onto the belt to clear paper debris to prevent this debris from jamming the belt mechanism.

Belt Drive. The belt drive is an S-Drive configuration. The Drive Pulley Assembly is a seamless tube driven by a hydraulic motor through a flexible coupling. Smaller tubes are used for Idler and Take-Up Pulleys. The Take-Up Pulley is mounted in Bearings in a rectangular framework. The Bearing consists of a slide block or bearing housing mounted on each end of the shaft and rides between a pair of machined rails in each side of the frame. A large capscrew passes through a nut secured to one end of the frame and is coupled to the bearing block or housing. By turning the capscrew, on each side, the bearing housing can be moved to remove slack from the belt.

BREAKER ASSEMBLY

The Breaker Assembly, consists of a Breaker Beam, Lift Mechanism, Breaker Blades and Breaker Actuator.

Breaker Beam. The Breaker Beam is a rectangular tube extending across the machine through openings in each side frame. The Beam is supported on both ends by a linked torque arm mounted to a bearing and hydraulic cylinder. The beam rides in brackets with wearstrips attached to the frame. The Breaker Beam houses the Breaker Blades.

DESCRIPTION (CONTINUED)

Lift Mechanism. The Lift Mechanism is a hydraulic actuator attached to each side of the frame connected to a torque arm and linked to the Breaker Beam. A lockout bar prevents the torque arm from lowering the breaker bar when maintenance is performed.

Breaker Blades. Attached to the bottom of the Breaker Beam are the Breaker Blades. A pair of vertical blades are contained in a "U-shaped" track mounted on bottom of the Beam. The Anvil Blade has a series of flat-topped teeth along its length and is held fixed within the track. The Breaker Blade, with similar teeth of slightly higher profile, slides horizontally along the Anvil Blade within the track. The Breaker Blade is connected at one end to a Hydraulic Actuator that strokes the Blade. The Blades are of abrasive resistant steel in a tool steel track with high-density polymer wear surfaces.

GATHERER ASSEMBLY

The Gatherer Assembly consists of a pair of vertical, wedge shaped Gatherer Plates mounted on camrollers that ride on wearplates. The Gatherer Plates are moved back and forth across the bale by hydraulic actuators. The Gatherer Assembly is mounted on a hinged bearing. The Gatherer Assembly is normally positioned beneath the path of the bale and is moved up to the gathering position and back down by a hydraulic actuator.

COILER ASSEMBLY

The Coiler Assembly consists of a Sweeper Arm Assembly, Coil Former Assembly, and a Coil Conveyor, which are mounted on a support frame.

Sweeper Arm Assembly. The Sweeper Arm Assembly consists of the Sweeper Arm and an Actuator. The Sweeper Arm has a shaft with journals to which the Sweeper arm and an actuator lever arm are attached. The Sweeper Arm is a curved arm that forces the wire coil against the coiling shaft to compress it. The Sweeper Actuator connected to the lever arm is a hydraulic cylinder.

Coiler Former Assembly. The Coiler Former Assembly consists of the Coiler Shaft and Actuator and the Slide Frame and its Actuator.

Coiler Shaft. The Coiler Shaft is a hardened steel shaft with a long slot cut to make a fork with tines of unequal length. The Shaft is mounted in bearings secured to brackets on the Slide Frame. Rotational power for the Coiler Shaft is supplied by a Hydraulic Motor mounted on a bracket welded to the end of the Slide Frame. The Coiler Shaft is inserted into a coiling chamber where the wire is acquired and contained for coiling around the shaft.

DESCRIPTION (CONTINUED)

The Slide Frame consists of a rectangular mounting plate that rides horizontally between a pair of slide tracks attached to a side plate on the Main Coiler Frame. The horizontal brackets on the Slide Frame provide a mounting position for the bearings which support the Coiler Shaft and its Actuator.

Actuator. The Slide Frame Actuator is a hydraulic cylinder attached to the Main Coiler Frame's side plate. The cylinder is coupled to a clevis bracket attached to the back of the Slide Frame. When actuated, the cylinder moves the Slide Frame so the slotted end of the Coiler Shaft extends through a hole in the Coiling Chamber.

COIL CONVEYOR

The Coil Conveyor consists of a framework with sidewalls and a belted chain wrapped around sprocketed head and tail assemblies. The head assembly is driven by an electric motor and reducer. The Coil Conveyor catches the coiled wires as they are ejected from the coil chamber and removes them to a storage bin.

OPERATION

To begin the Dewiring Operation, a bale is loaded onto the Feed Conveyor with the wires parallel to the direction of flow.

NOTE: Multiple bales may be loaded onto the Feed Conveyor at one time, depending on the system arrangement.

The Feed Conveyor moves bales into the WireWolf, and the WireWolf conveyor transports them to the discharge end. As the bale reaches the Discharge end of the conveyor, it contacts the Bale Positioner, which stops the conveyor with a portion of the bale hanging slightly over the end of the machine.

The Breaker Assembly is lowered to cut the wires holding the bale and cut into the bale part way. A portion of the bale falls off of the conveyor exposing the wires. The Breaker Assembly retracts and the Gatherer Assembly rotates to the "up" position. Hydraulic Actuators move the Gatherers together to grasp the wires hanging off the edge of the conveyor.

OPERATION (CONTINUED)

If an obstruction prevents the gatherers from closing on the wires completely, the system controls are alerted by the "Gatherer In Switches" not being actuated. The Gatherers retract and the Gatherer Assembly drops down to the intermediate position, the conveyor is jogged to clear the end of the conveyor of debris. The Gatherer Assembly is raised again, and the Gatherers are then closed again to grasp the wires.

A hydraulic cylinder extends the coiler into the chamber to an initial position where only the long tine contacts the wire.

If the Gatherers have closed successfully, the Gatherer Assembly, with the wires in tow, is lowered to present the wires to the Coiler Assembly through an opening in the Coiler Chamber to bring the wires in contact with the Coiler Shaft's long tine. The coiler shaft is extended further to place the wire between both tines, and the shaft is turned to coil the wire. The Sweeper Arm is lowered to contact the coiling wire and compress it on the coiler shaft as it turns. The Sweeper Arm and Coiler Shaft are retracted, and the coiled wire is ejected from the machine.

The Gatherers return to the home position. The Gatherer assembly is lowered to the down position, and the conveyor ejects the remainder of the bale from the machine.

MAINTENANCE SCHEDULE

Observe and follow all Safety Precautions noted in the Safety Documents in the front of this volume and in this section while performing maintenance. Some maintenance procedures may not be required for your equipment depending on options.

DESCRIPTION	FREQUENCY
1. Clean photolight lenses and reflectors, if applicable 2. Inspect and clean breaker beam assembly 3. Inspect wire gatherers for wear and damage 4. Inspect air showers for proper operation 5. Ensure an adequate volume of air at 4,0 (60 psig) is available 6. Ensure an adedquate volume and pressure of hydraulic oil is available	Daily
7. Inspect operation and condition of WireWolf components 8. Inspect breaker blade notches for wear 9. Inspect wire gatherers for wear 10. Inspect sweeper arm and wire guides for wear 11. Inspect coil conveyor flights for wear and damage 12. Inspect alignment of all sprockets 13. Inspect and drain air filter. Drain more often if conditions warrant 14. Inspect and replenish oil in hydraulic reservoir 15. Inspect operation of all switches, actuators, and valve solenoids	Weekly
16. Inspect sweeper arm alignment 17. Inspect condition of conveyor belt 18. Inspect operation of wire coiler assembly 19. Adjust hydraulic and pneumatic flow control valves for a smooth operation	Monthly
20. Adjust tension in conveying chains 21. Adjust conveyor belt tension as required 22. Inspect condition of all pneumatic hoses, fittings, and valves 23. Inspect and change hydraulic reservoir oil filter 24. Inspect/ensure all fasteners, including sprocket set screws, are secured	3 months

MAINTENANCE SCHEDULE (CONTINUED)

DESCRIPTION	FREQUENCY
1. Inspect condition of all wiring and connectors 2. Inspect sweeper arm for wear 3. Inspect wire coiler for wear 4. Inspect condition of all wear strips 5. Inspect all drive couplings for wear per vendor data 6. Inspect condition of coiler slide mechanism for wear 7. Inspect condition of all slides and ways 8. Inspect condition of breaker blade wear strips 9. Inspect condition of all pneumatic cylinder rod and actuator packing seals 10. Inspect and clean hydraulic reservoir oil strainers 11. Inspect condition of all hydraulic hoses, fittings, and valves 12. Inspect condition of all hydraulic cylinder rod packing seals	6 months
13. Inspect hydraulic pump for wear per vendor data 14. Inspect hydraulic motors for wear per vendor data 15. Drain, flush, and replenish the hydraulic system	Yearly

LUBRICATION SCHEDULE

Observe and follow all Safety Precautions noted in the Safety Documents in the front of this volume and in this section while performing maintenance. Some lubrication procedures may not be required for your equipment depending on options.

DESCRIPTION	FREQUENCY
1. Lubricate conveyor section idler pulley shaft bearings 2. Lubricate coiler assembly slide frame ways 3. Lubricate all take-up adjustment screw threads and slide surfaces	Daily
Lubricate breaker beam carriage cam rollers Lubricate conveyor section drive shaft bearings Lubricate gatherer assembly pivot shaft bearings Lubricate gatherer assembly hydraulic cylinder rod eye Lubricate gatherer assembly cam followers Lubricate sweeper arm pivot bearings Lubricate positioner pivot bearings Lubricate coiler conveyor head and tail shaft bearings Lubricate coiler shaft bearings Lubricate all cylinder rods and clevis pins*	Weekly

*Cylinder pins normally do not require lubrication but should be lubed with NGL12 grease for ease of re-assembly following maintenance. In applications where lubrication is required, a grease zerk is provided and the normal lubrication schedule applies. Spherical bearings should be lubed according to the schedule.

TROUBLESHOOTING

This document is intended to help operators and maintenance personnel handle most troubleshooting problems. Reference drawings that may be helpful in trouble shooting the WireWolf® are:

- Terminal box wiring
- Chain assembly, coil conveyor
- Lamb field piping recommendations

WARNING : Before approaching the WireWolf® for any purpose other than normal operation, shut off the Hydraulic Unit and lock-out the motor starter of the Hydraulic Unit and the Coiler Conveyor motor.

There are three assemblies on the WireWolf ® that can move when the hydraulic unit is shut off:

- Breaker Assembly
- Gatherer Assembly
- Bale Positioning Assembly

A. Breaker assembly

The wirewolf is provided with a lockout bar, which allows the breaker bar to be supported in the raised position, if it is necessary to remove the breaker lift cylinder or work on the associated components.

The Breaker uses a shearing action to break the baling wire. The bale enters with its wires parallel to the direction of travel and is positioned under the breaker by the bale positioner. The breaker blade is cycled back and forth by the breaker cylinder. The blades movement is controlled through switches (BOS and BIS). The Shearing Inserts act in conjunction with the Anvil to break the wires.

The Breaker Assembly is driven into the bale by the downward motion of the Breaker Lift Cylinder. It is maintained horizontal by the torque arm and two cylinders.

The breaking action starts when the photo-light (BSP) is interrupted by the bale as the it moves through the machine. The Assembly continues breaking and moving down until the lead portion of the bale falls away allowing the bale positioning switch (BPS) to reset. The breaking action stops and the assembly moves up a few inches to relieve pressure from the belt conveyor, but retain control of the portion of the bale still in the machine. Once the wire gathering operation has been successfully completed, the breaker assembly will be fully raised by (BUS). This allows the coiling and bale discharge to take place without interference.

TROUBLESHOOTING (CONTINUED)

A1. Failure to break wires.

a) Check to see that the cylinder is completing its stroke. It should activate the "BOS" (breaker out switch) and "BIS" (breaker in switch) in a reciprocating action as the breaker is moving down

b) Check for broken inserts (shear blades). Replace inserts where necessary.

Note: inserts can be reversed to provide a new cutting edge. Follow the assembly instructions given on the appropriate drawing.

c) Check hydraulic pressure (system pressure should be 1250 psi (86.2 Bars)).

d) Check that the hydraulic valve operates by actuating "BV" and observing the cylinder's motion.

e) Verify that the Breaker Lift Cylinder is operating by actuating "BDV" to move the Breaker down, and "BUV" to raise the breaker.

These functional tests will require that the Power Unit is operating. The valves can be operated manually to check the operation.

If the functions are correct manually, but fail to operate on automatic, check for faulty solenoid coils on the valves or blown fuses.

A2. Breaker Blade has excessive vertical play.

a) Support blocks and/or wearstrip are worn. Replace with new components, following assembly instructions on appropriate drawing.

A3. Breaker Blade has excessive horizontal play at cylinder connection.

a) Replace bushing.

B. Gatherer Assembly

The Gatherer Assembly is normally raised at the start of a cycle. If there is maintenance to be performed on the Gatherer it should be lowered onto blocks (by others) that are placed on the Coiler cover plates. To lower the gatherer onto the blocks, manually operate the Gatherer down valve (GOV) to allow oil to flow from the Gatherer Lift Cylinder.

TROUBLESHOOTING (CONTINUED)

The Gatherer Assembly rotates around the Head Pulley of the Belt Conveyor. It is independently supported in its own bearings and brackets. This arrangement allows the Conveyor Head Pulley to be serviced without disturbing the Gatherer Assembly.

The Gatherer Assembly starts in the raised position, with "GUS" activated, supporting the incoming bale as it is positioned under the Breaker. Once the Breaker has made contact with the bale, the Gatherer Assembly lowers to its intermediate position by cylinder, which is activated by "GIS". This position allows the front portion of the bale to fall away more easily and tends to set the wires around the edge of the Gatherer Top Plate. Once the breaking has been completed , the Gatherer Assembly is raised back to its up position, activated by "GUS". The Gatherer move in gathering the wires into a tight group at the center of the machine. If there is paper trapped with the wires, one or both of the "in" position switches "LGIS" or "RGIS" may not be tripped. This condition causes the Gatherer Assembly to rotate down to the intermediate position. and the Gatherers to move completely "out". The Gatherer Assembly is then raised and the Gatherers move in again to regather the wires. This sequence is repeated until the wires are successfully gathered. In which case "LFIS" and "RGIS" are both activated, or the machine is shutdown and an operator alerted by flashing light and/or alarm.

Once the wires are successfully gathered, the Gatherer Assembly will be completely lowered by activating "GDS". The wires are thus places inside the coiling chamber. The c oiling bar extends, trapping the wires (See Coiler operation) and the Gatherer rotates to the intermediate position, activated by "GIS". The Gatherers move completely "out", activated by "LGOS" and "RGOS". After the balance of the bale has been discharged from the machine, the Gatherer assembly is fully raised by "GUS" and is ready for the next bale.

B1. Gatherer assembly not positioning correctly in the vertical position.

a) Check positioning switches are functioning, "GUS," "GIS," and "GDS."

In the fully raised position, the tip wearplate should be 15° (+/- 2°) below the horizontal, actuated by "GUS". It is set by raising the Gatherer Aassembly until the Gatherer Arms clear the coiler covers by approximately 2 inches (51mm), "GIS" actuated..

b) Check to see that the cylinder is fully retracted in the down position, and "GDS" actuated. Check for mechanical interference if the cylinder does not fully retract.

Possible causes include paper accumulated on Coiler Covers or the coil is hung up in coiling chamber (see coiler).

Note: Clear any mechanical interference only when the WireWolf® is in the zero energy state.

TROUBLESHOOTING (CONTINUED)

B2. Gatherers not closing completely.

a) Paper is caught around one or both gatherers, or at the inside ends of the slide track.

Clear paper and restart the WireWolf®.

b) Positioning switches have moved out causing the gatherers to stop too soon.

Remove wear plate and switch cover and adjust switches "RGIS" and LGIS." When the gatherers are positioned correctly there should be a distance of 3 inches (76mm) across the outside of the box formed as the gatherers mesh together (Figure B2). The cylinder full stroke location can be adjusted by adding or removing shims from behind the clevis bracket.

B3. Gatherers are not retracting completely.

a) Check for paper jammed into Gatherer preventing full out stroke.

If gatherers do not reach their out switches, the cycle will stop. "RGOS" and "LGOS" are not tripped.

Check that both switches are being actuated. Remove end covers to access these switches.

B4. Damaged or worn wearstrips, tracks or cam followers.

a) Access components by removing the top plate. Detach carriages from the cylinder brackets. Replace the Cam Followers.

b) B5. Leaking cylinder. Replace as follows:

c) Remove both end covers.

d) Move carriages to their "out" positions.

e) The bolts that attach the cylinder brackets to their respective carriages are accessed through holes in the top plate or the top plat may be removed.

f) Disconnect the bracket of the cylinder to be removed from its carriage.

g) Disconnect the associated Gatherer Out Switch

TROUBLESHOOTING (CONTINUED)

h) Disconnect the Hose Lines to the cylinder at the bulkhead plate.

i) Disconnect the cylinder clevis mount, noting the size of the shim pack so that it can be re-installed correctly.

j) Slide the cylinder and its brackets from inside the gatherer.

k) Re-assemble the repaired or replacement cylinder by reversing the above procedure.

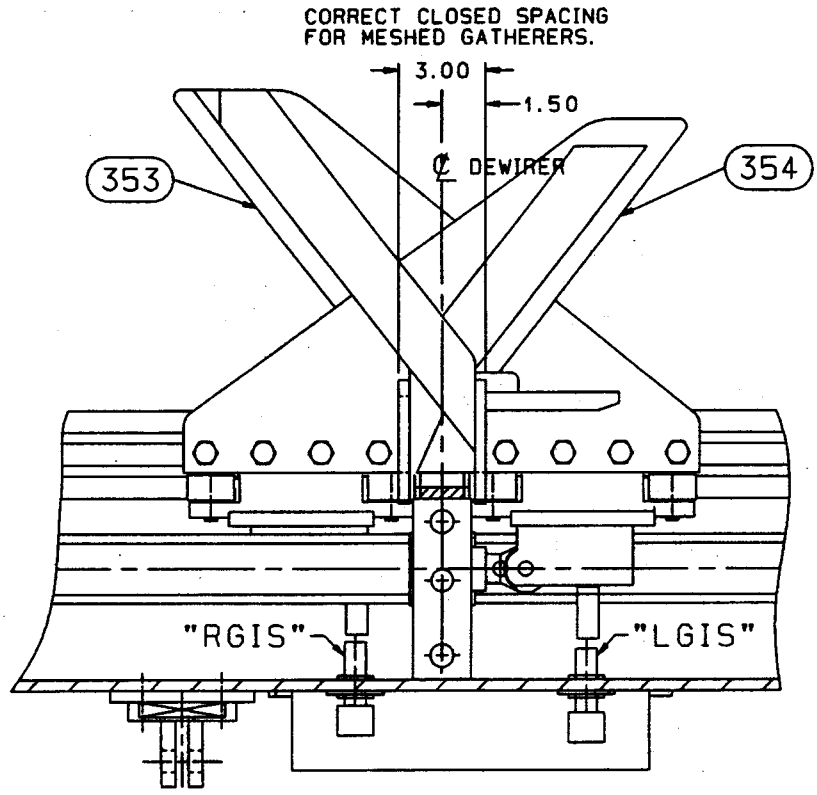


FIGURE "B2"

TROUBLESHOOTING (CONTINUED)

C. Bale Positioning Assembly

The Bale Positioner is pneumatically operated and should be retracted at the start of the cycle. If it is extended, close the air supply and operate arm home valve "AHV" to bleed out the air. Then lower the arm.

The Bale Positioner positions the bale beneath the Breaker Assembly and prevents short bales from falling out of the machine. It is pneumatically operated and requires a minimum of 60 PSIG (4.14 Bars) air pressure.

At the start, the Positioner is fully lowered, cylinder fully retracted. A bale entering the machine contacts the Arm and the Switch Lever pushing them back until the Bale Position Switch "BPS" is activated. Once the Breaker Assembly is in contact with the bale, 'BSP' is activated and the Arm rotates "up". Cylinder is activated to fully extend, switch "AEV" is energized. The Switch Arm is now free to respond to the bale, monitoring if the lead portion of the bale falls away, and allowing the switch "BPS" to be activated, initiating the gathering sequence. The Bale Positioner remains raised until the bale is discharged, then it is rotated down for the next cycle.

C1. Lifting or lowering speed of the arm or the return speed of the Switch Arm needs adjustment. Flow controls to adjust the exhaust from the main cylinder are located at the cylinder ports and for the Switch Arm Cylinder there is a single flow control and muffler mounted at the cap end port. The switch arm, which activates switch 'BPS', swings independently from the main arm that positions the bale.

a) Lock out the Hydraulic Power Unit, so that it is safe to walk on the Conveyor Belt. Take care to wear head protection as the cross brace and Breaker Assembly are below head height.

b) Adjust the Main Cylinder to raise in three seconds, and lower in three seconds, approximately. A ladder will be needed to reach the adjustment.

c) Set the Switch Arm to swing down without excess bounce back, which will affect switch actuation. The movements of the main arm can be caused by overriding the pneumatic valve "AVE/AHV".

TROUBLESHOOTING (CONTINUED)

D. Conveyor

The Conveyor is 92 inches (2.3 m) wide, and runs from the infeed to the discharge end of the machine. The belt is 2 ply construction, with approximately 0.2 inches (5mm) of top cover, a friction free back surface, and a heavy duty mechanical splice. The drive and take-up pulleys are located under the main bed plate. The drive is by Hydraulic Motor, and the hydraulic controls provide for two forward and one reverse speed. The bale enters and positions using the lower forward speed that matches the infeed conveyor speed (50 feet/min (15m/min.)) during the breaking and gathering operations, the conveyor is bumped forward to assist the bale to break apart and when the gatherers are recycled to clear paper. The conveyor backs up as the gatherer is raised for each new gathering attempt. These operations are at the lower speed. During the bale discharge and coiling, the conveyor runs at the fast forward speed, dropping back to the lower speed once the next bale is being loaded. The conveyor has two photo-lights "FP" and "RP" used in the control sequence. "RP" reverse photo is used to measure the bale's length so as to set discharge sequence timers. "FP" forward photo confirms bale or loose paper present at the discharge end of the conveyor.

Conveyor Speed. Conveyor speed should be set once the hydraulic oil has reached its normal operating temperature (120° F to 160° F). The normal forward speed and reverse speed is 50 feet per minute. Adjust flow controls PC 18 to achieve this speed, with "CFV" then 'CRV" energized. For the fast forward speed, energize 'CFV' and 'CFFV', then adjust flow control associated with 'CFFV' to set the speed to 120 feet/min (36.6m/min.).

Belt installation. When installing a replacement belt, follow the splicing cable instructions on drawing. If the belt is not tracking correctly or the Vee guide is not staying in its center groove, perform the following:

a) Check for uneven take-up positions and foreign material trapped under the belt.

b) Check that the splice is in good condition.

Removing drive pulley. To remove the drive pulley perform the following:

a) Disconnect the coupling from the drive pulley shaft.

b) Dismantle the motor mount.

c) Remove the flanged bearing and special bearing and housing.

d) The drive pulley can be move sideways and rotated to clear the side frames

TROUBLESHOOTING (CONTINUED)

E. Coiler

Coiler is located below the Gatherer Assembly at the discharge end of the machine. Wires are delivered to the Coiling Chamber by the Gatherers. The wires are pressed against the inside face of the extended tine of the Coiling Bar. The Coiling Bar is positioned at the end of the previous cycle by extending the cylinder until the carriage reaches switch "CIPS", and by rotating the Coiling Bar in reverse with the hydraulic motor until switch "CIS" is activated. Once the wires are against the coiling bar, it is fully extended by activating 'CES" and it is rotated a quarter turn to lock the wires in place. This signals the Gatherers to retract. Then the bale discharge and wire coiling begin. The Coiling Bar rotates (CCW viewed from the hydraulic motor end), and winds the wires into a loose coil. At the same time the Air Showers activate to blow air across the coiling chamber and the upper surfaces of the Coiler cover plates, and down the coil conveyor to extract as much loose paper as possible from the region.

After approximately 5 seconds, the Sweeper Arm rotates the press plate into contact with the coiled wires. The coiling bar continues to rotate causing the coil to tighten about it. The sweeper arm is then retracted by switch "SHS". and coiling bar and sleeve retract, activated by switch "CHS", releasing the coil. The Sweeper Arm makes a complete stroke pushing the coil out of the coiling chamber and into the coil conveyor. The Sweeper Arm returns to its home position.

E1. Coils are jamming and are not dropping out of the Coiling Chamber. The chamber is designed with a minimum of hang-up points and a positive coil clearing action. However, coils occasionally become stuck in the chamber or two coils combine, jamming the available space. The control circuit tries to dislodge the coil by repeating the sweeping action and rotating the coil. If this fails to clear the chamber, the machine stops and signals the operator by flashing light and/or alarm.

a) Lock-out the hydraulic power unit before going under the machine to clear the jammed coil. The technician must be provided with eye and hand protection and industrial duty wire cutters.

b) Cut and clear away any jamming wire.

c) Operate the conveyor manually to clear it.

d) Reset the machine ready for the next bale or press "RESUME CYCLE" to continue operation.

E2. Coils jam because of wear to the coiling bar or coiling sleeve.

a) Smooth out any grooving by grinding back the damaged surface.

TROUBLESHOOTING (CONTINUED)

If the wear is excessive, replace the worn parts as follows:

a) Set the carriage to its fully retracted position by activating switch "CHS".

b) Lockout the hydraulic power unit motor starter.

c) Remove the Coiling Chamber and remove the Sleeve Retaining Pin held by retaining rings.

d) Slide the sleeve off the end of the Coiling Bar.

e) If the Coiling Bar needs replacement, the coupling must be disassembled and the set-screws in bearings released to allow the Coiling Bar to be removed.

E3. Alignment of Carriage Assembly to the Coiling Chamber. The Carriage Assembly, which includes the Hydraulic Motor, Coiling Bar and Sleeve is guided by U-shaped polyethylene tracks. These tracks are housed in brackets, which are clamped to the Coiler frame by nut bars. By slacking the bolts holding these brackets, it is possible to adjust the position of the Carriage Assembly.

a) Remove the Coiler Cover Plate.

b) Fully extend the Coiling Bar through the Coiling Chamber.

c) Lock out the Hydraulic Power Unit motor starter.

d) Adjust the position to achieve a concentricity between the openings in the coiling chamber and the coiling sleeve, +/-0.01 inches (0.254mm). As the tracks wear it may be necessary to shim under the support brackets.

e) If wear is excessive, install new guide tracks and re-align.

E4. Pressure Plate wearing. The Pressure Plate is subjected to a highly abrasive environment as it presses against the rotating coil. Wear may not be even and grooving can occur. This grooving should be ground out to eliminate possible hang-ups. If enough material is removed that the sweeper arm is exposed to the spinning wires, the pressure plate should be replaced. Always lock-out the Hydraulic Power Unit motor starter before entering the machine.

E5. Air Showers. Adjust the Air Showers to have sufficient volume to clear the top surface of the Coiler Covers after each cycle of the machine.

TROUBLESHOOTING (CONTINUED)

E6. Setting Coiling Bar positions. The coiling bar should stop at the 15° positioin (Figure E2) when it reaches switch "CIS" when rotating in the clockwise direction (as vieewed from the hydraulic motor end) with "CIV" energized.

When the Carriage advances and stops at the Intermediate Position Switch "CIPS", the single tine portion of the Coiling Bar shoould be completely across the Coiling Chamber and the Sleeve should not yet have protruded through the inside of the Coiling Chamber side wall. In the fully extended position, the sleeve should completely fill the space between the coiling chamber sidewalls, with "CES" actuated. In the fully retracted position the end of the coililng bar will be hidden within the side wall of the coiling chamber, with "CHS" actuated.

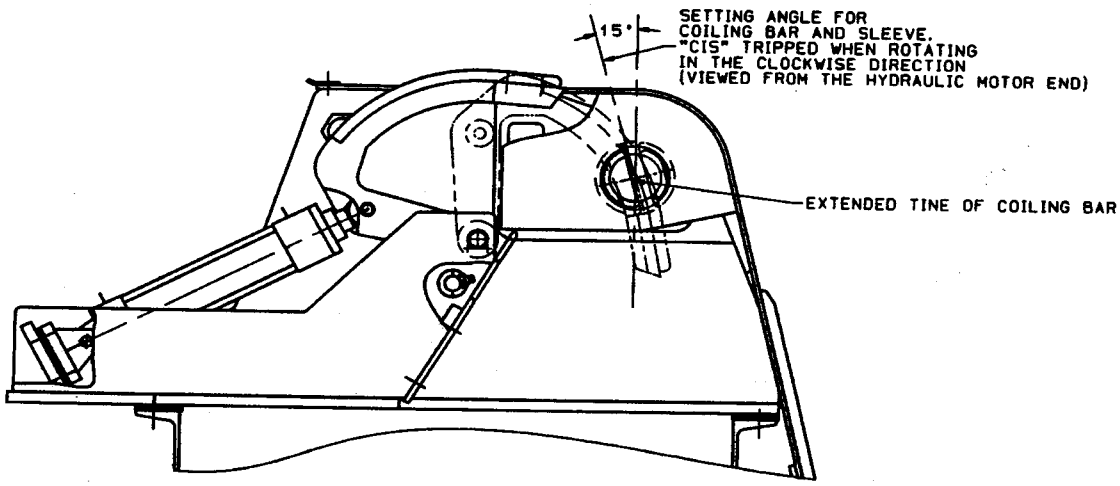


FIGURE "E2"

TROUBLESHOOTING (CONTINUED)

F. Coil Conveyor

The Coil Conveyor tail end is located under the Coiling Chamber of the Coiler Assembly. It receives coils onto its articulating plastic chain between two sets of pushers. The pushers are positioned by switch "CCHS". After a coil is dropped onto the conveyor the conveyor advances it horizontally until it is clear of the side frame then it inclines up at 35° and discharges the coil into a collection bin. It is driven by a 1/3 Hp electric motor through a headshaft mounted gearbox). The travel speed is approximately 30 feet/min. (9m/min.)., and it runs for 30 seconds, then stops, positioning with the next pusher against switch 'CCHS". There is no take-up. The chain relies on catenary tension on the return run to maintain chain engagement.

F1. Chain wear. Chain slack is excessive.

a) Drill out the ends of two adjacent connecting pins

b) Remove 1 1/2 inch (1 pitch) from the flat portion of the chain.

c) Reconnect and insert a new pin. A heated metal rod can be used to form the head on the end of the pin.

F2. Chain damage. Chain damage may result from coil jams. Spare parts of the chain should be stocked to make repairs as needed. If damage is frequent, check that tight cold are being formed and that there are no obstructions along the conveying path.

a) Replace chain parts as in F1 above. Arrange a bricked constriction of the chain links. This arrangement protects the pins as the chain passes through an uphill change of direction.

G. Hydraulic Manifold

All functions on the machine are hydraulically controlled with the exception of the Bale Positioner (pneumatic) and the Coil Conveyor (electric). All control valves, pressure controls, and flow controls are built into or mounted on the hydraulic manifold.

TROUBLESHOOTING (CONTINUED)

There are several choices for pressure and tank connections. The most convenient ones can be used, depending on power unit location. Each hydraulic motor has a case drain connection, which must be piped separately from the main case drain lines. At the power unit, these lines should terminate below oil level. In order to maintain the correct range of oil temperature in the lines and manifold, a Manifold Recirculation Valve 'MRV" is included. This is activated if the machine is idle and the temperature switch "MTS" detects low oil temperature. Two gallons/min (7.6 l/min.) will flow through the manifold until the temperature reaches 120° F. or the machine returns to full operation. The switch is located in a bulbwell in one of the drain ports, but may be relocated if necessary.

WARNING: If it is necessary to remove any of the valves or associated components, make sure all machine elements are at their zero energy positions. When replacing components, follow the torque recommendations given under manifold assembly and test procedures to avoid leaking.

G1. Valve fails to operate.
- a) Check for blown output fuse.
- b) Check for faulty coil, burned coil, or loose wiring.
- c) Inspect the power unit for operation or operation at reduced pressure, overheated, or bypass valve is set too low.
- d) Check for low oil level.
- e) Check for stuck spool, mechanical contamination or overheating.

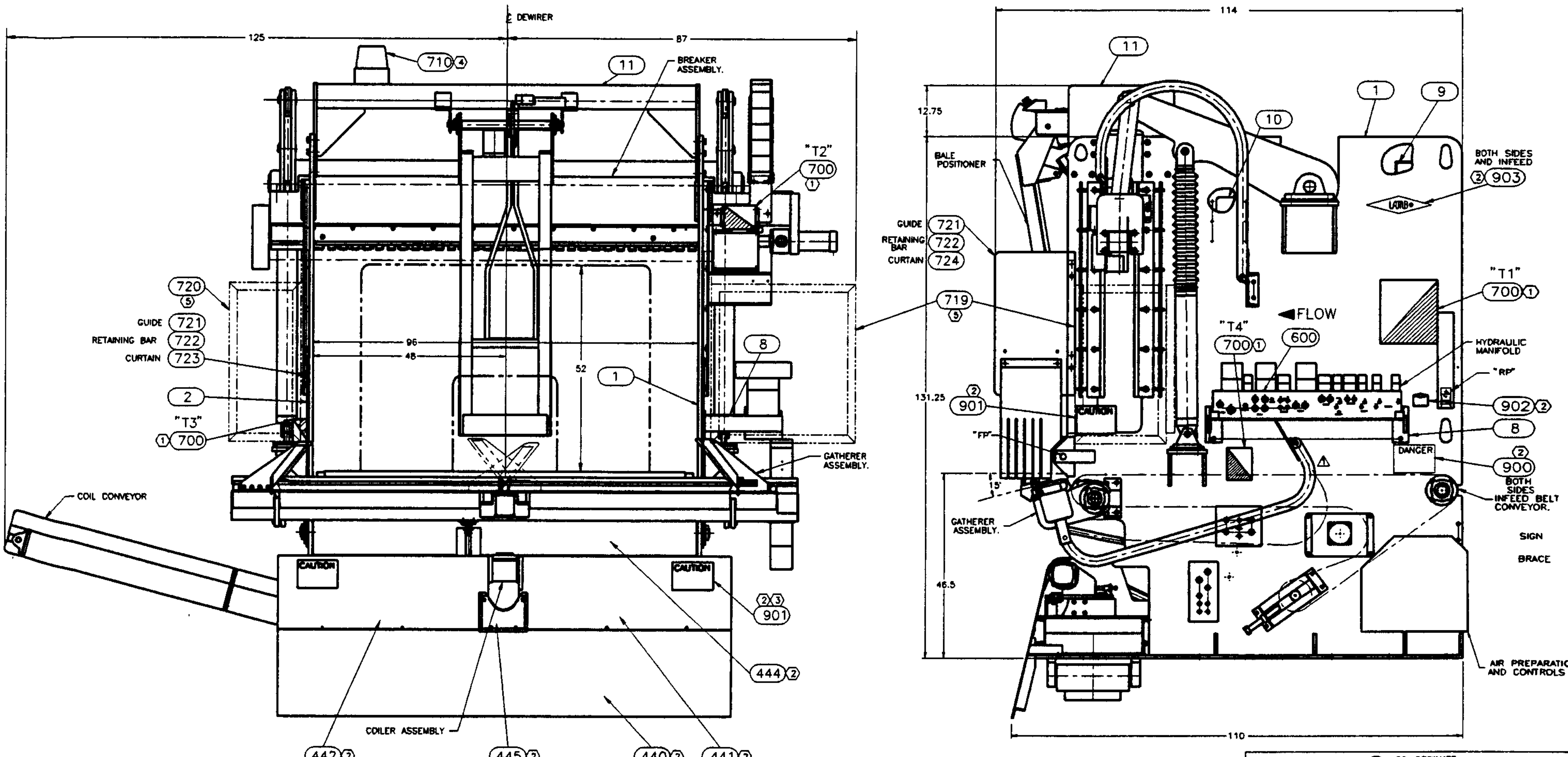
There is only one pressure control, and it is used on the sweeper extend stroke to prevent damage to the Coiling Bar. The correct setting is 300 PSI (20.7 Bars). It may be raised to 400 PSI (27.6 Bars) without damaging the Coiler mechanism.

Not all functions can be controlled from the push button station. It is pemissible to "Bump" each motion using the manual overrides on each valve in order to check the mechanical operation.

CAUTION: Take care nothing is operated in a position where it may mechanically interfere (e.g. moving Gatherers "in" in the completely "down" position or advancing the Coiling Bar when the Sweeper arm is extended). These interlocks are built into the control logic when using the push button station.

H. Pneumatics

The pneumatic control panel is below the hydraulic manifold at the infeed end of the machine. The air supply should be a minimum of 60 PSIG (4.1 Bars), instrument air preferred. It is filtered and regulated before it goes to the air shower control valves. It is also lubricated before going to the bale positioning valve.



DEWIRER
125
87
710 (4)
11
BREAKER ASSEMBLY.
"T2"
700 (1)
720 (5)
GUIDE 721
RETAINING BAR 722
CURTAIN 723
2
"T3"
(1) 700
96
48
52
1
8
GATHERER ASSEMBLY.
COIL CONVEYOR
CAUTION
(2)(3) 901
444 (2)
COILER ASSEMBLY
442 (2)
445 (2)
440 (2)
441 (2)
114
12.75
BALE POSITIONER
GUIDE 721
RETAINING BAR 722
CURTAIN 724
719 (5)
(2) 901
131.25
"FP"
15°
GATHERER ASSEMBLY.
46.5
110
11
10
1
9
BOTH SIDES AND INFEED
(2) 903
"T1"
700 (1)
FLOW
"T4"
700 (1)
600
HYDRAULIC MANIFOLD
"RP"
902 (2)
8
DANGER
(2) 900
BOTH SIDES INFEED BELT CONVEYOR.
SIGN
BRACE
AIR PREPARATION AND CONTROLS

⚠ (6) 910 AUX. CONTROL STATION

NOTES:

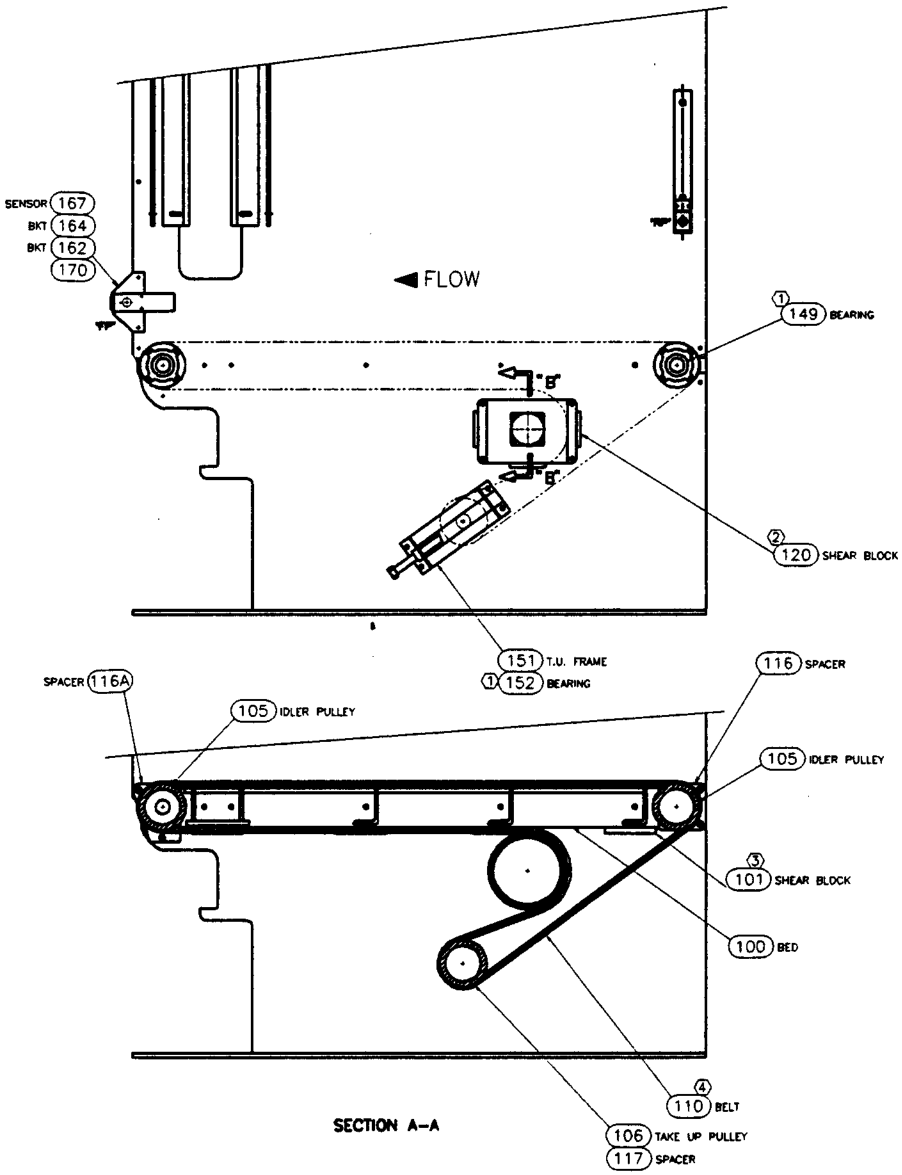
1. LOCATE AND MOUNT AT ASSEMBLY. USE AS TEMPLATE TO DRILL & TAP.
2. LOCATE AND MOUNT AT ASSEMBLY.
3. POSITION SAFETY SIGNS AT TOP OUTSIDE CORNERS OF COVERS TO PROTECT THEM FROM ABRASION.
4. LOCATE AT INSTALLATION FOR MAXIMUM VISIBILITY BY OPERATORS.
5. MOUNT GUARDS, 719 & 720 TO DISCHARGE END OF SIDE WALL. AND USE AS TEMPLATE TO TAP .5-NC (4) IN SIDE WALLS.
6. LOCATE AND MOUNT CONTROL STATION AT ASSEMBLY. STATION TO BE LOCATED ON THE SIDE OF THE DEWIRER ON THE TENDING SIDE

ABGS PROJECT No. 0084-003
DONOHUE INDUSTRIES INC. SHELDON, TEXAS.
DEINK EXPANSION PROJECT.
DII PROJECT No. 8305. / P.O. D-82471
DONOHUE EQUIPMENT No. 45-1-7080-92
DONOHUE EQUIPMENT No. 45-1-7080-92
DONOHUE EQUIPMENT NAME. No.1 BALE DEWIRER
DONOHUE EQUIPMENT NAME. No.2 BALE DEWIRER
LAMB REFERENCE No. 11990350-103
LAMB REFERENCE No. 11990350-203

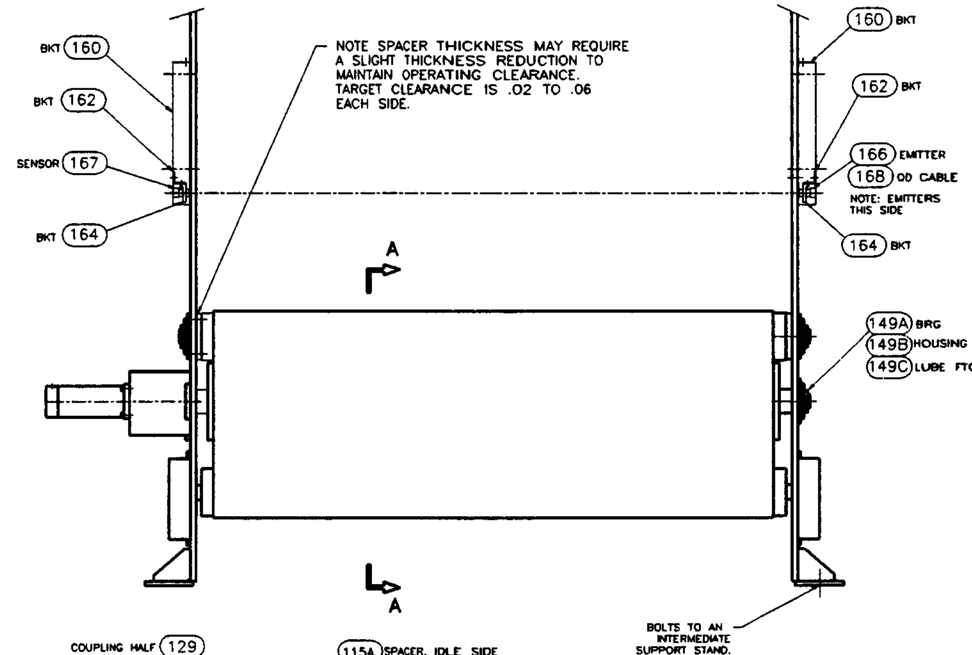
CO-ORDINATE MARKER

- ANCHOR BOLT
- MILL AIR SUPPLY
- NOTE
- MOTOR JUNCTION BOX
- FLOW - PRIMARY
- FLOW - MANUAL REVERSE (JOG)
- FLOW - SECONDARY
- TERMINAL BOX

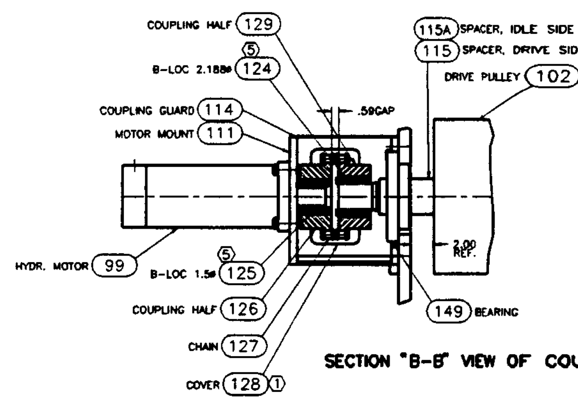
DRAWN BY: ATR	ASSEMBLY
SCALE: 1:12	DEWIRING MACHINE
DATE: 98 DEC 21	D-284
REF: 44E87Y	DRAWING No. 44E42L REV. 1 SHEET 1 OF 1



SECTION A-A



BKT 160
BKT 162
SENSOR 167
BKT 164
NOTE SPACER THICKNESS MAY REQUIRE A SLIGHT THICKNESS REDUCTION TO MAINTAIN OPERATING CLEARANCE. TARGET CLEARANCE IS .02 TO .06 EACH SIDE.
A
A
160 BKT
162 BKT
166 EMITTER
168 OD CABLE
NOTE: EMITTERS THIS SIDE
164 BKT
149A BRG
149B HOUSING
149C LUBE FTG.
BOLTS TO AN INTERMEDIATE SUPPORT STAND.



SECTION "B-B" VIEW OF COUPLING.

NOTE:

1. LUBRICATION POINT
2. WELD AT ASSEMBLY AFTER COUPLING ALIGNMENT
3. WELD AT ASSEMBLY AFTER CONVEYOR ASSY IS COMPLETE
4. BOTH ENDS OF THE SPLICING CABLE, USED TO COMPLETE THE MECHANICAL SPLICE, SHOULD BE RETAINED BY SLIDING A FLAT WASHER OVER EACH END AND BENDING IT UNTIL IT BITES INTO THE CABLE.
5. FOLLOW B-LOC INSTALLATION INSTRUCTIONS FOR LOCATING AND TIGHTENING THE LOCKING ASSEMBLIES. USE TORQUE WRENCH SET TO 32 FT-LBS.

ABGS PROJECT No. 0084-003
DONOHUE INDUSTRIES INC. SHELDON, TEXAS.
DEINK EXPANSION PROJECT.
DII PROJECT No. 8305 / P.O. D-02471
DONOHUE EQUIPMENT No. 45-1-7080-02
DONOHUE EQUIPMENT No. 45-1-7080-02
DONOHUE EQUIPMENT NAME. No.1 BALE DEWIRER
DONOHUE EQUIPMENT NAME. No.2 BALE DEWIRER
LAMB REFERENCE No. 11980358-103
LAMB REFERENCE No. 11980358-203

MATERIAL LIST

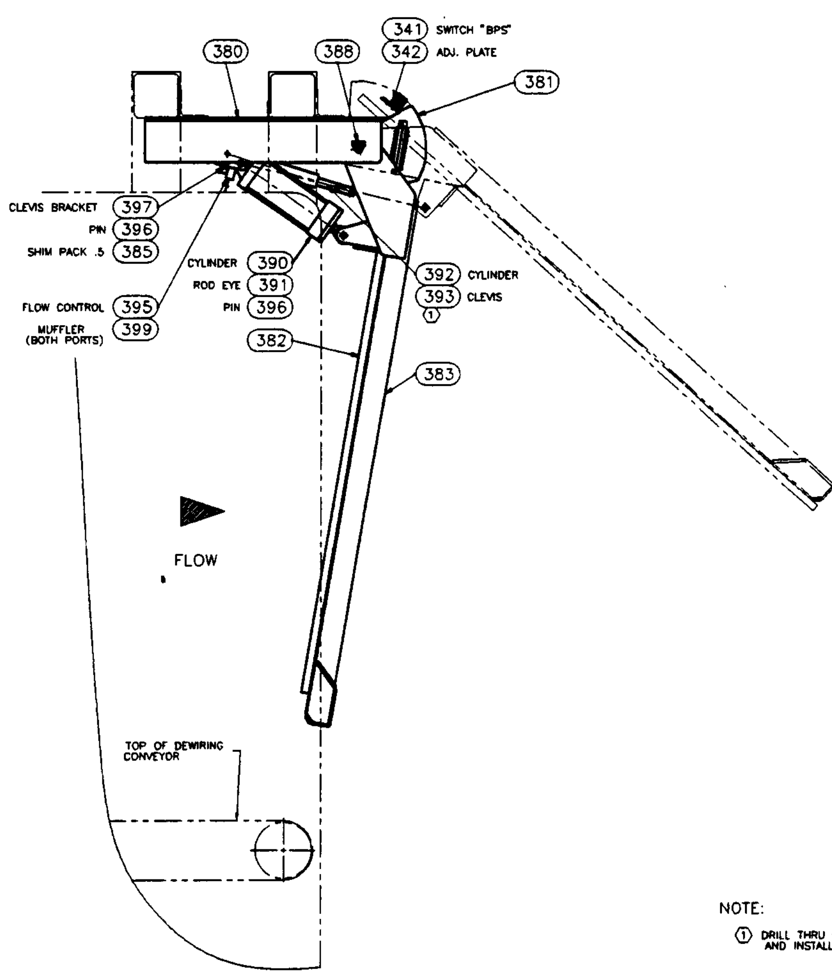
ASSEMBLY, CONVEYOR DEWIRING STATION

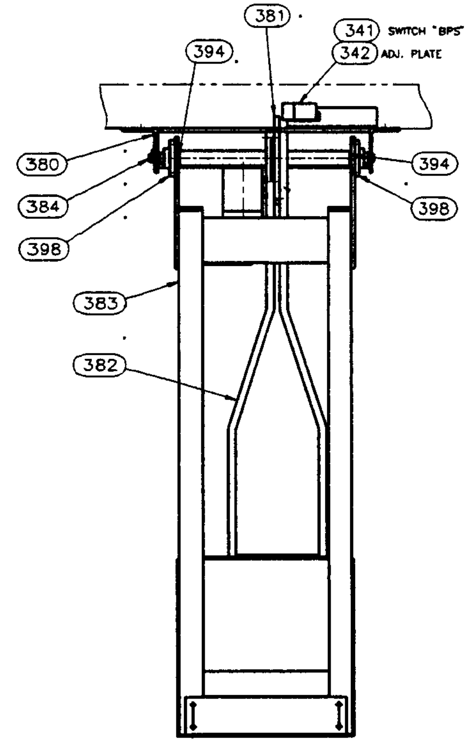
DRAWN BY MEH
CHECKED MSC
SCALE 1:10
DATE JUL 6 99

43E88Y

D-294

45E12A-0
SHEET 1 OF 1





NOTE:

① DRILL THRU CLEVIS & ROD, AND INSTALL ø.125 ROLL PIN

ABGS PROJECT No. DOBH-003
DONOHUE INDUSTRIES INC. SHELDON, TEXAS.
DEINK EXPANSION PROJECT.
DI PROJECT No. 8305 / P.O. D-92471
DONOHUE EQUIPMENT No. 45-1-7080-82
DONOHUE EQUIPMENT No. 45-1-7080-82
DONOHUE EQUIPMENT NAME. No.1 BALE DEWIRER
DONOHUE EQUIPMENT NAME. No.2 BALE DEWIRER
LAMB REFERENCE No. 11990350-103
LAMB REFERENCE No. 11990350-203

CO-ORDINATE MARKER
ANCHOR BOLT
MILL AIR SUPPLY
NOTE
MOTOR JUNCTION BOX
FLOW - PRIMARY
FLOW - MANUAL REVERSE (JOG)
FLOW - SECONDARY
TERMINAL BOX

DATE	BY Δ	REVISION	BY

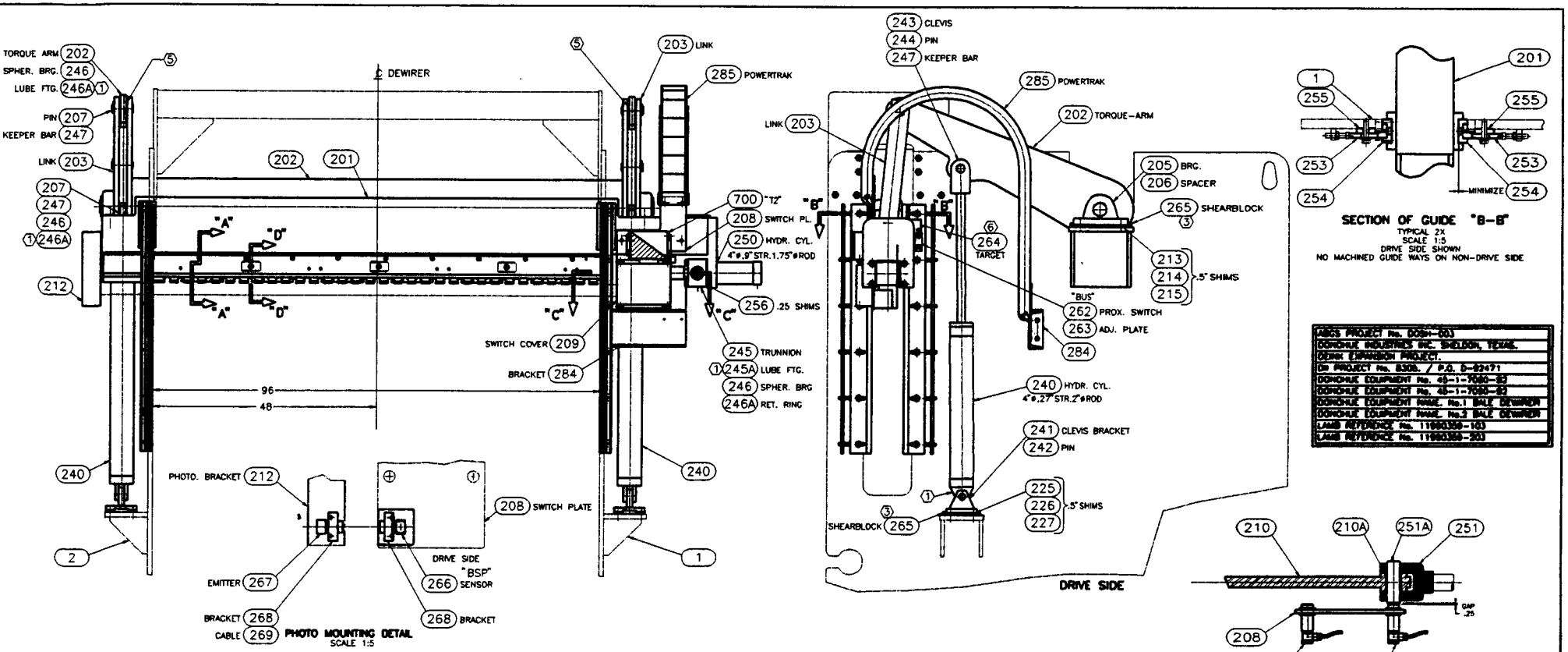
DRAWN MEH
CHECKED MSC
APPROVED
SCALE 1 : 8
DATE MAY 27 98

ASSEMBLY
BALE POSITIONER

D-291

42E76L

4.3E89Y-0
SHEET 1 OF 1



NOTES:

1. LUBRICATION POINT
2. TORQUE ALL FASTENERS (LUBED) PER TORQUE SPEC.
3. WELD AT ASSEMBLY
4. ASSEMBLING BLADE AND ANVIL.
   A) FASTEN WEARSTRIP (204) TO BEAM.
   B) CENTER ROLL PIN IN ANVIL SEAT HOLE.(201.1)
   C) ASSEMBLE ANVIL (220), STUDS (218), & WEARPLATE (224) TO BEAM.
   D) ASSEMBLE BLOCKS (217) ONTO STUDS (218).
   E) ASSEMBLE INSERTS (211) AND BREAKER BLADE (210), THEN MOUNT ASSEMBLY ONTO THE BLOCKS (217).
   F) ASSEMBLE INSERTS (231) AND ANVIL (230),THEN MOUNT ASSEMBLY, INCLUDING SECOND WEARPLATE (224) ONTO THE BREAKER FRAME (201).
   G) TORQUE ALL FASTENERS TO SPEC. BACK-OFF THE STUD (218) LOCKNUTS .25 TURNS AND CHECK THAT THE BREAKER BLADE (210) IS FREE TO RECIPROCATE.
   H) CONNECT CYL. (250) TO BLADE
   I) USE SET SCREWS (229) TO MOVE AJUSTMENT PLATES (228) UNTIL THE BREAKER BLADE IS PRESSING AGAINST THE WEARSTRIP (224) IN THE ANVIL BLADE (230). BACK OUT .12 TURNS AND LOCKNUT.
5. USE FLAT WASHERS, (207.1) TO ADJUST POSITION OF SPHERICAL BEARING AND LIMIT ITS SIDE MOVEMENT.
6. LOCATE AND MOUNT TO SIDE OF BREAKER BEAM AT ASSEMBLY.

TORQUE SPECIFICATIONS (LUBRICATED)	
.25NC	7FT-LB
.3125NC	14FT-LB
.375NC	22FT-LB
.5NC	60FT-LB
.625NC	120FT-LB
.75NC	200FT-LB

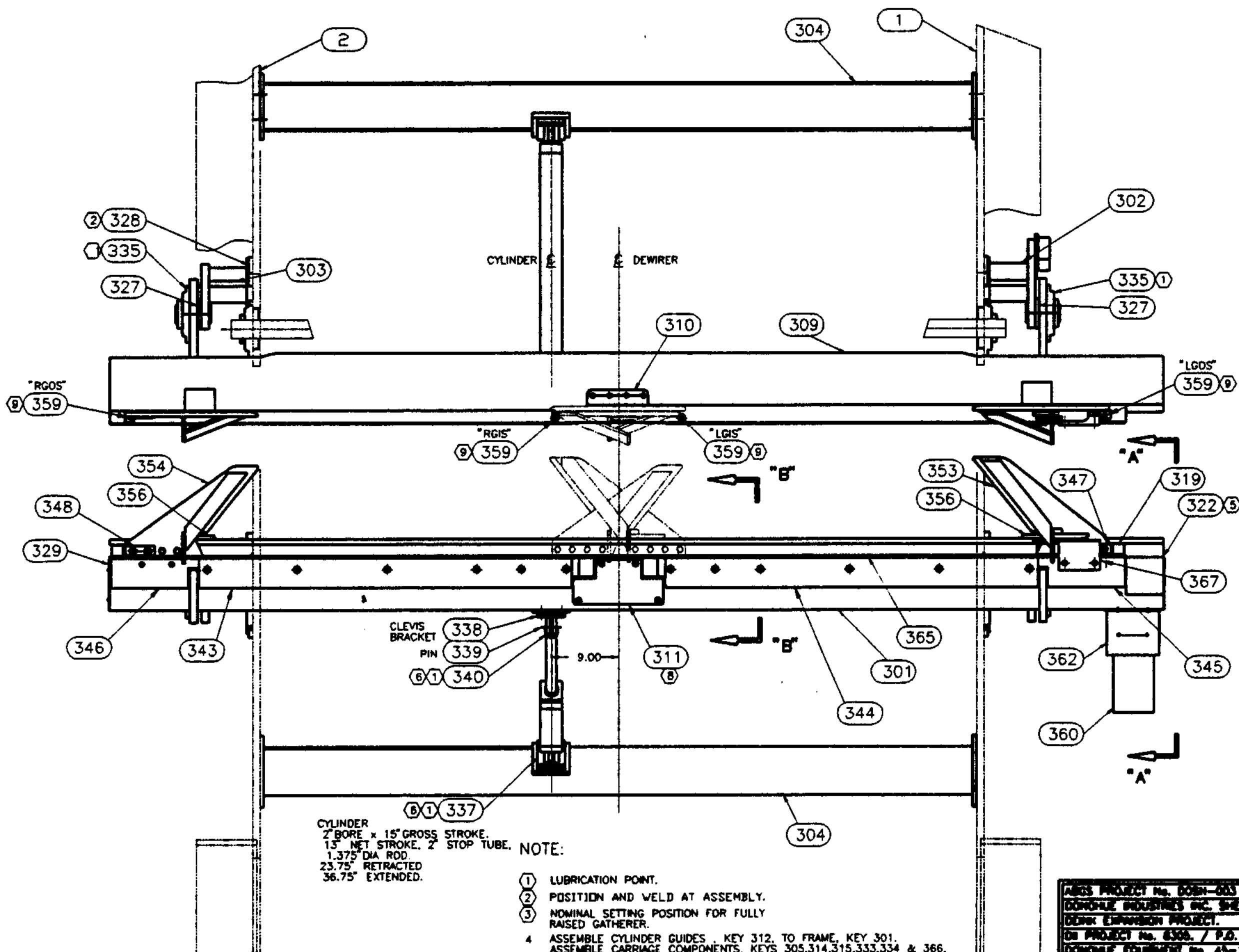
CO-ORDINATE MARKER	
ANCHOR BOLT	FLOW - PRIMARY
MILL AIR SUPPLY	FLOW - MANUAL REVERSE (JOG)
NOTE	FLOW - SECONDARY
1/8 MOTOR JUNCTION BOX	TERMINAL BOX

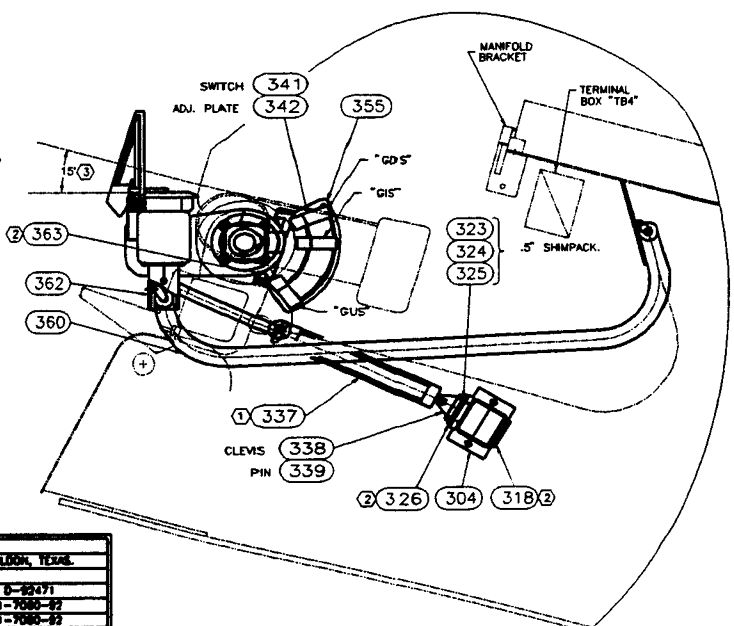
DRAWN BY	MEH
CHECKED	MSC
APPROVED	
SCALE	1 : 10
DATE	JUL 5 89

ASSEMBLY, BREAKER

REF. NO.	43E90Y
P.O. NO.	
SERIAL CODE	
LAND CODE	
DRAWING NO.	45E13A-0
SHEET	1 OF 1

D-295





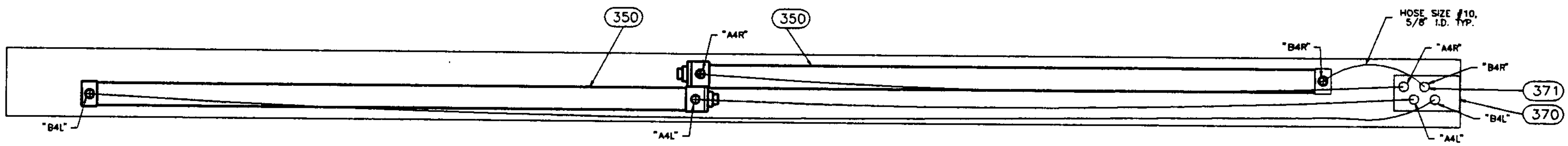
NOTE:

1. LUBRICATION POINT.
2. POSITION AND WELD AT ASSEMBLY.
3. NOMINAL SETTING POSITION FOR FULLY RAISED GATHERER.
4. ASSEMBLE CYLINDER GUIDES , KEY 312, TO FRAME, KEY 301. ASSEMBLE CARRIAGE COMPONENTS, KEYS 305,314,315,333,334 & 366, AND INSTALL ON TRACK 306. CONNECT CYLINDER, KEYS 350,351,352 TO THE CARRIAGE. ATTACH HYDRAULIC LINES TO THE CYLINDER BEFORE ASSEMBLING TO FRAME. INSTALL TOP WEARPLATE KEY. 309.
5. USE AS TEMPLATE TO DRILL AND TAP .25-NC(4) IN GATHERER FRAME KEY 301.
6. TORQUE ROD EYE, LUBRICATED, ONTO ROD AT 125 FT.LB.
7. WEARPLATE, KEY309, MUST BE SHIMMED TO PROVIDE A WORKING CLEARANCE (.010"/.015"), TO ALLOW THE CAM FOLLOWERS, KEY307, TO ROLL FREELY. USING SHIMS KEYS 319,372 & 373
8. LOCATE UP AGAINST SWITCH COVER, KEY 364. THEN USE AS TEMPLATE TO DRILL AND TAP .25-NC(4) IN GATHERER FRAME, KEY 301. INSTALL WITH LOCTITE 242
9. ROUTE WIRE FOR SWITCHES TROUGH CONDUIT ON GATHER BEAM FOR PROTECTION.

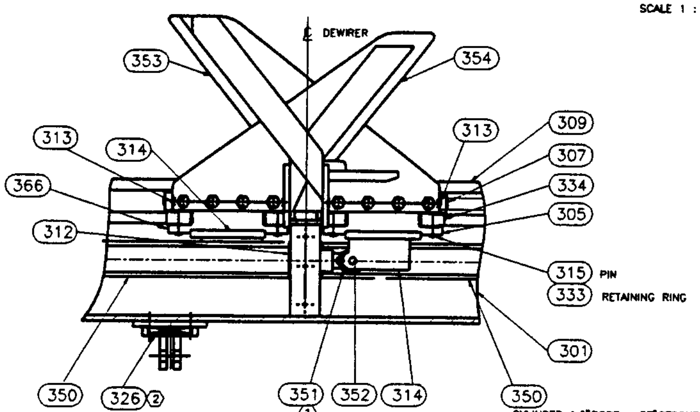
ABGS PROJECT No. DOSH-003
DONOHUE INDUSTRIES INC. SHELDON, TEXAS.
DDNK EXPANSION PROJECT.
DI PROJECT No. 6300. / P.O. D-92471
DONOHUE EQUIPMENT No. 43-1-7080-92
DONOHUE EQUIPMENT No. 43-1-7080-92
DONOHUE EQUIPMENT NAME. No.1 BALE DEWIRER
DONOHUE EQUIPMENT NAME. No.2 BALE DEWIRER
LAMB REFERENCE No. 11980358-103
LAMB REFERENCE No. 11980358-203

CO-ORDINATE MARKER
ANCHOR BOLT
MILL AIR SUPPLY
NOTE
MOTOR JUNCTION BOX
FLOW - PRIMARY
FLOW - MANUAL REVERSE (JOG)
FLOW - SECONDARY
TERMINAL BOX

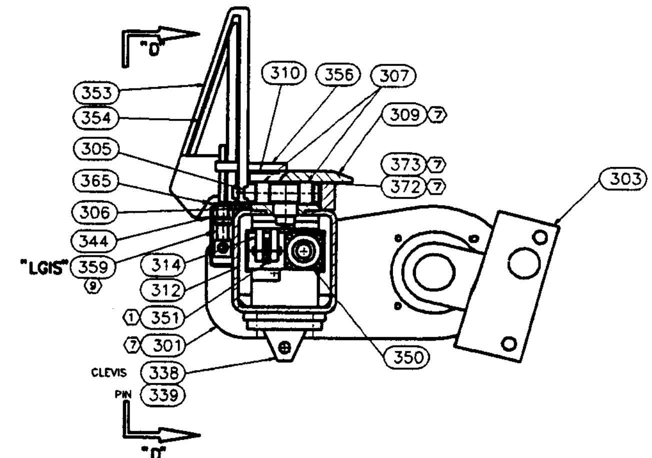
DRAWN ATR	ASSEMBLY, GATHERER
SCALE 1 : 8	43E91Y
DATE 99 JAN 18	D-285 44E76M-0 SHEET 1 OF 2



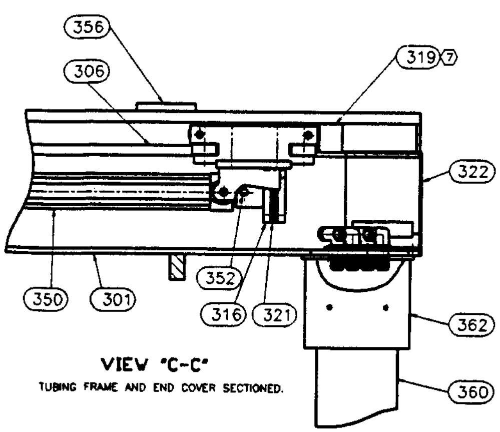
TOP VIEW OF HOSE CONNECTIONS BETWEEN CYLINDERS AND BULKHEAD PLATE.
SCALE 1 : 5



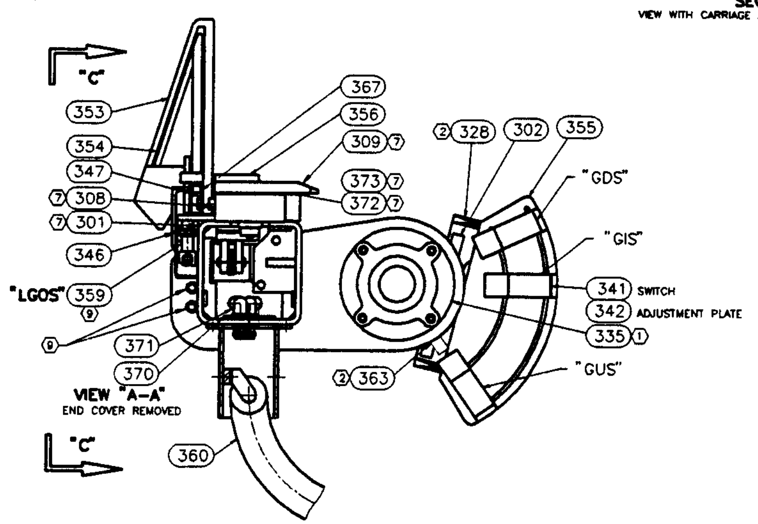
SECTION "D-D"
TUBING FRAME, KEY 301, SECTIONED.
AND NEAR SIDE TRACK, KEY 306, REMOVED.



SECTION "B-B"
VIEW WITH CARRIAGE ASSEMBLIES AT "IN" POSITION.



VIEW "C-C"
TUBING FRAME AND END COVER SECTIONED.

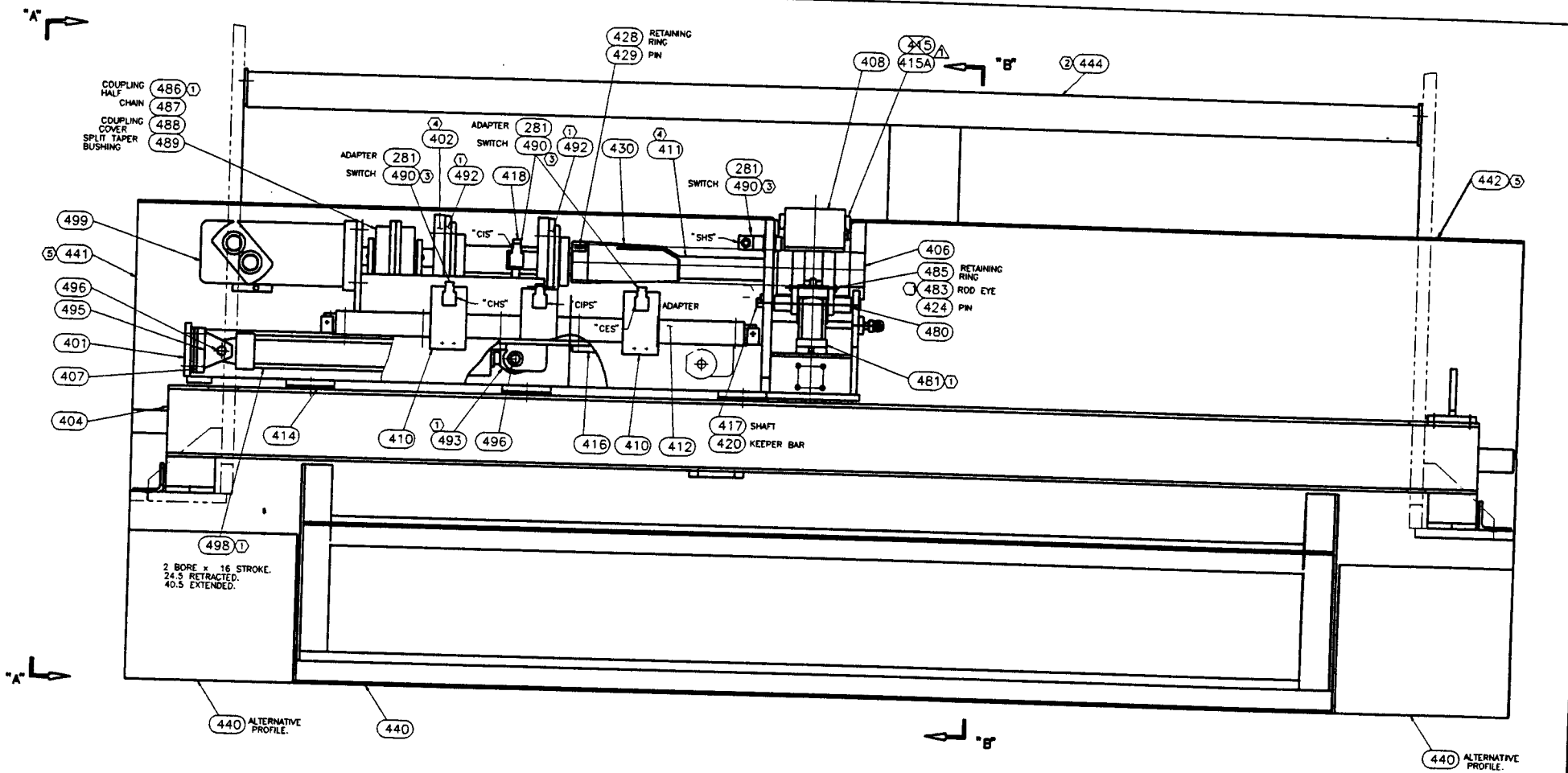


VIEW "A-A"
END COVER REMOVED

DONOHUE INDUSTRIES INC. SHELDON, TEXAS.
DEINK EXPANSION PROJECT.
DONOHUE EQUIPMENT NAME, No.1 BALE DEWIRER
DONOHUE EQUIPMENT NAME, No.2 BALE DEWIRER

CO-ORDINATE MARKER
ANCHOR BOLT
MILL AIR SUPPLY
NOTE
MOTOR JUNCTION BOX
FLOW - PRIMARY
FLOW - MANUAL REVERSE (JOG)
FLOW - SECONDARY
TERMINAL BOX

ATR	ASSEMBLY, GATHERER	43E91Y
SCALE 1 : 4		
DATE 99 JAN 18	D-286	44E76M-0 SHEET 2 OF 2



NOTES:

1. LUBRICATION POINT.
2. POSITION AND MOUNT AT ASSEMBLY.
3. SET GAP TO .25"
4. ALIGN COILER SHAFT, KEY 411, PARALLEL WITH COILING CHAMBER, KEY 406, AND MINIMIZE CLEARANCE BETWEEN TRACK AND SLIDE FRAME, KEYS 402 AND 403.
5. USE AS TEMPLATE TO DRILL AND TAP MOUNTING HOLES IN COILER AND SIDE FRAMES.
6. USE AS TEMPLATE TO DRILL AND TAP 5/16-NC HOLES (2) IN GUARDS KEY 441 AND 442.(SHEET 2)

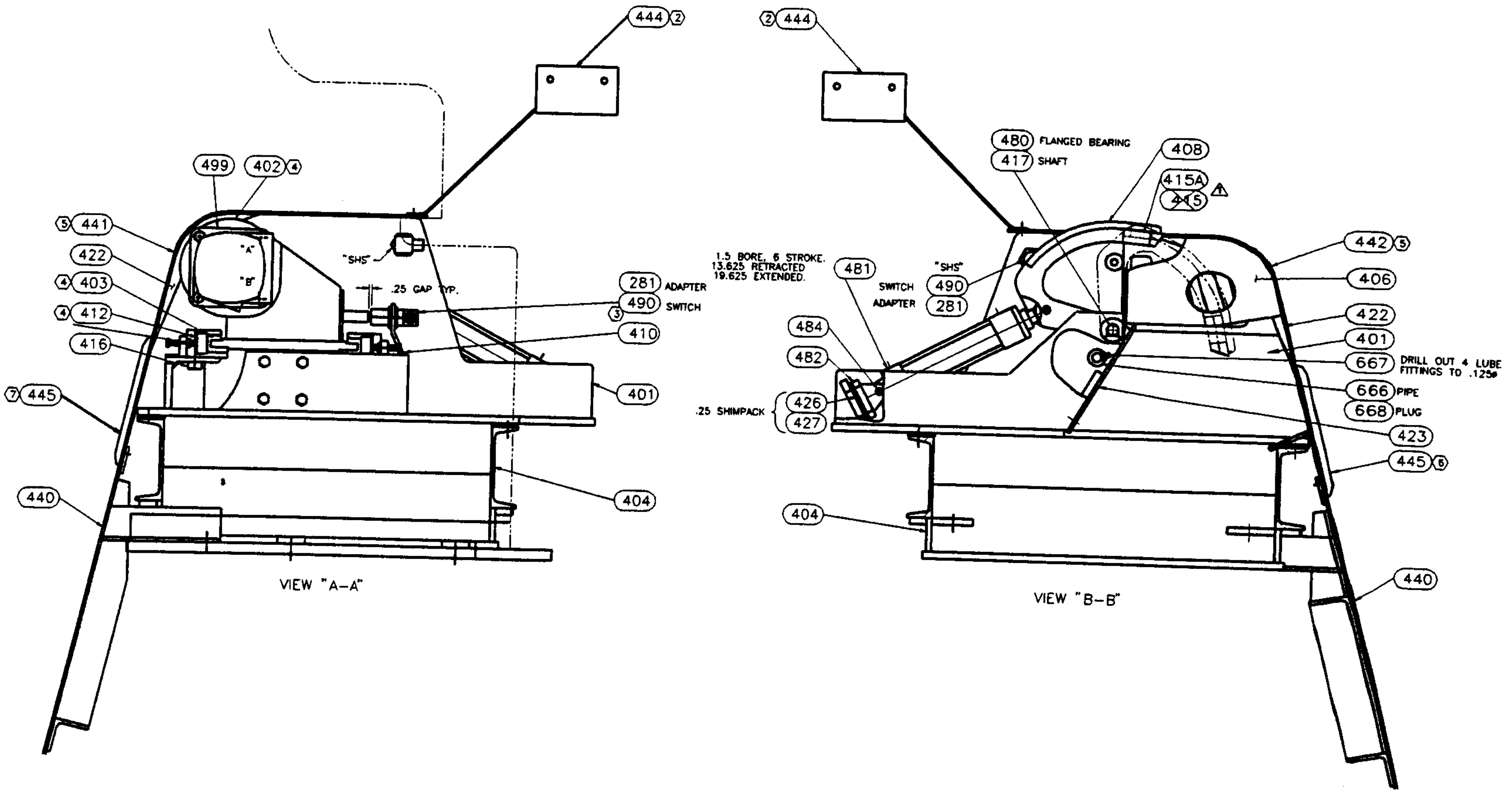
ABB PROJECT No. 8084-003	
DONOHUE INDUSTRIES INC. SHELDON, TEXAS.	
DONK EXPANSION PROJECT.	
GE PROJECT No. 8304 / P.O. D-82471	
DONOHUE EQUIPMENT No. 45-1-7080-92	
DONOHUE EQUIPMENT No. 45-1-7080-92	
DONOHUE EQUIPMENT NAME. No.1 BALE OPENER	
DONOHUE EQUIPMENT NAME. No.2 BALE OPENER	
LAMB REFERENCE No. 11980306-103	
LAMB REFERENCE No. 11980306-203	

MEH	ASSEMBLY COILER
MSC	
1 : 4	
MAY 27 98	D-288

42E25L

43E92Y -1

SHEET 1 OF 2



ABGS PROJECT No. D08H-003
DONOHUE INDUSTRIES INC. SHELDON, TEXAS.
DEINK EXPANSION PROJECT.
DI PROJECT No. 8308. / P.O. D-82471
DONOHUE EQUIPMENT No. 45-1-7080-82
DONOHUE EQUIPMENT No. 45-1-7080-92
DONOHUE EQUIPMENT NAME. No.1 BALE DEWIRER
DONOHUE EQUIPMENT NAME. No.2 BALE DEWIRER
LAMB REFERENCE No. 11980380-103
LAMB REFERENCE No. 11980380-203

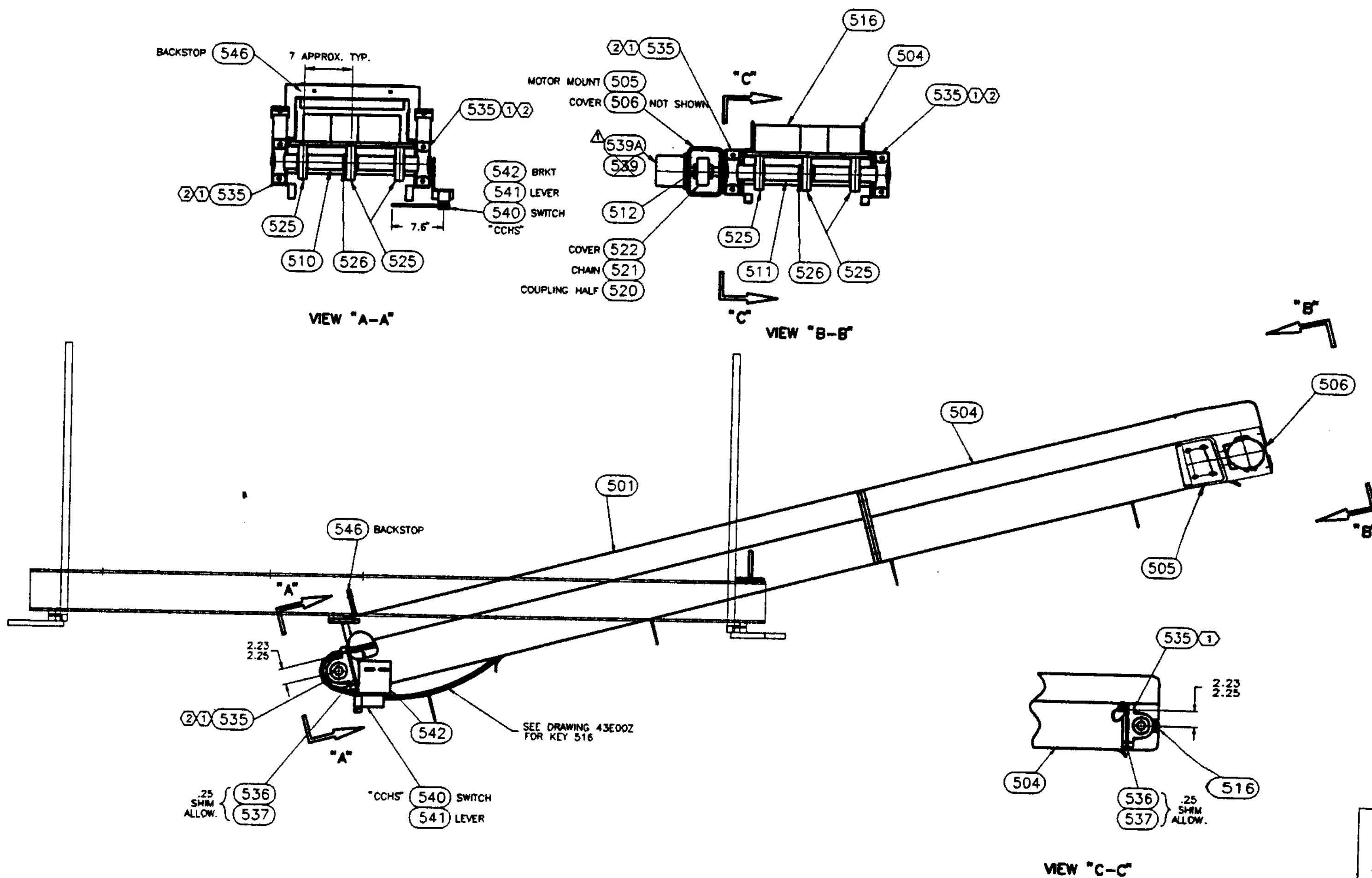
DATE	REV.	REVISION	BY
SEP 3 98	1	NEW PRESS PLATE, 410A WAS 410	MEH

DRAWN BY	MEH
CHECKED	MSC
APPROVED	
SCALE	1 : 4
DATE	MAY 27 98

ASSEMBLY COILER

D-289

REF.	42E25L
DRAWING NO.	43E92Y
REV.	1
SHEET	2 OF 2



NOTE:

1. LUBRICATION POINT
2. SPOT DRILL TO LOCK SET SCREW ON SHAFT.

ABCS PROJECT No. D0SH-003
DONOHUE INDUSTRIES INC. SHELDON, TEXAS.
DEINK EXPANSION PROJECT.
DI PROJECT No. 8308. / P.O. D-83471
DONOHUE EQUIPMENT No. 45-1-7080-02
DONOHUE EQUIPMENT No. 45-1-7080-02
DONOHUE EQUIPMENT NAME. No.1 BALE DEWIRER
DONOHUE EQUIPMENT NAME. No.2 BALE DEWIRER
LAMB REFERENCE No. 11980359-103
LAMB REFERENCE No. 11980359-203

CO-ORDINATE MARKER
ANCHOR BOLT
MILL AIR SUPPLY
NOTE
MOTOR JUNCTION BOX
FLOW - PRIMARY
FLOW - MANUAL REVERSE (JOG)
FLOW - SECONDARY
TERMINAL BOX

DRAWN BY: MEH
CHECKED: MBC
APPROVED:
SCALE: 1 : 8
DATE: MAY 28 98

ASSEMBLY
COIL CONVEYOR

D-290

43E93Y - 1
SHEET 1 OF 1