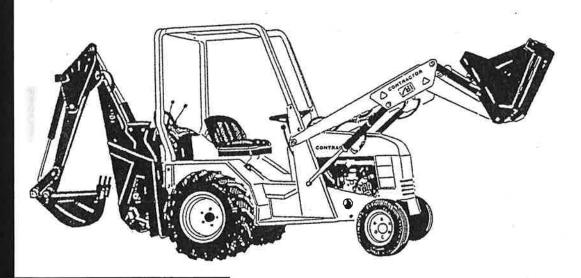
Allmand



Light Towers Portable Light Stands Compact Loader Backhoe

Solar Message Boards Portable Industria Heaters Concrete Breakers

Solar Flashing Arrowboards

OPERATOR'S MANUAL

CONTRACTOR—MODEL 20D-25D
ASSEMBLY # 0022

1502 West 4th **Ave.** Holdrege, NE 68949 800.562.1373 Fax 308.995.5887 Reliability, performance, and integrity backed by over 60 years of experience.



FOR PREPARING CONTRACTOR TLB FOR DELIVERY OR RENTAL

The **CONTRACTOR TLB** requires service as well as proper operation in order to provide the performance and safety it has been designed for. Never deliver or put a machine into service with known defects or missing instructions or decals. Always instruct the customer in the proper operation and safety procedures as described in the operator's manual. Always provide the manual with the equipment for proper and safe operation.

CHECK LIST:

- Visually inspect the equipment to ensure that all instructions and decals are in place and legible.
- Inspect the hydraulic system to insure all connections are tight and secure.
- Lubricate all grease fittings with recommended grease.
- Inspect all hydraulic hose for proper routing and signs of damage.
- Check the condition of the hydraulic cylinders.
- Inspect the steering system, tie rod ends, spindles and wheel bearings regularly and tighten rod ends often.
- Check the outriggers and make sure they operate properly.
- Tighten lug nuts to 80 ft/lb every 50 hours of operation.
- Inspect the loader and backhoe for damage and test for proper operation.
- Inspect the loader bucket stops for damage. (there should be at least 1/2" clearance between cylinder rod and bucket pin grease zerk).
- Inspect the electrical wiring for signs of damage.
- Inspect the park brake for proper holding strength.
- Inspect the tires to ensure good condition and proper inflation.
- Make sure the battery is fully charged and terminals are tight and clean. Insure the electrolyte is at the correct level.
- Check the service intervals for oil filters, fuel filter, air cleaner, engine oil and hydraulic oil.
- Check the engine oil, hydraulic oil and fuel levels.
- Start engine and check for hydraulic leaks and proper R.P.M. at full throttle.
- Check to make sure the operator's manual is with the equipment.
- Inspect the machine physically for damage and repair if necessary.

NOTE: See appropriate section of manual for scheduled maintenance intervals

 After completing the inspection checklist, operate the loader and backhoe through a complete operation cycle, following the operating instructions in the operator's manual.



NEVER ALLOW ANYONE TO OPERATE THE EQUIPMENT WITHOUT PROPER TRAINING!

ALWAYS READ THE INSTRUCTIONS FIRST!

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SAFETY WARNING!
ALWAYS REPLACE ANY SAFETY AND
INSTRUCTION DECALS THAT BECOME
DAMAGED, PAINTED OR OTHERWISE
ILLEGIBLE.

Refer to these representations of the safety warning decals used on the **CONTRACTOR TLB** to insure correct ordering if replacing becomes necessary.



HIGH-PRESSURE FLUID HAZARD
To Prevent Serious Injury or Death:
Refleve pressure on system before repairing or adjusting or disconnecting.
Wear proper hand and eye protection when searching for leaks.
Keep all components in good repair.
D-191



D-158
Cover panel - upper left

D-191
Cover panel - lower right

D-189
Gauge panel - right side



ELECTROCUTION HAZARD OVERHEAD WIRES
To Prevent Serious Injury or Death:
• Keep away from power lines.

D-197 Rear Fender-Right of Seat



D-190
ROPS front left upright

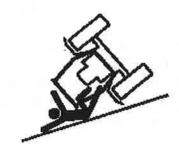
D-195 Rear Fender-Left of Seat



D-194
ROPS front right upright

AVOID INJURY FROM ROLLOVER ACCIDENTS!

- ALWAYS WEAR YOUR SEAT BELT WHILE OPERATING THIS MACHINE.
- DO NOT ATTEMPT TO JUMP CLEAR OF A TIPPING MACHINE SERIOUS OR FATAL CRUSHING INJURIES WILL RESULT. THIS MACHINE MAY TIP OVER FASTER THAN A PERSON CAN JUMP FREE.



TO AVOID ROLLOVERS:

- Be careful when operating on a slope.
- Avoid sharp turns at high speed.
- Balance loads so weight is evenly distributed and load is stable.
- Carry loads close to the ground to aid visibility and lower center of gravity.

DO NOT OVERLOAD: Know capacity of machine.

Be careful when operating at the edge of an excavation, trench, drop-off and loading or unloading from a trailer.



AVOID INJURY FROM BACK OVER ACCIDENTS!

- BEFORE MOVING MACHINE, BE SURE ALL PERSONS ARE CLEAR OF AREA.
- ALWAYS BE ALERT FOR BYSTANDERS MOVING INTO THE WORK AREA. SIGNAL TO WARN BYSTANDERS BEFORE MOVING MACHINE.
- WHEN USING A SIGNAL PERSON, KEEP PERSON IN VIEW AT ALL TIMES. BE SURE SIGNAL PERSON IS CLEAR BEFORE BACKING UP.



TO AVOID BACK OVER ACCIDENTS:

- Always look around before you back up. Be sure that everyone is clear of machine.
- Use a signal person when backing up if view is obstructed. Always keep signal person in view.
- Learn the meaning of all flags, signs and markings used on the job and who has the responsibility for signaling.
- Dust, heavy rain, fog, etc., can reduce visibility. As visibility decreases, reduce speed and use proper lighting.

USE HANDHOLDS AND STEPS

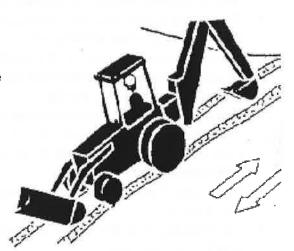
- DO NOT mount tractor from the right side.
- Falling is a major cause of personal injury.
- Always face the machine and use a three-point contact when mounting or dismounting the machine.
- Never jump either on or off the machine.
- Never mount or dismount a moving machine.
- Be careful of slippery conditions on platforms, steps and handrails when mounting or dismounting the machine.



DRIVE MACHINE SAFELY

AVOID DRIVING ON HILLSIDES OR STEEP SLOPES

- Set backhoe boom lock and swing lock to center the boom before driving.
- This is a potential rollover hazard and could result in a serious injury or possibly death.
- If you must drive on steep hillsides, moving the backhoe to the uphill side of the machine may make the machine more stable, depending upon working conditions.



DRIVE CAREFULLY:

- On slopes (avoid if at all possible)
- Where space is limited
- Over rough ground, curbs and tracks
- Near a ditch or excavation ALWAYS!

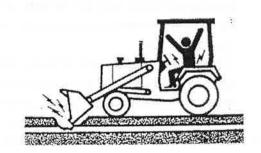
FOR TRAVELING:

- Carry loader bucket low.
- Never carry passengers.



Before digging:

- Check location of electrical cables
- Gas lines
- Water and sewer lines
- Avoid accidental machine movement



WARN OTHERS OF SERVICE WORK

- Unexpected machine movement can cause serious injury or even death.
- Before performing any work on the machine, attach a "DO NOT OPERATE" tag to the steering wheel.



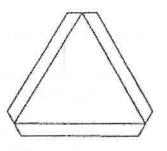
USE SAFETY LIGHTS AND DEVICES

- Install and use all safety lights and devices necessary to assure safe operation and local compliance.
- Keep all safety items in good condition. Replace any missing or damaged parts immediately.

THE CONTRACTOR <u>SHOULD NOT</u> BE DRIVEN ON PUBLIC ROADS FOR ANY REASON.

- Trailer to job sites or from one work location to another.
- Slow moving vehicles, such as the CONTRACTOR, present a hazard that, if involved in an accident, could result in serious injury or possibly death.
- A few minutes spent loading and trailering the CONTRACTOR, may save some one's life.





SLOW MOVING VEHICLE

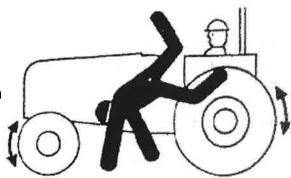
BEWARE OF EXHAUST FUMES

- Prevent asphyxiation. Engine exhaust fumes can cause sickness or death.
- If you must operate in a building, be sure there is adequate ventilation. Either use an exhaust pipe extension to remove the exhaust fumes or open doors and windows to bring in enough outside air into the area.



KEEP RIDERS OFF MACHINE

- Only allow the operator on the machine. Keep riders off.
- Riders on machine are subject to injury such as being struck by foreign objects and being thrown off of the machine.
- Riders also obstruct the operator's view, resulting in the machine being operated in an unsafe manner.



HANDLE FUEL SAFELY - AVOID FIRES

- Handle fuel with care, it is highly flammable. Do not refuel machine while smoking or when near open flame or sparks.
- Always stop engine before refueling machine.
 Do not fill fuel tank inside any building structure.
 Always attempt to refuel in the out of doors.



CONTRACTOR/TLB

GENERAL

The Allmand **CONTRACTOR** heavy-duty, compact tractor-loader-backhoe is designed for its size and maneuverability to excavate materials in areas that larger tractor-loader-backhoes can not access. The front end loader is generally used for excavating, leveling, and for back filling trenches and other types of excavations. The backhoe is generally used for excavation of soil to form a trench or opening, depending upon operator's needs, in areas where limited space is a factor.

The base unit consists of a chassis, engine, hydrostatic transmission drive system, tires and wheels, steering system, front end loader, hydraulic system, backhoe and Roll Over Protective Structure (ROPS).

CHASSIS WITH INTEGRAL HYDRAULIC RESERVOIR

The chassis frame is constructed of formed steel and all components are welded in rigid fixtures to insure consistency of each part produced.

The hydraulic reservoir consists of the left and right vertical frame posts and the upper and lower cross members. Provisions have been made in the reservoir for two 100 mesh suction strainers, a 1 1/2" oil fill opening, 1/2" NPT magnetic drain plug and oil level sight gauge. The reservoir accommodates 12 gallons of hydraulic fluid and has room for the oil to expand.

The chassis includes mounting provisions for solid rear axle and drive plate, as well as the oscillating front axle.

The chassis also includes mounting provisions for a certified ROPS which is attached with specified hardware. The ROPS can be removed and replaced without affecting certification. Refer to page 12 of this manual for instructions on this operation.

HYDROSTATIC TRANSMISSION DRIVE SYSTEM

The machine is driven by an Eaton infinitely variable hydrostatic transmission consisting of a variable displacement pump and a fixed displacement motor. The pump unit includes a servo control valve.

Control of the variable piston displacement pump is the key to controlling vehicle speed. Prime mover horsepower is transmitted by the pump when the operator moves the directional control pedal. When the variable piston pump swash plate is tilted, a positive stroke to the piston is created.

The priority circuit delivers fluid to the steering control valve which is an open center valve. Fluid out of the steering control valve returns to the reservoir in the right vertical frame post. The remainder of the flow, approximately 8 g.p.m., enters the manual control valve which supplies fluid for control of the loader arm cylinders and loader bucket cylinders. The valve is equipped with a 2500 p.s.i. relief valve. Fluid to the backhoe is supplied by a power beyond port off the hydraulic control valve for the loader.

The loader control valve and backhoe control valve, both return through a 5 micron return filter and an oil cooler with a pressure bypass. The cooled oil is then returned to the left vertical frame post of the reservoir. As in all hydraulic systems, reliability depends upon clean and cool oil.

LOADER

The loader assembly is manufactured to handle most excavation and landscaping projects. Critical locations on the loader arms and cylinder mounts are reinforced with plate steel to add durability. The pivot points of the loader are constructed of high strength steel to create a wear resistant joint.

The bucket assembly is manufactured to provide a structurally stable container to excavate, transfer, and load most types of product. The cutting edge is reinforced by a 1/2" thick grader blade material spanning the full width of the bucket. The bucket working load capacity is 1/3 cubic yard.

TIRES and WHEELS

The **CONTRACTOR** is standard equipped with, $23 \times 8.5 \times 12$ tubeless tires mounted on 10×6 steel wheels with a 6 - 6" bolt pattern, for the front and 31×15.5 15 tubeless tires mounted on 15×13 " steel wheels with a 5 - 5.5" bolt pattern, for the rear. Optional rear tires are 9.5×16 , 6 ply, on 16×7 " steel wheels with 5 - 5.5" bolt pattern. Recommended tire pressure for the rear tires is 25 psi minimum, 45 psi max. Inflate front tires to manufacturer's recommended pressures.

BACKHOE

Refer to the CONTRACTOR 408A Backhoe Operators Manual, by **BRADCO**, for any general information.

ENGINE - KUBOTA DIESEL

Power is provided by a Kubota D905-B, 54.8 cu. in., 20 H.P. or a Kubota D1105, 68.8 cu. in., 25 H.P. four-cycle, three cylinder, water cooled diesel engine. (Horsepower rating is made with engine at 3000 RPM) Engine includes: low oil pressure sensor, 12 VDC electrical system with starter and 30 amp. regulated battery charging circuit. Features like spherical overhead valve design, full pressure lubrication, Bosch (MD type mini pump) injection pump, quick and easy access to routine service areas and use of quality, long-lasting components provide a durable and dependable power source.

OVERALL DIMENSIONS

Weight	3760 lbs. (1565 kg)
Length	16' 06" (5.03 m)
Height	82" (2.08 m)
■ Width	56" (1.42 m)
Wheelbase	64.2" (1.63 m)
 Ground Clearance 	9" (22.8 cm)
 Turning Radius 	9' 02" (2.79 m)

TRACTOR

INACION	
Engine	Kubota D905-B or D1105-B
Transmission	Eaton HD Hydrostatic
Drive motor	Ross ME-15
Power steering	Eaton Char-Lynn
 Differential 	Dana 44 Limited Slip
Brakes	Hydrostatic
Parking brake	Band type
 Speed range 	0 to 4.8 MPH (8 km/h)
 Auxiliary hydraulic pump 	Gear pump
 Auxiliary hydraulic output 	8 gpm @ 2500 psi
■ Fuel tank	6.5 gallons (24.6 L)
Hydraulic oil reservoir	12 gallons (45.4 L)
Tire size (Front)	23 x 8.5 - 12
■ Tire size (Rear)	31 x 15.5 - 15
Tire Pressure (Front)	20 p.s.i.
■ Tire Pressure (Rear)	20 p.s.i.

LOADER

Maximum lift height (Bucket Pivot)	89" (2.29 m)
 Clearance with bucket dumped 	71" (1.80m)
 Reach @ maximum height 	31" (78.1 cm)
Reach @ grade	49.5" (1.26 m)
 Bucket rollback angle 	35 degrees
 Bucket dump angle 	35 degrees
Digging depth	4" (10.2 cm)
 Lift capacity 	2100 lbs. (953 kg)
 SAE Lift capacity 	1500 lbs. (681 kg)
 Breakout force 	3400 lbs. (1542 kg)
Bucket width	56" (1.27 m)
Bucket capacity	1/2 yd (.38 cu. m)

Specifications are subject to change without notice

ENGINE BREAK-IN

OBSERVE ENGINE OPERATION CLOSELY

IMPORTANT: Become thoroughly familiar with the sound and feel of your new machine. Read and understand the Engine Instruction Manual included with your **CONTRACTOR**. Refer to the Engine instruction manual for seasonal fuel and oil viscosity recommendations.

NOTE: Engine is warranted to the original owner by the manufacturer.

OPERATOR RESPONSIBILITIES

- Check engine oil daily.
- Operate engine at normal loads.
- Check indicator lights and gauges (if equipped) frequently during operation.
- Avoid excess engine idling.
- Perform all engine maintenance in the Engine Instruction Manual.

NOTE: The engine owner is responsible for the performance of the required maintenance as defined by the engine manufacturer in the written instructions found in the Engine Instruction Manual provided with the engine.

CHECK INDICATORS BEFORE STARTING

Turn key switch clockwise and hold in the "RUN" position. All indicator lights must light. If any indicator fails to light, the bulb may be burned out. If bulb is not burned out and indicator fails to light up, see your authorized dealer or call the factory.

NOTE: Start engine only from the operator's seat, with the foot pedal in the neutral position and the park brake engaged.

PRE-START CHECKLIST

- CHECK oil level, add if low. Do not overfill.
- CHECK fuel level, add if low.
- CHECK cooling air intake areas and external surfaces of engine. Make sure they are clean and unobstructed.
- CHECK that the air cleaner components and all shrouds, equipment covers and guards are in place and securely fastened.

CHECK forward / reverse pedal. Make certain that the pedal is exactly in neutral; if not, the engine will not start.



WARNING: LETHAL EXHAUST GASES

Engine exhaust gases contain poisonous carbon monoxide. Carbon monoxide is odorless, colorless and can cause death if inhaled. Avoid inhaling exhaust fumes.

NEVER RUN THE ENGINE IN A CLOSED BUILDING OR CONFINED AREA WITHOUT HAVING ADEQUATE VENTILATION!

FOR A WARM ENGINE

Follow the same starting procedure as described for cold weather starting. Use of the glow plugs may not be necessary on a warm engine, and use of the glow plugs is not recommended in temperatures above 41° F.

IMPORTANT: Always check all the engine warning lights when starting. If the oil pressure light remains on, immediately stop the engine and check for the cause

STOPPING THE ENGINE

Before leaving the operator's station:

- 1. Park the machine on a level surface and lower loader bucket, backhoe bucket and any other accessories to the ground.
- 2. Engage park brake.
- 3. Place the throttle in the "slow" position. Allow the engine to run at least 15 seconds before stopping the engine.
- 4. Turn the key switch to the "off" position.
- 5. Move hydraulic control levers to release hydraulic pressure from the system.

CAUTION: PREVENT POSSIBLE INJURY FROM UNEXPECTED MACHINE MOVEMENT. NEVER RELY ON NEUTRAL POSITION OF FOOT PEDAL ALONE TO KEEP THE MACHINE FROM ROLLING. THE MACHINE CAN UNEXPECTEDLY ROLL OR MOVE UNDER POWER RESULTING IN SERIOUS INJURY OR DEATH. ALWAYS ENGAGE PARK BRAKE TO HOLD MACHINE STATIONARY!

ENGINE ANGLE OF OPERATION:

The **KUBOTA** diesel engine can be operated at angles up to 25 degrees.

Check oil level to assure crankcase oil level is at the full mark.

NOTE: Do not operate this engine continuously at angles exceeding 25 degrees in any direction. **Serious engine damage can occur from insufficient oil supply**.

COOLING:

NOTE: If debris builds up on the grass screen or other cooling air intake areas, stop the engine immediately and clean. Running this engine with blocked or dirty air intake and cooling areas can cause extensive damage due to overheating.

ENGINE SPEED:

NOTE: Do not tamper with the governor setting to increase the maximum engine speed. Over speed is hazardous and will void engine warranty. The maximum allowable high idle speed for this engine is **3600 RPM** with no load.

BATTERY:

- The CONTRACTOR is shipped with a 12 volt, group 24 battery with a 675 CCA rating.
- Check battery electrolyte level regularly and fill as needed.
- Replace with the same group size and amp rating when replacement is needed.

NOTE: The CONTRACTOR electrical system is a 12-volt negative (-) ground.

CAUTION: An explosive gas is produced while batteries are in use or being charged. Keep flames or sparks away from the battery area. Make sure batteries are charged in a well- ventilated area. Always wear eye protection when servicing or handling batteries.

NOTE: By lightly depressing the pedals forward and reverse, torque is developed to be transferred to the drive wheels by the hydraulic motor and differential set-up.

The further the forward and reverse pedals are depressed, the faster ground speed.

Torque will decrease as ground speed increases.

3. Move the forward / reverse pedal to the neutral position to stop.

NOTE: The pedal returns to a neutral detent position when pressure is released from the forward and reverse pedals.

LOADER CONTROL VALVE LEVER

The loader control valve returns to the neutral position when released, except when in the float position.

A - Move the control valve lever forward to lower loader arms.

AA - Move the control valve lever forward past the detent. This is the

float position.

- **B** Move the control valve lever back to raise the loader arms.
- C Move the control valve lever left to roll back the bucket.
- **D** Move the control valve lever **right** to **dump** the bucket.

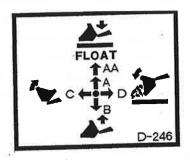
For faster loader cycle times follow these simple tips:

- 1. Run engine at fast idle.
- 2. Move the loader boom and the bucket at the same time.
- 3. Without using force, move control valve lever fully toward each function.



OPERATING TIPS

- Reduce speed when driving over rough terrain, carrying heavy loads, or working in a congested area.
- Whenever possible, avoid obstacles, such as rough terrain, rocks, curbs and ditches.
- In general, by decreasing machine speed the control of the machine increases.
- When the backhoe is not in use, the backhoe boom must be locked in the fully raised position. Curl the backhoe bucket up and retract dipperstick.
- When driving the **CONTRACTOR**, carry the loader bucket low for good visibility and machine stability.
- Walk the job site to uncover any hazards and to plan the job.
- Practicing good housekeeping on the job site will help maximize machine stability, reduce operator fatigue, and increase productivity.
- Material that is loose and fragmented dumps much easier than material that is hard and compacted.
- Excavate material in thin layers rather than jamming it into the bucket. This will allow the material to break up as it enters the bucket. This is especially important when moving sticky, wet materials



MAINTENANCE INSTRUCTIONS

WARNING: Accidental Starts!

Before servicing the engine or equipment, always remove the ignition keys to insure there will not be any accidental start up. Make sure the equipment is in neutral and park brake set.

MAINTENANCE SCHEDULE

These required maintenance procedures should be performed at the frequency stated in the table. They should also be included as part of any seasonal tune-up.

NOTE: Every 500 hours of operation, separate the pump from the engine. Clean the splined areas and lightly grease the male portion of the pump spline. Use either Dow Corning G-N Metal Assembly Paste or #77 Assembly Paste. When remounting the pump, be certain the mating surfaces are clean and correctly aligned.

		HOURLY INTERVALS					
NO.	CHECKPOINTS	8	50	250	500	750	1000
1	Check engine oil level, fill if needed	0					
2	Change engine oil with seasonal viscosity		0	0	0	0	0
3	Cooling system circuit cleaning						0
4	Check battery electrolyte level	0		0			12
5	Replace oil filter cartridge		0		0		0
6	Check fan belt for tightness	0		0		0	
7	Check oil cooler fins, clean as necessary	0		0		0	
8	Check fuel tank for sediment, clean as necessary			0			0
9	Check radiator hoses and clamps for leaks	0			0		
10	Starter and alternator check						0
11	Check fuel lines for leaks	0					
12	Check air cleaner element	0	0				
13	Replace air cleaner element						0*
14	Check electrical wiring for damaged or loose connections	0	0	0			
15	Tighten tie rod ends to 35 ft/lbs	0	0	0	0	0	0
16	Tighten lug nuts to 80 ft/lbs		0	0	0	0	0
17	Check hydraulic oil level, fill if necessary	0	0				
18	Check all fasteners for tightness	0		0			
19	Check backhoe bucket teeth, replace if necessary	0					
20	Grease all swivel points (loader and backhoe)	0					
21	Grease drive hub coupler				0		
22	Grease right foot pedal mount and center bearing mount			0			
23	Check fuel filter, replace if necessary				(1)	0	
24	Check hydraulic hoses for damage and loose connections	0	0	0			0
25	Change hydraulic return filter	T			0		
26	Change hydraulic fluid and clean suction strainers				0		0
27	Check loader bucket stops for damage						

- O Indicates that jobs must be done after the first 5 hours respectively.
- * Perform these maintenance procedures more frequently under extremely dusty and dirty working conditions.

Hydraulic fluid should be changed every 1000 hours after the first 250 hour change.

NOTE: All daily checks should be done with every engine oil change.

NOTE: Change hydraulic return filter at the first 50 hours then every 200 hours.

PREPARATIONS FOR STORAGE

- 1. When preparing the **CONTRACTOR** for storage, first remove floor plate and steering column cover. Wash off all dirt and grease from all the major components and connecting hoses. Coat the exposed cylinder rods with grease and grease all the grease fittings.
- 2. IMPORTANT: When washing the CONTRACTOR, allow engine and hydraulic system to cool before washing. Cold water on a hot engine or hydrostatic pump can cause costly damage. DO NOT direct the stream of water, when washing, directly at the hydraulic system breather, it is possible to get water into the hydraulic system and contaminate the fluid.
- 3. Make sure the battery is fully charged, battery terminals are clean and have a corrosion protectant applied.
- 4. Change the engine oil and run for 5 minutes to allow the oil to penetrate to all the parts.
- 5. Drain the fuel system, fuel tank, fuel pump, and carburetor, or add a fuel stablilizer to prevent gasoline from gumming up the fuel system during storage.
- 6. Place the CONTRACTOR in a clean, dry place and cover if at all possible.



TROUBLESHOOTING CHART

The troubleshooting chart lists problems that might be encountered in the operation of the **CONTRACTOR**. The remedies listed may direct the repairman to a possible faulty component.

A - ENGINE

- For engine troubleshooting charts indicating faults and recommended repair procedures;
 refer to Manufacturer's Operation and Maintenance Manual.
- If your particular problem is not covered or you are unsure of what steps to take, contact factory for assistance.

C - TRANSMISSION

CONTRACTOR fails to move under power:

- Parking brake set
- Inadequate oil level in hydraulic reservoir
- Control pedal or linkage broken or loose
- Inadequate oil flow through transmission suction filter
- Drive coupling mechanical failure
- Hydrostatic pump failure
- Drive motor failure

CONTRACTOR moves in neutral:

- Control pedal neutral centering device broken or out of adjustment.
- Neutral centering device return spring broken.

For detailed troubleshooting information on hydrostatic transmission, refer to Trouble Shooting Manual, Eaton Hydrostatic Transmissions, available from an Eaton representative or dealer.

C – ELECTRICAL SYSTEM

ENGINE STATUS	VOLTMETER READING	INDICATES	TO CORRECT
RUNNING	13.5 TO 14 VOLTS	NORMAL CONDITION	NONE
RUNNING	LESS THAN 13.5 VOLTS OR MORE THAN 14 VOLTS	ALTERNATOR OR REGULATOR MALFUNCTION	CONTACT DEALER
WON'T START	12 TO 12.5 VOLTS	WEAK BATTERY	CHARGE BATTERY
WON'T START	LESS THAN 12 VOLTS	WEAK BATTERY OR DEFECTIVE BATTERY CELL	CHARGE OR REPLACE BATTERY
STOPPED	EXCESSIVE CURRENT DRAW	SHORT CIRCUIT	INSPECT SYSTEM

D-HYDRAULIC SYSTEM

- Thoroughly review description of hydraulic system, pages 16 and 17 of this text.
- Use logical steps to determine cause of malfunction.
- Identify the function or functions which require troubleshooting.
- If possible, trace malfunction to source: pump, control, motor or cylinder.
- Determine if pressure or volume is inadequate for function as specified.

STEERING (continued)

PROBLEM	POSSIBLE CAUSE	CORRECTION
SLIP—SLOW MOVEMENT OF STEERING WHEEL	Leakage of cylinder piston seals or accessory valve between cylinder line or ports.	Replace seals or accessory valve
FAILS TO CAUSE ANY MOVEMENT OF STEERED WHEELS	Worn steering control unit meter	Replace steering control unit
TEMPORARY HARD STEERING OR HANG-UP	*Thermal Shock	Check unit for proper operation and cause of thermal shock
ERRATIC STEERING	Air in system due to low level of oil, cavitation of pump, leaky fitting, pinched hose, etc.	Correct condition and add fluid
"SPONGY" OR SOFT	Air in hydraulic system. Most likely air trapped in cylinders or lines	Bleed air out of system
STEERING	Low fluid level	Add fluid and check for leaks
	Steering column upper shaft is loose or damaged	Tighten steering wheel nut
FREE WHEELING— STEERING WHEEL TURNS FREELY WITH NO FEELING OF PRESSSURE AND NO ACTION OF STEERED	Lower splines of column may be disengaged or broken	Repair or replace column
	Steering control unit meter has a lack of oil. This can happen on start-up, after repair, or long periods of non- use	Usually starting engine and allowing hydraulic oil to irculate will cure the problem
	No flow to steering control unit—Can be caused by:	
WHEELS	Low fluid level	Add fluid and check for leaks
	Ruptured hose	Replace hose
	Internal steering control unit damage due to "Thermal Shock"	Replace the steering control unit
FREE WHEELING— STEERING WHEEL TURNS WITH SLIGHT RESISTANCE BUT RESULTS IN LITTLE OR NO STEERED WHEEL ACTION	Cylinder piston seal blown out.	Determine the cause. Correct the cause and replace the blown seal.
EXCESSIVE FREE PLAY AT STEERING WHEEL	Loose steering wheel nut. Steering column shaft worn or damaged. There should be very little play in the unit itself	Repair or replace steering wheel connection or column
EXCESSIVE FREE PLAY AT STEERED WHEELS	Broken or worn linkage between cylinder and steered wheels	Check anchor points in steering linkage between cylinder and steered wheels
SIEEKED WINEELS	Leaking cylinder seals	Replace cylinder seals

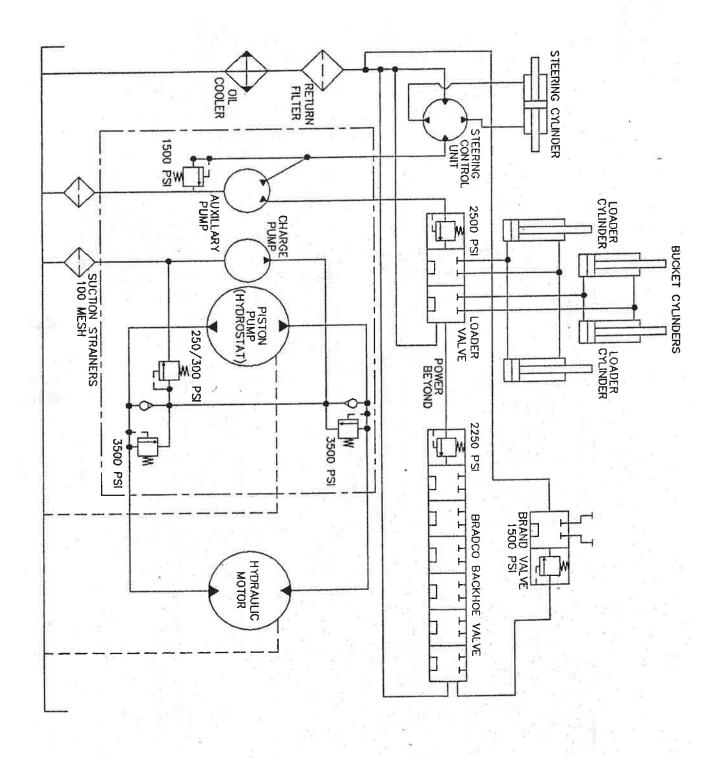
^{*}Thermal Shock is defined on the following page.

LOADER LIFT AND BUCKET ROLL BACK (continued)

PROBLEM	POSSIBLE CAUSE	CORRECTION
	Cold hydraulic fluid	Warm fluid with engine at idle speed
	Engine speed too slow	Open throttle
	Oil leaking past control valve.	Repair or replace worn section
	Oil too heavy.	Use recommended oil
LOADER AND BUCKET ACTIONS TOO SLOW	Pump damaged or worn	Repair or replace pump
	Oil leaking past cylinder seals	Replace seals
	Dirty return oil filter	Replace return oil filter
	Faulty relief valve	Clean or replace relief valve
	Broken or leaking lines	Replace defective hose and check for leaks
LOADER FAILS TO HOLD	Dirty hydraulic oil	Drain and refill oil, replace filter
UP A LOAD	Oil leaking past cylinder seals	Replace seals
	Oil leaking past control valve	Repair or replace worn section
	Faulty relief valve	Clean or replace relief valve
	Dirty oil	Drain, refill oil, replace filter
	Partially plugged suction strainer	Drain oil, clean suction strainer, and refill with new oil
	Control valve held open too long	Return control to neutral position when not in use
	Worn pump	Replace pump
OIL OVERHEATING	Relief valve set too low	Reset relief valve correctly
OIL OVERHEATING	Oil too light for warm weather	Use recommended oil
	Engine R.P.M. too fast	Reduce throttle setting
	Damaged oil lines	Replace damaged lines
	Excessive oil flow over relief valve from poor operating techniques	Learn smoother operating techniques
	Plugged or bent oil cooler fins	Clean and/or straighten oil cooler
	Control valve tie bolts loose (if equipped	Torque bolts sequentially-50, 70, 90 in/lb.
	Damaged O-rings between valve sections	Replace O-rings between valve sections
EXTERNAL LEAKAGE	Damaged O-rings on valve spool	Repair control valve
EXTERNAL LEARAGE	Cylinder seals damaged	Repair cylinder
0	Damaged O-rings on valve drop check	Repair control valve
	Broken oil lines	Replace defective hoses and check for leaks
CYLINDER	Oil leaking past seals	Replace seals
MALFUNCTIONING	Faulty relief valve	Clean or replace valve
	Dirty valve	Clean valve
CONTROL VALVE	Scored bore or bent spool	Replace valve section
STICKING OR WORKING	Control linkage misaligned (if equipped)	Correct misalignment—tighten sequentially:50, 70, in./lb
HARD	Return spring broken or binding	Replace spring
	Foreign matter in spool bore	Clean bore

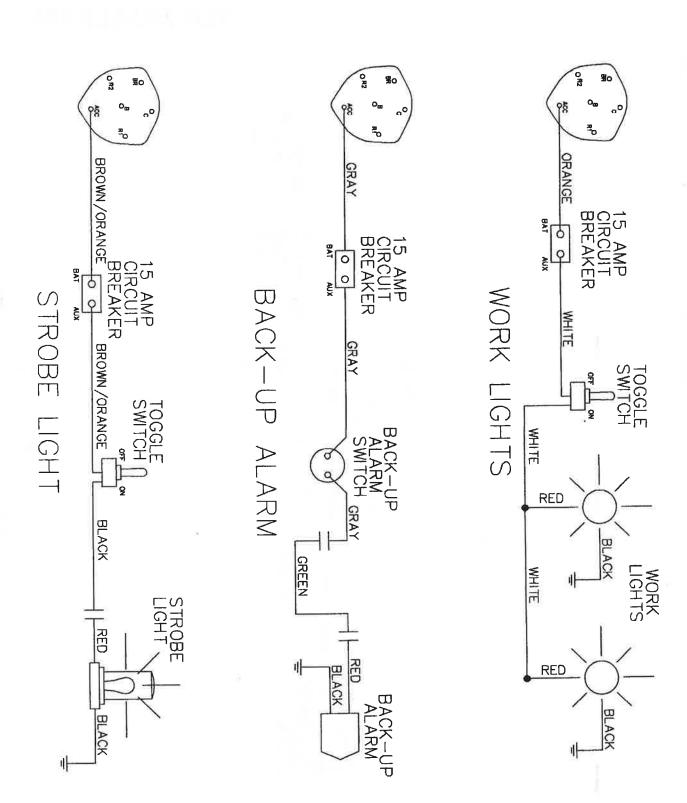
KUBOTA HYDRAULIC SCHEMATIC

TLB 20D-TLB 25D



WIRING SCHEMATIC FOR OPTIONAL EQUIPMENT

TLB 20D-TLB 25D



SERVICE INFORMATION

The following information has been provided to assist in making minor adjustments that are part of the routine maintenance of the **CONTRACTOR**. To remain a safe and trouble free machine, it is recommended to check the following points on a regular basis.

FORWARD/REVERSE PEDAL ADJUSTMENT

- Remove the floor plate and raise the back wheels of the tractor off of the ground.
 NOTE: The outriggers of the backhoe may be used to raise the rear of the tractor off of the ground. Place support stands under the tractor frame for added safety in the event a hydraulic hose were to break, allowing the tractor to possibly drop to the ground.
- 2. Locate the center bearing adjustment plate (30) on the hydrostatic transmission manual control. Using a 1/2" open/box end wrench, loosen the two 5/16-24 NF nylon insert nuts (29) retaining the center bearing plate to the center bearing mount plate weldment. Loosen the jam nut (4) on the adjusting bolt (3) at the top of the center bearing adjustment plate. Screw the adjusting bolt, in to stop forward creep and out to stop reverse creep, to pivot the top of the plate until the "creeping" of the drive wheels has stopped. Tighten the jam nut of the adjusting bolt. NOTE: Use extra caution, while making the adjustments, not to touch any hot surface, due to fact that the engine must be running while making these adjustments.*
- 3. Make certain that the two 5/16-24 NF nylon insert nuts (29) are tight after making any adjustments. The action of the center bearing against the cam of the adjusting plate can cause the center bearing adjustment plate to slide, causing the tractor to "creep" when in the neutral position. Always set the park brake when the operator leaves the drivers seat.
- 4. Re-install the floor plate and lower the tractor to the ground.

*Refer to the exploded view, **A-4A** on the following page, to get a better understanding of how the parts are assembled before attempting to make any adjustments. Space is limited in this area and knowing what to look for is quite helpful.

PARK BRAKE ADJUSTMENT

- 1. Remove the stop screw, on the side of the park brake handle end cap, and turn cap clockwise to increase the brake tension.
- 2. Replace the stop screw.

If adjustment of the park brake handle does not increase the brake tension, adjustment at the brake band actuator is required. The following information will describe how to adjust the park brake actuator.

- 1. Remove the floor plate and locate the park brake assembly between the differential and the Eaton hydraulic drive motor.
- 2. Using a 7/8" open end wrench, loosen the top lock nut on the brake cable assembly (9). Using your fingers, reach under the bracket and turn the lower lock nut towards the end of the cable one complete turn of the nut.
- 3. Tighten the top lock nut and check park brake tension. If tension is too tight, loosen the end cap on the park brake handle to fine tune to the desired amount of tension. If tension is too loose, rework step #2 until desired amount of tension is acquired.*
- 4. Replace floor plate.

*Refer to **the** exploded view **A-2A** on the following page for clarification. Helpful Hint: **Lengthening** the cable will **tighten** the park brake, **shortening** the cable will **loosen** the park brake.

ASSEMBLY PARTS AND ACCESSORIES

DECEMBER 1999



CONTRACTOR

TLB 25D

P.O. BOX 888 HOLDREGE, NE 68949

PHONE: 308/995-4495, 1-800/562-1373

ALLMAND FAX: 308/995-5887

ALLMAND PARTS FAX: 308/995-4883



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FRAME AND DIFFERENTIAL

MODEL TLB 20D-25D

A-1B

NO	REQ'D	PART NO	DESCRIPTION
1	4	**	9/16-12 NC X 1-1/4" GRADE 5 BOLT
2	4	**	9/16 SPLIT LOCK WASHER
3	1	920150	COMPLETE REAR AXLE ASSEMBLY (489:1)
		920146	(2) SHAFT ASSEMBLY COMPLETE
		920147	(1) SEAL PINION
4		920148	(10) WHEEL STUD
4 5 6	2	92T054	AXLE CUTOUT SUPPORT
6	12	**	1/2-13 NC X 1-1/4" GRADE 5 BOLT
7	12	**	1/2 SPLIT LOCK WASHER
8	16	**	1/2-13 NC HEX HEAD NUT
9	10	920295	1/2 - 20 90 DEGREE LUG NUT
NS	2	920415	REAR WHEEL ASSEMBLY
		920316	(2) REAR WHEEL 15 X 13
		920310	(2) TIRE SUPER TERRA GRIP 31-15.50-15
NS	2	920412	REAR WHEEL ASSEMBLY
		920316	(2) REAR WHEEL 15 X 13
		920305	(2) TIRE SOFTRAC 31-15.50-15

LEGEND: NS = Not Shown

PARK BRAKE ASSEMBLY PARTS

MODEL TLB 20D-25D

A-2B

NO	REQ'D	PART NO	DESCRIPTION
1	3	**	5/16 -18 NC KEPS NUT
2	1	92TO63	PARK BRAKE COVER
3	3	**	5/16 -18 NC NYLON INSERT NUT
4	1	920220	PARK BRAKE LEVER
5	6	**	3/8-16 NC NYLON INSERT NUT
6	3	**	5/16 -18 INC X 2 1/4 GRADE 5 BOLT
7	1	920221	BRAKE CONTROL ASSEMBLY
8	1	**	7/16 -14 NC X 5 GRADE 5 BOLT
9	4	044057	3/8-16 NC GRADE 8 NUT
10	1	92T045	DRIVE HUB COUPLER
11	4	046131	3/8-16 x 2" GRADE 8 BOLT
12	1	920223	6" BRAKE DRUM
13	2	92T092	PARK BRAKE SPACER
14	1	920222	BRAKE BAND ASSEMBLY
15	1	**	7/16 -14 NC NYLON INSERT NUT
16	1	92T064	BRAKE ACTUATOR WELDMENT
17	2	**	3/8 - 16 NC X 2 GRADE 5 BOLT
18	1	**	3/8 - 16 NC X 5 GRADE 8 BOLT
19	1	401256	1/4 - 28 NIF STRAIGHT GREASE ZERK
20	1	920150A	COMPANION FLANGE

LEGEND: NS = Not Shown

DRIVE MOTOR ASSEMBLY PARTS

MODEL TLB 20D-25D

A-2D

REQ'D	PART NO	DESCRIPTION
4	**	1/2 - 13 NC X 2 GRADE 8 BOLT
12	**	1/2 GRADE 8 FLAT WASHER
4	**	1/2 - 13 NC X 1 1/4 GRADE 5 BOLT
1	92TO37	CROSS MEMBER, HYDRAULIC MOTOR
4	**	1/2 SPLIT LOCK WASHER
4	**	1/2 - 13 NC HEX NUT
4	**	1/2 - 13 NC NYLON INSERT NUT
1	920321	4 BOLT HYDRAULIC MOTOR, CHAR-LYNN
	920338	HYDRAULIC MOTOR, ROSS ME15
		(after SN 0002T360022
		(See A-2E on next page for illustration)
	4 12 4 1 4	4 ** 12 ** 4 ** 1 92TO37 4 ** 4 ** 1 920321

LEGEND: NS = Not Shown

DRIVE MOTOR ASSEMBLY (FWA) PARTS

MODEL TLB 20D-25D

A-2F

NO	REQ'D	PART NO	DESCRIPTION
1	4	**	1/2 - 13 NC X 2 GRADE 8 BOLT
2	12	**	1/2 GRADE 8 FLAT WASHER
3	4	**	1/2 - 13 NC X 1 1/4 GRADE 5 BOLT
4	1	92T037	CROSS MEMBER, HYDRAULIC MOTOR
5	4	**	1/2 SPLIT LOCK WASHER
6	4	**	1/2 - 13 NC HEX NUT
7	4	**	1/2 - 13 NC NYLON INSERT NUT
8	1	920338	4 BOLT HYDRAULIC MOTOR, ROSS ME15
9	2	920674	STRAIGHT THREAD CONNECTOR, 12-10 F50X-S
10	1	920692	STRAIGHT THREAD ELBOW, 6 C50X-S

LEGEND: NS = Not Shown

TRACTOR SEAT AND OIL FILTER PARTS

MODEL TLB 20D-25D

A-3B

NO	REQ'D	PART NO	DESCRIPTION
1	1	DD-257	DECAL, CHANGE FILTER ELEMENT
2	1	920835	HYDRAULIC ADAPTER TEE 8R6X-S,
3	1	920821	ADAPTER STREET ELBOW 3/4 CD-S
4	1	920809	RETURN FILTER HEAD
5		920803	FIBER GLASS ELEMENT REPLACEMENT FILTER
		920335	FIBER GLASS ELEMENT REPLACEMENT FILTER
			(BEFORE S/N 9911T01)
6	1	920816	ADAPTER MALE CONNECTOR 8-12F50X-S
7	4	**	1/4 INTERNAL TOOTH LOCK WASHER
8	4	**	1/4 20 NC X 1/2 GRADE 5 BOLT
9	2	**	3/8 16 NC X 1 1/4 GRADE 5 BOLT
10	2	**	5/16 FLAT WASHER
11	2	**	3/8 16 NC NYLON INSERT NUT
12	4	**	5/16 18 NC KEPS NUT
13	1	92T196	SEAT MOUNT PLATE
14	8	**	1/4 FLAT WASHER
15	1	920245	TRACTOR SEAT W/ADJUSTERS
16	2	**	5/16" ACORN NUT

LEGEND: NS = Not Shown

FORWARD/REVERSE PEDAL ASSEMBLY PARTS

MODEL TLB 20D-25D

A-4B

NO	REQ'D	PART NO	DESCRIPTION
1	10	**	5/16 -18 NC KEPS NUT
2	2	**	5/16 -18 NC X 1 112 FULL THREAD PAN HEAD BOLT
3	8	**	5/16 -18 NC X 1 GRADE 5 BOLT
4	2	**	5/16 -18 NC NYLON INSERT NUT
5	1	92T087	RIGHT SIDE FOOT REST
6	1	920280	PEDAL PAD, LARGE
7	1	92T085	RIGHT FOOT PEDAL
8	1	920281	BRAKE PEDAL PAD, REAR
9	2	HD145	1/4 X 1 1/2 ROLL PIN
10	1	92T086	RIGHT FOOT PEDAL PIVOT SHAFT
11	2	92T055B	PEDAL BUSHING
12	1	92T055	RIGHT FOOT PEDAL MOUNT WELDMENT
13	1	HN065	3/4 X 16 PALNUT
14	1	92T160	RIGHT FOOT PEDAL F/R LINKAGE ARM
15	1	920430	NEUTRAL SAFETY SWITCH
16	1	401256	1/4 - 28 NF STRAIGHT GREASE ZERK
17	2	**	POP RIVET
18	1	920874	RIGHT SIDE STEP PEDAL PROTECTOR
19	2	**	1/4 - 20 X 1 TRUSS HEAD SCREW
20	2	**	1/4 - 20 KEPS NUT

LEGEND: NS = Not Shown

HYDROSTAT LINKAGE ASSEMBLY PARTS

MODEL TLB 20D-25D

A-4D

NO	REQ'D	PART NO	DESCRIPTION
1	1	92T070	CENTER BEARING PIVOT WELDMENT
2	1	HD045	5/32 X 1-1/2 COTTER PIN
3	1	92T055B	BUSHING
4	2	712572	OFFSET YOKE, 3/8 - 24 NF (AFTER SN 9707T23)
		**	5/16 SPLIT LOCKWASHER (BEFORE SN 9707T23)
5	2	HN080	3/8-16 NC TOP LOCK NUT (AFTER SN 9707T23)
		**	5/16 -24 NF HEX NUT (BEFORE SN 9707T23)
6	2	**	3/8 SAE FLAT WASHER (AFTER SN 9707T23)
7	1	921168	LINKAGE ARM, HYDROSTAT, SQUARE BUSHING
8	1	920218	CAM FOLLOWER
9	1	401257	1/4 - 28 NF 90* GREASE ZERK
10	1	92T069	CENTER BEARING MOUNT PLATE WELDMENT
11	1	**	5/8 SPLIT LOCKWASHER
12	1	**	5/8 -18 NF HEX NUT
13	2	**	5/16 -24 NF NYLON INSERT NUT
14	2	**	5/16 FLAT WASHER
15	2	**	5/16 - 18 NC HEX NUT
16	1	**	5/16 - 18 NC x 1" GRADE 5 BOLT
17	2	**	3/8 -16 NC x 2" GRADE 8 BOLT (AFTER SN 9707T23)
		920174	SPHERICAL ROD END - RIGHT HAND (BEFORE SN 9707T23)
18	2	**	3/8 - 24 NF HEX NUT (AFTER SN 9707T23)
19	1	92T155	3/8 LINK ROD (AFTER 9707T23)
		92T082	LINK ROD (BEFORE 9707T23)
20	2	**	3/8 - 16 NC x 2" GRADE 5 BOLT (AFTER SN 9706T19)
21	2	**	3/8 SPLIT LOCKWASHER
22	2	**	5/16 HARDENED STEEL FLAT WASHER (AFTER SN 9706T1
23	1	92T160	RIGHT FOOT PEDAL F/R LINKAGE ARM
24	1	**	5/16 - 18 NC NYLON INSERT NUT
25	1	HD068	5/16 - 18 NC x 3" EYE BOLT
26	1	920237	SPRING, PEDAL RETURN
27	1	**	5/16 - 24 NF HEX NUT
28	1	92T048	CENTER BEARING PLATE

LEGEND: NS = Not Shown

FRAME RAIL AND ENGINE MOUNTS PARTS LIST

MODEL TLB 20D-25D

A-5B

NO	REQ'D	PART NO	DESCRIPTION
1	1	92T065	KUBOTA ENGINE FRAME RIGHT MOUNT
2	1	92T030	KUBOTA ENGINE FRAME LEFT MOUNT
3	1	92T088	SKID PLATE
4	1	92T003A	LEFT FRAME RAIL
5	1	92T0031	RIGHT FRAME RAIL
6	4	**	5/16-18 NC x 1-1/4 GRADE 5 BOLT
7	4	**	5/16-18 NC NYLON INSERT NUT
8	8	**	3~8-16 NC x 1-1/4 GRADE 5 BOLT
9	8	**	38FLAT WASHER
10	12	**	3/8-16 NC NYLON INSERT NUT
11	2	920021	TIE DOWN HOOK
12	4	**	3/8 - 16 NC X 1 CARRIAGE BOLT

LEGEND: NS = Not Shown

ORBITROL/LOADER VALVE MOUNT PARTS

MODEL TLB 20D-25D

A-6B

NO	REQ'D	PART NO	DESCRIPTION
1	4	**	3/8 - 16 NC TOP-LOCK LOCK NUT
2	4	**	5/16 FLAT WASHER
3	1	92T111	VALVE MOUNTING PLATE
4	2	92T112	VALVE MOUNTING PLATE SPACER
5	1	920157	STEERING COLUMN - 11"
6	4	**	3/8 SPLIT LOCK WASHER
7	4	**	3/8 - 16 NC X 1 1/2 GRADE 5 BOLT
8	1	920322	BREATHER CAP
9	2	92T113	VALVE MOUNTING U-BOLT
10	1	920155	STEERING ORBITAL 4.23 CID

LEGEND: NS = Not Shown

LOADER VALVE / HANDLE ASSEMBLY PARTS

MODEL TLB 20D-25D

A-6D

NO	REQ'D	PART NO	DESCRIPTION
1	3	**	1/4 - 28 NF X 3/4 GRADE 5 BOLT
2	3	**	1/4 SPLIT LOCK WASHER
3	3	**	1/4 FLAT WASHER
4	3	920176	FEMALE ROD END
5	5	**	1/4 - 28 NF HEX NUT
6	1	**	1/4 - 28 X 2 SOCKET HEAD CAP SCREW
7	1	**	1/4 - 28 NF NYLON INSERT HEX NUT
8	1	921023	PIVOT BLOCK LOADER VALVE
9	2	**	1/4 - 20 NC KEPS NUT
10	1	920329	EATON VALVE 2-SPOOL
11	2	048009	1/4 - 28 X 1-1/4 SOCKET HEAD CAP SCREW
12	1	92T111	VALVE MOUNTING PLATE
13	1	921022	ROD END BUSHING
14	1	**	1/4 - 28 X 1 SOCKET HEAD CAP SCREW
15	2	**	1/4 - 20 NC X 2 GRADE 5 BOLT
16	1	921020	LOADER VALVE JOYSTICK

LEGEND: NS = Not Shown

FRONT AXLE INSTALLATION PARTS

MODEL TLB 20D-25D

A-7B

NO	REQ'D	PART NO	DESCRIPTION
1	1	HN075	1 3/4 - 12 HEX JAM NUT
2	1	92T152	FRONT AXLE NUT PLATE
3	1	92T100	AXLE PIVOT BOLT BRACKET WELDMENT
4	1	920243	FRONT AXLE ASSEMBLY
5	2	**	5/16 FLAT WASHER
6	2	**	5/16 SPLIT LOCK WASHER
7	2	**	5/16 - 18 NC X 1 GRADE 5 BOLT
8	AR	FW063	1 3/4 I.D. X 2 1/4 O.D. MACHINE BUSHING 18 GA.
	AR	FW064	1 3/4 I.D. X 2 1/4 O.D. MACHINE BUSHING 14 GA.
	AR	FW065	1 3/4 I.D. X 2 1/4 O.D. MACHINE BUSHING 10 GA.
9	1	92TO02	PIVOT BOLT ASSEMBLY
10	5	401259	1/4 - 28 STRAIGHTGREASE ZERK

LEGEND: NS = Not Shown

FRONT AXLE ASSEMBLY PARTS

MODEL TLB 20D-25D

A-7D

NO	REQ'D	PART NO	DESCRIPTION
1	1	920203	FRONT AXLE ASSEMBLY 7/96
2	1	92T105	SHORT SPINDLE WELDMENT, RIGHT
3	2	920230	THRUST WASHER
4	4	920340	BUSHING, 1 3/4 X 1 1/2 LONG
5	4	401257	1/4 - 28 90° GREASE ZERK
6	2	92T104	SPINDLE SLEEVE CAP
7	2	**	3/8 - 16 NC X 1 GRADE 8 BOLT
8	2	**	3/8 SPLIT LOCK WASHER
9	2	**	1/2 - 13 NC NYLON INSERT NUT
10	2	**	1/2 - 13 NC X 1 1/4 GRADE 8 BOLT
11	1	920750	STEERING CYLINDER 1:10 TAPER
12	2	920217	INNER SEAL -162289 (RIGHT SIDE NOT SHOWN)
13	2	920212	INNER BEARING -JL69349 (RIGHT SIDE NOT SHOWN)
14	2	920215	INNER BEARING RACE (RIGHT SIDE NOT SHOWN)
15	2	920214	HUB W/RACES INSTALLED (RIGHT SIDE NOT SHOWN)
16	12	920202	STUD BOLT (ONLY ONE SHOWN)
17	2	920216	OUTER BEARING RACE (RIGHT SIDE NOT SHOWN)
18	2	920213	OUTER BEARING -LM67048 (RIGHT SIDE NOT SHOWN)
19	2	920208	7/8 WASHER (RIGHT SIDE NOT SHOWN)
20	2	920207	7/8 HEX CASTLE NUT (RIGHT SIDE NOT SHOWN)
21	2	920206	COTTER PIN (RIGHT SIDE NOT SHOWN)
22	2	920205	GREASE CAP (RIGHT SIDE NOT SHOWN)
23	4	FW028	1/2 USS HARDENED LOCK WASHER
24	4	**	3/32 X 3/4 COTTER PIN
25	4	**	7/16 - 20 NF HEX CASTLE NUT
26	4	920291	TIE ROD END (LARGE)
27	4	MFO85	14mm X 1.5 JAM NUT
28	2	92T103	TIE ROD STUD 14mm X 82.5
29	1	92T102	SHORT SPINDLE SLEEVE WELDMENT, LEFT
NS	2	920419	FRONT WHEELASSEMBLY TERRAIN
		920319	(2) WHEEL 12 X 7 - 6 BOLT
		920313	(2) TIRE 23 X 8.5 - 12" SURE GRIP
NS	2	920416	FRONT WHEEL ASSEMBLY (OPTIONAL) includes (2) TITAN NHS MULTITRACK G/S 23.0 X 10.5-12
NS		92T047K	STEERING CYLINDER KIT

LEGEND: NS = Not Shown

FRONT AXLE ASSEMBLY (FWA) PARTS

MODEL TLB 20D-25D

NO	REQ'D	PART NO	DESCRIPTION	A-7F
1	1	920239	FRONT AXLE ASSEMBLY, FWD	
2	2	**	1/2-13 NC NYLON INSERT NUT	
3	2	**	1/2-13 NC x 1-1/4 GRADE 8 BOLT	
4	1	920750	STEERING CYLINDER 1:10 TAPER	
5	4	920291	TIE ROD END (LARGE)	
6	4	MF085	14mm X 1.5 JAM NUT	
7	4	921013	TIE ROD STUD	
8	4	FW028	1/2 USS HARDENED LOCKWASHER	
9	4	**	7/16-20 NF HEX CASTLE NUT	
10	4	**	3/32 X 3/4 COTTER PIN	
11	2	320076	ADAPTER 3/8 ORM - 3/8 JIC MALE 6F50X-S	

LEGEND: NS = Not Shown

** = Purchase locally

NO	REQ'D	PART NO	DESCRIPTION
1	1	923228	AXLE ALLMAND BROS. WELDMENT
2	1	923229	SPINDLE ASSEMBLY RH ALLMAND BROS.
3	1	923230	SPINDLE ASSEMBLY LH ALLMAND BROS.
4	2	**	HHCS G5P 1/4-20 X 3-3/4
	2	**	WASHER, FLAT 1/4 USS PLTD
	2	**	WASHER, LOCK 1/4 PLTD
	2	**	NUT HEX 1/4-20 PLTD
5	2	923231	BRACKET HOSE LOOP
6	2	923232	CAP, SPINDLE
7	4	923233	BUSHING, CAST BRONZE
8	2	923234	SHIM, SPINDLE
9	2	923235	MOTOR, WHEEL CHARLYNN
10	2	923236	HUB, CAST 5 ON 4.5-2000 CHARLYNN
	10	**	BOLT, WHEEL 1/2-20 X 1-1/4 90D
11	8	**	HHCS G5P 1/2-13 X 1-3/4
	8	**	WASHER, LOCK 1/2 PLTD
12	2	923237	SNAP RING, EXTERNAL
13	3	923238	ZERK, GREASE STRAIGHT 1/4-28
14	1	923239	MOD-BUSHING SOLID BRONZE
15	1	921243	BUSHING, TIE ROD END

LEGEND: NS = Not Shown

FRONT AXLE INSTALLATION (FWA) PARTS

MODEL TLB 20D-25D

A-7H

NO	REQ'D	PART NO	DESCRIPTION
1	1	HN075	1 3/4 - 12 HEX JAM NUT
2	1	92T152	FRONT AXLE NUT PLATE
3	1	92T100	AXLE PIVOT BOLT BRACKET WELDMENT
4	1	920239	FRONT AXLE ASSEMBLY, FWD
5	2	**	5/16 FLAT WASHER
6	2	**	5/16 SPLIT LOCK WASHER
7	2	**	5/16 - 18 NC X 1 GRADE 5 BOLT
8	AR	FW063	1 3/4 I.D. X 2 1/4 O.D. MACHINE BUSHING 18 GA.
	AR	FW064	1 3/4 I.D. X 2 1/4 O.D. MACHINE BUSHING 14 GA.
	AR	FW065	1 3/4 I.D. X 2 1/4 O.D. MACHINE BUSHING 10 GA.
9	1	92TO02	PIVOT BOLT ASSEMBLY
10	5	401257	1/4 - 28 90° GREASE ZERK

LEGEND: NS = Not Shown

BATTERY TRAY AND FITTINGS PARTS

MODEL TLB 20D-25D

A-8B

NO	REQ'D	PART NO	DESCRIPTION
1	2	920677	ADAPTER MALE ELBOW 4-4CTX-S
2	1	920663	HYDRAULIC ADAPTER
3	. 4	920669	HYDRAULIC BULKHEAD ADAPTER, 90°
4	1	920666	HYDRAULIC ADAPTER
5	1	BC025	POSITIVE BATTERY CABLE, 46"
6	2	**	5/16-18 NC. NYLON INSERT NUT
7	2	**	5/16 FLAT WASHER
8	1	340017	NYLON BATTERY HOLD DOWN
9	2	433507	5/16 x 11" J-BOLT
10	1	713197	NEGATIVE BATTERY CABLE, 9-1/2"
11	1	**	12 VOLT BATTERY
12	3	**	3/8-16 NC x 1" GRADE 5 BOLT
13	1	92T014	BATTERY TRAY
14	2	**	5/16-18 NC x 1" GRADE 5 BOLT
15	1	**	5/16 INTERNAL TOOTH LOCKWASHER
16	3	**	3/8-16 NC KEPS NUT
17	2	**	5/19-18 NC KEPS NUT

LEGEND: NS = Not Shown

ENGINE / EXHAUST / HYDROSTAT PARTS

MODEL TLB 20D-25D

A-9B

NO	REQ'D	PART NO	DESCRIPTION
1	- 1	920540	KUBOTA 20HP DIESEL ENGINE
	1	920539	KUBOTA 25HP DIESEL ENGINE
2	4	**	5/16-18 NC KEPS NUT
3	1	**	1/4-20 NC KEPS NUT
4	1	92T078	KUBOTA ENGINE THROTTLE LINKAGE ARM
5	1	**	5/16-18 NC x 3/4 GRADE 5 BOLT
6	1	**	1/4-20 INC x 3/4 GRADE 5 BOLT
7	1	92T067	LONG ENGINE MNT RH (SN 9703T03 TO PRESENT)
NS		92T141	SHORT ENGINE MNT RH (SN 9701T02 TO 9703T03)
8	2	**	5/16-18 NC x 1-1/4 GRADE 5 BOLT
9	2	**	1/4 FLAT WASHER
10	1	920745	SPIN-ON FUEL FILTER (SN 9703T03 TO PRESENT)
NS		650138	IN-LINE FUEL FILTER (SN 9701T02 TO 9703T03)
11	16	**	M10 x 1.125 x 30 mm GRADE 8.8 BOLT
12	16	**	3/8 FLAT WASHER (AFTER 9/16/97)
13	1	92T076	KUBOTA ENGINE THROTTLE CABLE BRACE
14	1		M10 x 1.125 x 20mm GRADE 8.8 BOLT
15	1	92T046	KUBOTA ENGINE MOUNT LEFT
16	1	920555	BELL HOUSING SET
		920556	135mm FLYWHEEL NYLON FLANGE
		920557	M-42 STEEL HUB SAE "B" 13 TOOTH SPLINE
17	2	**	5/16 FLAT WASHER
18	2	**	3/8 INTERNAL TOOTH LOCKWASHER
19	2	**	3/8-16 NC x 1-3/4 GRADE 5 BOLT
20	1	920262	HYDROSTAT PUMP ASSEMBLY
		920267	(1) HYDROSTAT ONLY
		920264	(1) GEAR PUMP
21	1	92T070	CENTER PIVOT BEARING WELDMENT
NS	1	H0018	5/16 FUEL LINE, 22"
NS	1 °	H0018	5/16 FUEL LINE, 16"
NS	1	H0018	5/16 FUEL LINE, 72"
NS	1	H0005	5/16 RETURN LINE, 72"

LEGEND: NS = Not Shown

HYDROSTAT AND FITTINGS PARTS

MODEL TLB 20D-25D

A-9D

NO	REQ'D	PART NO	DESCRIPTION
1	1	920680	STRAIGHT THREAD ELBOW, 12-8 C50X-S
2	1	920682	ADAPTER, STRAIGHT THREAD, 12 F50X-S
3	1	920665	ADAPTER, MALE CONNECTOR, 6-8 F50X-S
4	1	920831	ADAPTER, ELBOW CONNECTOR, 8-10 C50X-S
5	1	920683	STRAIGHT THREAD CONNECTOR, 16 F50X-S
6	1	920679	STRAIGHT THREAD ELBOW, 12 C50X-S
7	1	920678	STRAIGHT THREAD CONNECTOR, 4-6 F50X-S

LEGEND: NS = Not Shown

KUBOTA ENGINE, FRAME AND MUFFLER PARTS

MODEL TLB 20D-25D

A-10B

NO	REQ'D	PART NO	DESCRIPTION
1	4		3/8-16 NC x 2-3/4 GRADE 5 BOLT
2	4		3/8 FLAT WASHER
3	8	640565	ENGINE MOUNT WASHER
4	4	640500	ENGINE SHOCK MOUNT
5	4		3/8-16 NC NYLON INSERT NUT
6	4		5/16 SPLIT LOCKWASHER
7	4		M8 X 1.25 X 20mm GRADE 8.8 BOLT
8	1	92T079	KUBOTA ENGINE MUFFLER HEAT SHIELD
9	4		1/4 FLAT WASHER
10	4		1/4-20 NC x 3/4 GRADE 5 BOLT
11	1	920550	KUBOTA MUFFLER

LEGEND: NS = Not Shown

DRIVE MOTOR HYDRAULIC HOSE PARTS

MODEL TLB 20D-25D

A-11B

NO	REQ'D	PART NO	DESCRIPTION
1	1	920675	STRAIGHT THREAD ELBOW 12-10 C50X-S
2	1	920724	HOSE ASSEMBLY 3/4 X 16.5"
			12FJX90M - 12FJX90M - 255°
3	1	920682	ADAPTER STRAIGHT THREAD 12F50X-S
4	1	920679	STRAIGHT THREAD ELBOW 12 C50X-S
5	1	920717	HOSE ASSEMBLY 3/4 X 16"
			12C12M-12FJX-12FJX90S- 16
6	1	920674	STRAIGHT THREAD CONNECTOR 12-10 F50X-S

LEGEND: NS = Not Shown

HYDROSTAT HOSE ROUTING ASSEMBLY PARTS

MODEL TLB 20D-25D

A-11D

NO	REQ'D	PART NO	DESCRIPTION
1	1	920722	HOSE ASSEMBLY 3/4 X 26 16MP - 12FJX
2	1	920680	STRAIGHT THREAD ELBOW 12-8 C50X-S
3	1	920728	HOSE ASSEMBLY 1 X 23
			16MP - 16FJX90M
4	1	920683	STRAIGHT THREAD CONNECTOR 16 F50X-S
5	2	920325	FLOW EZY SUMP STRAINER
6	1	920677	ADAPTER MALE ELBOW 4-4CTX-S
7	1	H0015	1/4" FUEL LINE, YELLOW, 16-1/2"
8	1	920678	STRAIGHT THREAD CONNECTOR 4-6 F50X-S

LEGEND: NS = Not Shown

STEERING HYDRAULIC ASSEMBLY PARTS

MODEL TLB 20D-25D

A-11F

NO	REQ'D	PART NO	DESCRIPTION
1	1	920618	HOSE ASSEMBLY 3/8 X 74
			6FJX90L - 6FJX45M - 180°
2	1	920617	HOSE ASSEMBLY 3/8 X 62-1/2
			6FJX90S - 6FJX45M - 270°
3	1	920725	HOSE ASSEMBLY 3/8 X 31
			6FJX90S - 6FJX90S - 330°
4	1	920619	HOSE ASSEMBLY 3/8 X 20-1/2
			6FJX - 6FJX90S - 25°
5	1	920666	ADAPTER MALE CONNECTOR 6-8 FTX-S
6	1	920665	ADAPTER MALE CONNECTOR 6-8 F50X-S
7	6	320076	ADAPTER 3/8 ORM - 3/8 JIC MALE 6F50X-S

LEGEND: NS = Not Shown

COOLER/LOADER VALVE HYDRAULIC PARTS

MODEL TLB 20D-25D

A-11H

NO	REQ'D	PART NO	DESCRIPTION
1	2	920608	ADAPTER OIL COOLER
2	4	920669	BULKHEAD 900 6WETX - WLN - S
3	1	920691	HOSE ASSEMBLY 1/2 X 22 8FJX - 8FJK
4	1	920678	ADAPTER MALE CONNECTOR 6-8 F50X-S (REPLACES 920665)
5	1	920690	HOSE ASSEMBLY 3/8 X 25 1/2 8FJX - 8FJX
6	2	920686	HOSE ASSEMBLY 3/8 X 30" 6FJX - 6FJX90S
7	1	920606	HOSE ASSEMBLY 5/8 X 92" 10FJX - 10FJX90S
8	2	920663	ADAPTER MALE CONNECTOR 10 - 12 FTX-S
9	1	920692	ADAPTER 90° 6C50X-S
10	3	320076	ADAPTER 3/8 ORM - 3/8 JIC MALE 6 F50X-S
11	2	920698	ADAPTER 8F50X-S
12	1	920893	ADAPTER MALE CONNECTOR, 8-10 C50X-S (REPLACES 920818)
13	1	920607	HOSE ASSEMBLY 5/8 X 49 1/2 10FJX90S - 10FJX
14	1	920688	HOSE ASSEMBLY 3/8 X 28" 6FJX - 6FJX90S
15	1	920689	HOSE ASSEMBLY 1/2 X 47" 8FJX - 8FJX45M
16	1	920684	HOSE ASSEMBLY 1/2 X 84" 8FJX - 8FJX
17	1	920646	HOSE ASSEMBLY 1/2 X 56" 8FJX - 8FJX
18	1	920671	ADAPTER MALE RUN TEE 8-8-8 RTX-S
19	1	920664	ADAPTER PIPE THREAD REDUCER 3/4 - 1/2 PTR-S
20	1	920670	ADAPTER STREET ELBOW 3/4 CD-S

LEGEND: NS = Not Shown

DRIVE MOTOR HYDRAULIC ASSEMBLY PARTS

MODEL TLB 20D-25D

A-11J

NO	REQ'D	PART NO	DESCRIPTION
1	1	920718	HOSE ASSEMBLY 3/4 X 23" 12FJX - 12FJX90L
2	1	920717	HOSE ASSEMBLY 3/4 X 16" 12FJX90S - 12FJX
		920723	HOSE FOR EATON DRIVE MOTOR (BEFORE SN 0002T360022)
3	1	920716	HOSE ASSEMBLY 3/8 X 17" 6FJX - 6FJX
		920724	HOSE FOR EATON DRIVE MOTOR (BEFORE SN 0002T360022)
4	1	920719	HOSE ASSEMBLY 3/8 X 72" 8FJX - 8FJX90S
5	1	920715	HOSE ASSEMBLY 3/8 X 60" 8FJX - 8FJX
6	4		HOSE ASSEMBLY, SUPPLIED BY VENDOR
7	2	BF100	TUBE END NUT
8	2	BF099	TUBE END REDUCER, 12-8TRTX
9	2	920782	SWIVEL NUT RUN TEE, 12R6X

LEGEND: NS = Not Shown

NOSE ASSEMBLY PARTS

MODEL TLB 20D-25D

A-12B

NO	REQ'D	PART NO	DESCRIPTION
1	1	92T126	NOSE
2	4	044003	#8-32 NC KEPS NUT
3	2	920234	SOUTHCO SOFT LATCH
4	4	041013	#8-32 NC x 1/2 SCREW
5	12	047015	3/8 FLAT WASHER
6	6	046120	3/8-16 NC x 1 1/2 GRADE 5 BOLT
7	4	041050	1/4-20 NC x 3/4 SCREW
8	9	044036	3/8-16 KEPS NUT
9	1	92T062	ROCK GUARD
10	4	053028	3/8-16 NC x 1 GRADE 5 CARRIAGE BOLT
11	2	920020	TIE DOWN HOOK
12	2	030051	TRIM LOK 4 1/2"
13	1	92T147	RADIATOR/HOOD BRACE (SN 9703T23 TO PRESENT)
NS		92T133	RADIATOR/HOOD BRACE (SN 9701T02TO 9703T23)
14	4	044018	1/4-20 NC NYLON INSERT NUT
15	4	047005	1/4 FLAT WASHER
16	1	920472	COOLAND OVERFLOW TANK
17	1	030053	TRIM LOC 26" (SN 9704T13 TO PRESENT)
NS		030052	TRIM LOC END BEAD 28" (SN 9701T02 TO 9704T13)
18	1	081025	AIR CLEANER INTAKE HOSE 28"

LEGEND: NS = Not Shown

RADIATOR AND AIR CLEANER PARTS

MODEL TLB 20D-25D

A-12D

NC	REQ'D	PART NO	DESCRIPTION
1	1	920551A	RADIATOR (SN 9703T23 TO PRESENT)
N:	S 1	920551	RADIATOR, TLB (SN 9701T02 TO 9703T03)
2	4	**	5/16-18 NC x 1-1/4 GRADE 5 BOLT
3	8	**	5/16 FLAT WASHER
4	2	WP051	TRIM LOK, 6"
5	8	**	5/16 - 18 NC KEPS NUT
6	1	92T147	RADIATOR / HOOD BRACE SN 9703T23 TO PRESENT)
N.	S	92T133	RADIATOR / HOOD BRACE RN 9701T02 TO SN 9703T03)
7	1	WP053	TRIM LOK, 28" (SN 9703T23 TO PRESENT)
N:	S	WP052	TRIM LOK, END BEAD, 28" (SN 9701T02 TO 9704T13)
8	1	H0025	2" VENT HOSE, 28"
9	1	640273	AIR INTAKE HOSE
10	3	HD038	#32 HOSE CLAMP
11	1 1	340034	AIR CLEANER
12	2 2	340038	AIR CLEANER BAND
13	3 4	**	3/8-16 NC NYLON INSERT NUT
14	4	**	3/8 FLAT WASHER
18	5 4	**	3/8-16 NC x 1-1/4 GRADE 5 BOLT
16	6 4	**	5/16-18 NC x 3/4 GRADE 5 BOLT
17	7 1	92T145	AIR CLEANER MOUNT (SN 9703T23 TO PRESENT)
18	3 1	DD 310	DECAL (AIR CLEANER SERVICE)

LEGEND: NS = Not Shown

HOOD/INSTRUMENT PANEL PARTS

MODEL TLB 20D-25D

A-13B

NO	REQ'D	PART NO	DESCRIPTION
1	4	**	#6 - 32 NC KEPS NUT
2	4	**	#6 - 32 NC X 3/8 SCREW
3	2	920234	SOUTHCO SOFT LATCH
4	2	**	5/16 - 18 NC ACORN NUT
5	1	920293	FIBERGLASS HOOD
6	4	330437	BALL STUD
7	2	920231	GAS SPRING, 35 LB (SN 9704TO7 TO PRESENT)
NS	2	920229	GAS SPRING, 30 LB (SN 9701TO1 TO SN 9704TO7)
8	2	**	5/16 -18 NC KEPS NUT
9	5	**	#10 -24 NC X 1/2 SCREW
10	1	92T138	HOOD HINGE STAINLESS STEEL
11	2	**	1/4 - 20 NC X 3/4 SCREW
12	1	92T135	INSTRUMENT PANEL (PANEL ONLY)
13	4	**	#10 - 24 NC NYLON INSERT NUT
14	5	**	#10 - 24 NC KEPS NUT
15	2	**	1/4 - 20 NC KEPS NUT
16	4	**	#10 - 24 NC X 3/4 SCREW

LEGEND: NS = Not Shown

INSTRUMENT PANEL ASSEMBLY PARTS

MODEL TLB 20D-25D

A-13D

NO	REQ'D	PART NO	DESCRIPTION
1	1	92T135	INSTRUMENT PANEL (PANEL ONLY)
2	8	**	1/4 - 20 NC X 3/4 SCRÈW
3	1	340014	HOUR METER
4	1	920462	OIL PRESSURE/ WATER TEMP/ BATTERY GAGE
5	1	@@@	GLOW PLUG LIGHT
6	4	***	#10 - 24 NC X 3/4 SCREW
7	1	920463	THROTTLE CABLE LEVER
8	2	HD216	TINNERMAN FASTENER
9	1	92T073	THROTTLE CONTROL MOUNT BRACKET
10	1	340009	SPST TOGGLE SWITCH (W/ WORK LIGHTS)
11	4	***	#10 - 24 NC NYLON INSERT NUT
12	1	640163	CIRCUIT BREAKER MOUNTING BRACKET
13	6	***	1/4 - 20 NC KEPS NUT
14	1	620087	30 AMP CIRCUIT BREAKER
15	1	920441	15 AMP CIRCUIT BREAKER (W/ WORK LIGHTS)
16	1	920475	KEY SWITCH W/ 2 KEYS
17	1	920474	IGNITION KEY (EXTRA)
18	4	***	5/16 -18 NC X 3/4 SELF-TAPPING SCREW
19	1	92T101	STEERING COLUMN COVER PANEL
NS	1	920465	KUBOTA WIRING HARNESS
NS	3	***	5/8 CUSHION CLAMP
20	4	***	#10-24 NC x 1/2 SCREW
21	4	***	#10 FLAT WASHER
22	1	920010	PLASTIC MANUAL BOX
23	1	920008	1/2 SCALE OPERATOR'S MANUAL
NS	1	920007	OPERATOR'S AND PARTS MANUAL
NS	36"	WP053	TRIM LOCK (ON LOWER EDGE OF INSTRUMENT PANEL)

LEGEND: NS = Not Shown

** = Purchase locally

@@@= See Kubota Dealer

ROPS KIT ASSEMBLY PARTS

MODEL TLB 20D-25D

A-14B

NO	REQ'D	PART NO	DESCRIPTION
1	1	92T011	ROPS KIT
			(1) FRONT POST ASSEMBLY
			(1) REAR POST ASSEMBLY
2	1	920122A	2" LAP BELT KIT
3	1	711028	7/8 O.D. x 9/16 I.D. RUBBER GROMMET
4	2	**	7/16 FLAT WASHER
5	2	**	7/16 - 20 NF NYLON INSERT NUT
6	2	**	7/17 - 20 NF x 1 GRADE 5 BOLT
7	1	92T213	TLB LIGHT BRACKET (OPTIONAL)
8	2	920445	TRACTOR IMPLEMENT LIGHT (OPTIONAL)
NS		920123A	3" LAP BELT KIT (OPTIONAL)
NS	1	920427	LIGHT PLATE, 16/3 WIRE HARNESS

IN THE EVENT OF A ROLL OVER OR R.O.P.S. DAMAGE, THE COMPLETE R.O.P.S. SHOULD BE REPLACED INCLUDING THE HARDWARE.

IF INDIVIDUAL HARDWARE COMPONENTS NEED TO BE REPLACED, THEY CAN BE SOURCED LOCALLY PROVIDING THEY ARE EQUIVALENT SIZE AND GRADE.

UNDER NO CIRCUMSTANCES SHOULD THE R.O.P.S. EVER BE MODIFIED OR ALTERED. IF THIS HAPPENS, CERTIFICATION WILL BE VOID.

LEGEND: NS = Not Shown

BACKUP, STROBE AND WORKLIGHT PARTS

MODEL TLB 20D-25D

A-14D

NO	REQ'D	PART NO	DESCRIPTION
1	2	920445	TRACTOR IMPLEMENT LIGHT KIT
2	2	**	1/2-13 NC HEX NUT
3	2	**	1/2 SPLIT LOCKWASHER
4	2	**	1/2 FLAT WASHER
5	2	**	1/2-13 NC x 3 1 /4 GRADE 5 BOLT
6	1	711028	RUBBER GROMMET 7/8 O.D. x 9/16 LD,
7	1	920432	BACK-UP ALARM
8	2	**	1/4-20 NC x 3/4 GRADE 5 BOLT
9	2	**	1/4-20 NC KEPS NUT
10	1	920442	STROBE LIGHT, 12 VOLT
11	2	**	#10-24 NC x 3/4 SCREW
12	2	**	#10-24 NC KEPS NUT
13	1	92T097	LIGHT MOUNTING BRACKET
NS	1	920427	LIGHT PLATE WIRING HARNESS
NS		920476	WORK LIGHT UPDATE KIT
NS		920477	BACK-UP ALARM UPDATE KIT
NS		920478	STROBE LIGHT UPDATE KIT

LEGEND: NS = Not Shown

OPTIONAL BACKUP ALARM SWITCH PARTS

MODEL TLB 20D-25D

A-14F

NO	REQ'D	PART NO	DESCRIPTION
1	1	920431	BACK-UP ALARM SWITCH
2	1	HN065	3/4 x 16 PALNUT
3	1	92T055	RIGHT FOOT PEDAL MOUNT WELDMENT
4	4	**	5/16-18 NC KEPS NUT
5	4	**	5/16-18 NC x 1 GRADE 5 BOLT
NS	1	920428	BACK-UP ALARM SWITCH WIRING HARNESS

LEGEND: NS = Not Shown

LOADER/BUCKET ASSEMBLY PARTS

MODEL TLB 20D-25D

A-15B

NO	REQ'D	PART NO	DESCRIPTION
1	10	**	1/4 - 20 NC NYLON INSERT NUT
2	2	**	1/4 - 20 NC X 2 1/2 GRADE 5 BOLT
3	2	92L006	LOADER LIFT CYLINDER
4	2	92L001S	LOADER PIVOT PIN WELDMENT
5	2	92L002	CYLINDER PIVOT PIN
6	8	**	1⁄4 -20 X 2" GRADE 5 BOLT
6A	2	HD149	5/16 X 2 SPIRAL ROLL PIN
7	2	92T006	UPPER LOADER PIN WASHER
8	4	92L001 M	LOADER PIN
9	1	92L001	LOADER ARM ASSEMBLY
10	2	92L007	BUCKET CYLINDER
11	4	92LO04M	BUCKET PIN
12	1	92L004	BUCKET ASSEMBLY
13	4	401256	1/4 - 28 NF GREASE ZERK, STRAIGHT
NS		92L006K	LOADER CYLINDER SEAL KIT (BUCKET & LOADER)
NS		92L007G	LOADER CYLINDER GLAND
NS		92L007P	LOADER CYLINDER PISTON
NS		92L007R	LOADER CYLINDER ROD

LEGEND: NS = Not Shown

LOADER HYDRAULIC ASSEMBLY PARTS

MODEL TLB 20D-25D

A-15D

NO	REQ'D	PART NO	DESCRIPTION
1	2	920625A	HOSE ASSEMBLY 3/8 X 34 1/4 6FJX - 6FJX
2	2	920627	HOSE ASSEMBLY 3/8 X 19 1/2 6FJX - 6FJX90S
3	8	**	1/4 -20 NC X 3/4 SELF-TAPPING SCREW
4	4	920668	HYDRAULIC ADAPTER 6JTX-S
5	8	920605	TUBE CLIP
6	8	320076	HYDRAULIC ADAPTER 6 ORM - 6 JICM
7	2	920623	HOSE ASSEMBLY 3/8 X 23 3/4 6FJX - 6FJX
8	2	920621	HOSE ASSEMBLY 3/8 X 41 6FJX - 6FJX
9	1	920636	HOSE ASSEMBLY 3/8 X 78 1/2 6FJX90L-6FJX90S-308°
10	. 1	920637	HOSE ASSEMBLY 3/8 X 78 6FJX90S - 6FJX90S - 300°
11	1	920638	HOSE ASSEMBLY 3/8 X 84 6FJX90L - 6FJX90S - 285°
12	1	920637	HOSE ASSEMBLY 3/8 X 81 6FJX90S - 6FJX90S - 305°
NS		92L006K	LOADER CYLINDER SEAL KIT (BUCKET & LOADER)

LEGEND: NS = Not Shown

BACKHOE SEAT ASSEMBLY PARTS

MODEL TLB 20D-25D

A-16B

NO	REQ'D	PART NO	DESCRIPTION
1	1	920246	BACKHOE SEAT
2	1	92B002	BACKHOE SEAT MOUNT WELDMENT
3	4	**	1/4 FLAT WASHER
4	4	**	8MM X 20MM X 1.25 HCS 8.8 BOLT
5	2	**	3/8-16 NC x NYLON INSERT NUT
6	2	**	5/16 FLAT WASHER
7	2	**	3/8-16 NC x 1-1/4 GRADE 5 BOLT
8	2	**	1/4-20 NC NYLON INSERT NUT
9	2	**	1/4 FLAT WASHER
10	2	**	1/4-20 NC x 5/8" SOCKET HEAD SCREW

LEGEND: NS = Not Shown

AUXILIARY VALVE ASSEMBLY PARTS

MODEL TLB 20D-25D

A-16D

NO	REQ'D	PART NO	DESCRIPTION
1	1	320583	SWIVEL CONNECTOR 650S-8-8
2	1	920655	UNION CROSS
3	1	920705	HOSE ASSEMBLY 1/2 X 24
			8FJX90S - HOSE FITTING (5/8 TUBE TO 1/2 HOSE)
4	1	920704	5/8 HYDRAULIC TUBING
5	1	920703	5/8 HYDRAULIC TUBING
6	1	920259	POWER BEYOND SLEEVE CK-6017-B
7	3	920701	HYDRAULIC FITTING 1/2 NPT - 5/8 TUBING 90°
8	1	**	1/4 - 20 NC X 3/4 SELF-TAPPING SCREW
9	1	**	5/8 CUSHION CLAMP
10	3	**	1/4 - 20 NC NYLON INSERT NUT
11	2	920664	HYDRAULIC FITTING 3/4 X 1/2 PTR-S
12	1	920328	DIRECTIONAL VALVE
13	3	**	1/4 - 20 NC X 1 3/4 GRADE 5 BOLT
14	2	920697	HYDRAULIC FITTING 1/2 FF-S
15	1	920650	FEMALE COUPLING
16	1	920651	FEMALE COUPLING CAP
17	1	920653	MALE COUPLING CAP
18	1	920652	MALE COUPLING

LEGEND: NS = Not Shown

AUXILIARY VALVE ASSEMBLY PARTS

MODEL TLB 20D-25D

A-16F (AFTER 7/1/98)

NO	REQ'D	PART NO	DESCRIPTION
1	1	320583	SWIVEL CONNECTOR 650S-8-8
2	1	920655	UNION CROSS
3	1	920285	1/2 X 29.5-8FJX-8FJX45S (RETURN HOSE)
4	1	920286	1/2 X 61.5-8FJX-8FJX45S (PRESSURE SUPPLY)
5	1	920277	POWER BEYOND SLEEVE
6	3	320070	MALE 0 RING BOSS TO MALE JIC 37° FLARE 90°
7	3	**	1/4 - 20 NC NYLON INSERT NUT
8	2	920697	8-12 CTX-S HYDRAULIC FITTING
9	1	920328	DIRECTIONAL VALVE
10	3	**	1/4 - 20 NC X 1 3/4 GRADE 5 BOLT
11	1	320084	HYDRAULIC FITTING 1/2 FF-S
12	1	920650	FEMALE COUPLING
13	1	920651	FEMALE COUPLING CAP
14	1	920653	MALE COUPLING CAP
15	1	920652	MALE COUPLING
16	1	920298	PF10L-8-3 HYDRAULIC FITTING
17	2	920297	1/2 CD-S 10-12 PIPE THREAD 90° MALE-FEMALE
			HYDRAULIC FITTING
18	1	920296	1/2 CD 45-S PIPE THREAD HYDRAULIC FITTING
19	1	92T224	QUICK COUPLE SUPPORT BRACKET
20	1	92T225	QUICK COUPLE SUPPORT BRACKET BOTTOM
21	6	**	1/4 FLAT WASHER
22	2	**	1/4-20 X 3/4 BOLT
23	1	**	1/4-20 X 3/4 PHILLIPS HEAD SCREW
24	1	**	1/4-20 KEPS NUT

LEGEND: NS = Not Shown

FUEL TANK ASSEMBLY PARTS

MODEL TLB 20D-25D

A-17B

NO	REQ'D	PART NO	DESCRIPTION
1	6	920190	1/2-20 NC J-NUT
2	1	92TO93	POLY FUEL TANK
3	1	92TO94	POLY FUEL TANK MOUNTING PLATE
4	10	**	1/4 - 20 NC X 1 GRADE 5 BOLT
5	10	**	1/4 FLAT WASHER
6	1	340027	FILLER CAP, PLASTIC CAP

LEGEND: NS = Not Shown

DECALS (DASH / FENDERS) PARTS LIST

MODEL TLB 20D-25D

A-18B

NO	REQ'D	PART NO	DESCRIPTION
1	1	DD-197	(DANGER) OVERHEAD ELECTROCUTION HAZARD
2	1	DD-195	(DANGER) UNDERGROUND ELECTROCUTION HAZARD
3	1	DD-209	LIGHTS SYMBOL (W/OPTIONAL WORK LIGHTS)
4	1	DD-196	ENGINE THROTTLE CONTROL
5	1	DD-158	(WARNING) READ OPERATORS MANUAL
6	1	DD-206	OIL PRESSURE SYMBOL
7	1	DD-189	(DANGER) TO AVOID BODILY INJURY
8	1	DD-207	LOADER JOYSTICK FUNCTIONS (BEFORE SN 9708TO6)
		DD-246	LOADER JOYSTICK FUNCTIONS (AFTER SN 9708TO6)
9	1	DD-187	CALIFORNIA PROPOSITION 65 DIESEL WARNING
10	1	DD-192	DANGER DIESEL ONLY
11	1	@@	KUBOTA STOPPING INSTRUCTIONS

LEGEND: NS = Not Shown

** = Purchase locally

@@ = See Kohler Dealer

DECALS (RIGHT SIDE) PARTS LIST

MODEL TLB 20D-25D

A-18D

NO	REQ'D	PART NO	DESCRIPTION
1	1	DD-147	NO STEP
2	1	DD-212	OPERATOR'S MANUAL
3	1	DD-270	ALLMAND DECAL
4	1	DD-191	(WARNING) HIGH-PRESSURE FLUID HAZARD
5	4	DD-210	TIE DOWN POINT
			(2) ON TRACTOR FRAME (RIGHT & LEFT)
			(2) ON BACKHOE FRAME (RIGHT & LEFT)

LEGEND: NS = Not Shown

DECALS (LEFT SIDE) PARTS LIST

MODEL TLB 20D-25D

A-18F

NO	REQ'D	PART NO	DESCRIPTION
1	4	DD-210	TIE DOWN POINT (2) ON TRACTOR FRAME (RIGHT & LEFT) (2) ON BACKHOE FRAME (RIGHT & LEFT)
2	1	DD-193	(DANGER) HOT EXHAUST
3	1	DD-258	HYDRAULIC SYSTEM SERVICE DECAL
4	1	DD-158	READ HAND BOOK DECAL

LEGEND: NS = Not Shown

DECALS (ROPS) PARTS LIST

MODEL TLB 20D-25D

A-18H

NO	REQ'D	PART NO	DESCRIPTION
1	1	DD-190	(CAUTION) AVOID DEATH OR SERIOUS INJURY
2	1	DD-194	(WARNING) AVOID CRUSHING
3	2	DD-219	(WARNING) PINCH POINT

LEGEND: NS = Not Shown

DECALS (HOOD / NOSE) PARTS LIST

MODEL TLB 20D-25D

A-18J

NO	REQ'D	PART NO	DESCRIPTION
1	1	DD-270	ALLMAND DECAL
2	2	DD-273	DECAL TLB-25D
3	1	DD-221	DECAL NOSE - HOOD SET
4	2	DD-274	CONTRACTOR

LEGEND: NS = Not Shown

** = Purchase locally

A-18L

DECALS (LOADER) PARTS LIST

1	2	DD-274	CONTRACTOR DECAL
2	2	DD-269	ALLMAND LOGO

LEGEND: NS = Not Shown

DECALS (BUCKET) PARTS LIST

MODEL TLB 20D-25D

A-18N

NO	REQ'D	PART NO	DESCRIPTION
1	2	DD-285	BUCKET LEVEL INDICATOR

LEGEND: NS = Not Shown

BACKHOE BUCKET OPTIONS PARTS LIST

MODEL TLB 20D-25D

A-19B

PART NUMBER	BUCKET DESCRIPTION AND SIZE
920102	BACKHOE BUCKET 40810"
920103	BACKHOE BUCKET 40812"
920104	BACKHOE BUCKET 40816"
920105	BACKHOE BUCKET 40818"
920106	BACKHOE BUCKET 40824"
920109	BACKHOE BUCKET 40836"
920149	BACKHOE QUICK ATTACH 408

STABILIZER GUARD PARTS LIST

MODEL TLB 20D-25D

A-20B

NO	REQ'D	PART NO	DESCRIPTION
1	1	920169	STABILIZER GUARD
2	1	340117	1 1/2" MUFFLER CLAMP - PLATED

LEGEND: NS = Not Shown

ALLMAND LIMITED WARRANTY

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED INCLUDING WARRANTIES OF MECHANTABILITY OR OF FITNESS FOR PURPOSE, AND ANY EXCEPTIONS ARE DESCRIBED IN THE PUBLISHED LIMITED WARRANTY ADDENDUM, AVAILABLE UPON REQUEST.

COMPONENTS, SUB-ASSEMBLIES AND DEVICES MANUFACTURED BY OTHER MANUFACTURERS ARE NOT COVERED BY THIS WARRANT? AND ALL WARRANTY INFORMATION FROM SUCH OTHER MANUFACTURERS IS PROVIDED WITHIN OR ACCOMPANY THESE GOODS.

Subject to the foregoing, the manufacturer, Alimand Bros. Inc., hereby warrants all equipment manufactured by Allmand Bros. Inc. to be free from defects in material and workmanship for a period of one (1) year after delivery to the original purchaser. Delivery shall be deemed for the purposes of this warranty to have occurred no later than five days following the date of sale agreement or invoice unless the purchase agreement or invoice specifically states a later delivery date in which case such delivery date shall control. The original purchaser shall be deemed to be a person who places the goods or products in actual use, and any person holding such goods solely for wholesale or retail sale purposes shall not constitute an original purchaser. PROVIDED, any leasing of these goods or other use beyond normal demonstration of same shall be deemed to be a use by an original purchaser and all warranty periods shall commence at the time of such use. During the warranty period any defective goods or parts hereof shall be repaired or replaced at manufacturer's discretion. In the event it is necessary to return such goods or parts to the factory, all transportation charges shall be prepaid and the manufacturer shall in no event pay any transportation or mileage expenses.

The obligations of the manufacturer is solely to repair or replace defective goods or parts or to refund the cost of the same if it is determined by the manufacturer that repair or replacement will not return the goods to proper working order or utility. THE REMEDIES SET FORTH HEREIN ARE EXCLUSIVE AND MANUFACTURER SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES. THE OBLIGATIONS OF THE MANUFACTURER HEREUNDER SHALL IN NO WAY EXCEED THE PRICE OF THE EQUIPMENT OR PART UPON WHICH SUCH LIABILITY IS BASED.

The warranty shall not extend to tires, lamps and batteries or parts which have been altered, changed, damaged or improperly installed, repaired, operated or maintained. Provided, this exclusion shall not apply to installations, repairs or other work done at the manufacturer's plant or under direct manufacturer's supervision. The Operator's Manual, to the extent covered therein, is deemed to set forth the proper procedures for operation, repair, installation and maintenance of these goods.

No representative, dealer or distributor of the company is authorized to make any changes or exceptions to this warranty unless expressly authorized in writing from the manufacturer. All warranty claims must be filed within thirty (30) days of failure.



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