

TOWHAUL UNIT HEALTH AUDIT

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The design used in this proposal includes proprietary information that is covered by a current patent(s) or patent application.

Mine Information

Name of evaluator:_____ Date:

Mine Name:______ Mine Location:_____

TowHaul Unit Serial #:_____

NOTICE

Please photograph the Prime Mover and Lowboy according to the instructions and visuals below. In most cases, the visuals show only one side of the Truck or Lowboy, but both sides are generally needed.

The following is intended to be a guide of the minimum areas to be photographed. Any additional points of interest that are observed on site should also be documented, including, but not limited to:

-Any Repairs -Any Modifications

More photos are always better than fewer. If possible, please document location of any detail photos that might not be obvious.

Last Updated: 06/05/25

Ground Force Manufacturing, LLC dba TowHaul — Health Audit

GENERAL IMAGES

NOTICE

Please provide photographs of the Prime Mover according to the visuals below. Ensure these images are of good quality and taken at perpendicular angles to the truck.

Please provide full images of the Lowboy as well.

Driver Side View Curb Side View Rear View Front View T Curb Side Bumper Driver Side Bumper Front Bumper Under View Detail View Detail View

PRIME MOVER INSPECTION

The Prime Mover Inspection will be broken into the following assemblies:

- 1. Counterweights
- 2. Prime Mover Fenders
- 3. Lower Lug
- 4. Guide Frame
- 5. Gooseneck
- 6. Subframe
- 7. Cab

NOTICE

Images throughout this document may not represent the exact unit purchased and may show options that are not present on every unit.



Counterweights

- 1. Counterweight Lugs
- 2. Counterweights



Inspect:			NOTES:
1. Counterwe	eight Lugs		
□ Inspect the	welds and condition hey in place?)		
2. Counterwe	eights		
	s are in place, if and in working		

Pri	ime Mover Fenders		
Insp	ect:	3.	
1. 2. 3. 4.	Mud Flap Roller brackets Signal Lights and light box Rock Kickers	2. - 4. - 1. -	
Insp	pect:		NOTES:
1.	Fenders		
	Damage to the structure (bent from contact with the Gooseneck, tire chains, etc.) Welded connections (front fender mount, fender pipe,		
	gusset) Mud Flap condition (missing, torn, missing bolts)		
	Roller brackets (broken or		
	missing) Signal Lights and light box (do they function properly, broken		
	or burned out, missing?) Rock Kickers (are they present, bent?)		

Lower Lug

- 1. Lower Lug
- 2. Apron Cylinders



Inspe	Inspect:		
1.	Lower Lug		
	Check the welds to the H-Tube and the structure for cracking		
	Inspect the Lower Lug Shaft for cracks		
2.	Apron Cylinders		
	Look for hydraulic leaks		
	Lower Cylinder caps and bolts are in place and tight		
	Upper Cylinder Pins, keepers, and lock bolts are in place and		
	tight		
	Adequate grease (both ends of the cylinders)		

Guide Frame

- 1.
- 2.
- 3.



(70)	a sa na ak	
	oseneck	
Inspe	ect:	5.
		3.
1.	Serial Plate	- (BOP)
2. 3.	Gooseneck Side Plates and Flanges Main Lift Cylinders	Tours
4.	Grab Hook and Cylinder	TowHaul
5.	Toe Shaft	2.
6. 7.	Gooseneck Pickup Hooks Toe	4.
8.	Trunnion Pin	10.
9.	Wiring and Air Connections Front and Rear	9.
10. 11.	Cameras Gooseneck Webs	1.
12.	Turntable Shaft	
		S Com
		7.
		8.
		6.
Inspe	ect:	NOTES:
1.	Serial Plate	
	Provide a picture	
		MINE LEAA AMA LEAA Ala Suba Ala Suba Al
2.	Gooseneck Side Plates and Flanges	
2.	Gooseneck Side Plates and Flanges Look for cracks at the end of the	
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	Gooseneck Side Plates and Flanges Look for cracks at the end of the flanges	
	Gooseneck Side Plates and Flanges Look for cracks at the end of the flanges Look for cracks around the	
	Gooseneck Side Plates and Flanges Look for cracks at the end of the flanges Look for cracks around the doublers on the side plates and flanges	
□ □ 3.	Gooseneck Side Plates and Flanges Look for cracks at the end of the flanges Look for cracks around the doublers on the side plates and flanges Main Lift Cylinders	
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3.	Gooseneck Side Plates and Flanges Look for cracks at the end of the flanges Look for cracks around the doublers on the side plates and flanges Main Lift Cylinders Look for oil leaks on hose fittings and the cylinders themselves Pins and shafts missing keepers	
□ □ 3. □	Gooseneck Side Plates and Flanges Look for cracks at the end of the flanges Look for cracks around the doublers on the side plates and flanges Main Lift Cylinders Look for oil leaks on hose fittings and the cylinders themselves Pins and shafts missing keepers and/or bolts	
□ □ 3. □	Gooseneck Side Plates and Flanges Look for cracks at the end of the flanges Look for cracks around the doublers on the side plates and flanges Main Lift Cylinders Look for oil leaks on hose fittings and the cylinders themselves Pins and shafts missing keepers	

Insp	ect:	
4.	Grab Hook and Cylinder	
	Wear on the hooking surface (Minimum 1/8" material left)	
	Cracked welds, holes in the	1
	hooking surface Cylinder pins, keepers, and bolts	
	are in place	
	Oil leaks on the cylinder and fittings	
	Adequate grease	
5.	Toe Shaft	
	Retainers are in place	U P
	Bent Shaft	
	Adequate grease	
6.	Gooseneck Pickup Hooks	
	Half Shells are present and in	
_	good condition	
	Wear on the bottom, tip of the hooks, and hook surface (use	
	Hook Gauges)	
7.	Too	
<i>∕</i> . □	Toe Main Lift cylinder rod end pins,	
	retainers, and bolts are in place	
	Check for cracked welds on pin	
	lugs on top of the toe Check for cracked welds on the	
	web plates front and back	
	Check bottom plate welds, bent,	
	or deformed plate	7 / _
	Toe Bearing Pad thickness (how much) look for weld cracks	
	around the pad	
	Check Toe Extension welds,	8
	bottom plate Trunnion Pin inspection cover is	
	in place	

	k	
Insp		
8.	Trunnion Pin	
	All bolts are present and tight Check for cracks in the pin cap	
_	and socket	
	Pin collar is in place and in good	
	condition	
	Trunnion pin surface is in good condition no burs, dents, or	
	wear marks	
	Is the pin too loose in the socket	
	(remove shims)	
	Adequate grease	
0	Mining and Air Consections From	h and Daan
9.	Wiring and Air Connections From	nt and Kear
	Look for damage Are they factory?	
	, the they factory.	
10	C	
10.	Cameras	
	Are they in place and functioning?	
	Tunctioning:	
11.	Gooseneck Webs	
	Cracks in the welds at the ends	
	of the webs?	
	Cylinder Box welds	Townaul
	Any bending or deformation	Sectowner &
12.	Turntable Shaft	
	Gap between the shaft and the	
	bushing is less than 1/4"	
	Keeper Bolts are all in place	
	Bushing condition	
	Adequate grease	

Subframe

- 1. Turntable
- 2. Slide Plate
- 3. Subframe Bolt Bars
- 4. Apron
- 5. Control Valve, Relief Manifolds, Bulkhead Fittings, Cable Trays, and Hoses
- 6. PLUS+1 Enclosure
- 7. Walkways
- 8. Bayonet Pins



TurntableSuper nuts and bolts present and tight Look for cracks in the welds around the saddle plates and gussets, welds around corners of trough Measure and record gap between the turntable and the slide plate base plate Locks in place and bolted Are the shims in place on the turntable or all installed? How many are installed? Over Arms visible damage/
and tight Look for cracks in the welds around the saddle plates and gussets, welds around corners of trough Measure and record gap between the turntable and the slide plate base plate Locks in place and bolted Are the shims in place on the turntable or all installed? How many are installed?
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Are the shims in place on the turntable or all installed? How many are installed?
deformation/bending.
Adequate grease around Base Plate
Plate

Inspe	ert.	
2.	Slide Plate	
	Check for cracked welds around	
	the stiffeners and base plate	
	Wear on the base plate	
	If all the shims have been	
	installed in the Turntable and 1/4" grooves are gone, the	
	Turntable and Base Plate need	
	to be replaced.	
	Stops in place	
3.	Subframe Bolt Bars	
	All bolts and nuts present and tight	To
	Check for cracks in the welds to	
	the truck frame	
4.	Apron	
	Stub Shafts are present,	
	retainers and bolts in place Stub Shaft support plates are in	Apron Stub Shaft DS
_	place.	
	Apron Arms straight and not	
_	damaged	Diffigure Apron Stub Shaft CS
	Rollers in good condition and moving freely	
	Apron Limit Switch (is it in place	
	and not tied down)	
	Adequate grease	
		- 15
		·//
5.	Control Valve, Relief Manifolds,	
	Fittings, Cable Tray, and Grating	
	Look for leaks on all connections	
	and hoses Mounting bolts present and	
	tight	
		0 0 0 0 0 0 0 A
		·

	pect:	
6.	PLUS+ 1 Enclosure	
	Open enclosure and inspect connections and overall condition (frayed wires, spliced connections, damaged wiring or cord connectors, water, dirt, mud, clean)	
7.	Walkways	
	Mounting bolts present and tight All Grating secured and in place HP Filter secure, check for leaks, filter indicator wired and in place Hose Reel cabinets secured to walkway, all lids and doors in place and in good condition, check for oil leaks Handrail secured in place and in good condition Accumulator and PBR Manifold in place check for oil leaks, cables are in place, broken pressure Transmitters Mud flaps and brackets (condition and are all the bolts in place and tight)	
8.	Bayonet Pins	1
	Both pins are in place	

Cab

- 1. PLUS+ 1 Screen
- 2. Camera Screen
- 3. Park Brake and Emergency Brake Handle
- 4. Service Brakes and Retarder
- 5. Work Light Switches
- 6. TowHaul Warning and Safety Stickers



Inspe	ect:	
1.	PLUS+ 1 Screen	
	Record hours, history (8, history)	
	What is the condition of the	12 or 24 Hour History
	screen and the control buttons?	Prime Mover
	Are there any errors on the screen with the unit running?	Londony CAN Lost ! Long Stars Co Touristant Same Stars Co
	Apron Limit Switch functioning	
	All controls working properly	
2.	Camera Screen	
	Condition	
	All the cameras are working	
	Cameras showing the right views	
3.	Park Brake and Emergency Brake	e Handle
	Are they functioning and in	
	place?	
4.	Service Brakes and Retarder	
	Are they functioning and reading	Lookay Brites
	on the PLUS+1 screen properly?	196 - Michael Martine Barray
		Trailad
5.	Work Light Switches	
	Working and labeled?	
	5	
6.	Warning and Safety Stickers	F
	Are they still in place?	NOTICE
	, ,	- Stage and Landy - Stage and L
		-Do NOT BIT Lossboy unless pick-op shaft in Fay
		CAUTION Be sure the Townshaw's system is isolated prior to jump
		is isolated prior to jump starting or welding.



Fro	Front End					
	Inspect:					
1. 2. 3.	Pickup Shaft Bearing Pad Systems	2.				
Inspe	ect:		NOTES:			
1.	Pickup Shaft					
	Gap between shaft and bushing					
	(less than 1/4" is permitted)					
	Wear of shaft (1/2" Allowable					
	where hooks contact shaft.) Bushing condition					
	Are they still locked in the Pickup	``				
	plates, have they rotated?					
	Retaining caps and bolts in place					
	and tight	C C C				
	Adequate grease					
	Locking plates and their					
	condition (non-rotating shaft) Cleanliness of the Pickup Shaft					
	area (dirt, rocks, ice and snow)					
2.	Bearing Pad					
	Check thickness of the plate					
	Check for cracked welds around	0.750 9				
	the 2 plates Cleanliness of the bearing					
	surface and the area around it					
3.	Systems					
	Pigtails for the electrical and					
	air systems (are they factory,					
	condition, stored on the front					
	end or ramp) Bull/bood fittings: air drugs boso	170°				
	Bulkhead fittings: air dryer, hose and tubing conditions, Canon					
	plugs and wiring conditions					
	Grease System (inspect grease					
	lines and injectors)					

Ce	nter Section			
Insp	ect:			
1. 2. 3. 4. 5. 6.	Upper Load Wing Pin Covers Lower Load Wing pins Front End Front and Rear Cross Bars Rear of the Center Section Systems 3.			1.
		P O H		
				2.
Insp			NOTES:	
1.	Upper Load Wing Pin Covers			
	Inspect welds around pin covers Thickness of the front covers Ensure they are in place			
2				
2.	Lower Load Wing Pins Ensure they are still there and in			
	place (horizontal or vertical) Retaining bolts are installed and tight (if applicable)			
3.	Front End			
	Weld across the top is not cracked or worn down from tracked equipment			
	The vertical welds on both sides			
	(check for cracking) Bottom weld (inspect for cracking and excessive wear on the bottom plate)			

Load Wings

Inspect:

- 1. Serial Plate
- 2. Ramp Hooks
- 3. Outer Rails
- 4. Cross Members
- 5. Wood Decking
- 6. Ladders
- 7. **D-rings**
- 8. Chain trays
- 9. Load Wing Walkway Extension
- 10. Systems

Inspect: NOTES: **Serial Plate** 1. Provide a picture **Ramp Hooks** 2. Look for cracked welds to the front cross members or pulling out of the front cross member plate 3. **Outer Rails** Look for signs of berming (bent outer web and flange) **Cross Members** 4. Inspect welds to the inner and outer rails of the Load Wing Inspect the beams for twisting and deforming Inspect the upper and lower gussets on the front and rear cross members for cracked welds

TowHaul

Insp	ect:		
5.	Wood Decking		ſ
	Look for holes in the decking, loose boards, excessive wear		
6.	Ladders	· · · · ·	
	Missing? Handles are there and in working order	A b	
	Missing step?		
7.	D-rings		
	Condition		
8.	Chain trays		
	Missing?		
	Condition		
9.	Load Wing Walkway Extension		
	Grating in place and secured Brackets secured with bolts and tightened		
	Mud flap towel bar installed and secure (if equipped)		
10.	Systems		
	Clearance Lights all present,	24/////////////////////////////////////	
	undamaged, and working Work light switches and lights are working		
	*Air System tubing, booster air tank, relay, drain valve hooked		
	up and functioning (if equipped)		
	*Auto Lube system working		
	when hooking up to the	2 January	
	Prime Mover, Electrical cable connections, grease hose	and the second	
	connections, damage (if	*Located beneath	
	equipped)	Load Wing, along DS	P

Γd	mps	
nspe	ect:	
•	Ramp Keepers1.Stops5.Web PlatesLoad BlocksCleats	
nsp	ect:	 NOTES:
1.	Ramp Keepers	
	Ensure keepers are installed and secured with bolts and tight Pin keepers on older ramp installed and not missing	
2.	Stops	
	Look for damaged or missing stops	
3.	Web Plates	
	Weld cracks and cracks in webs and flanges where the bottom front plate meets the bottom flanges.	
4.	Load Blocks	
]	Describe condition Storage hooks (on the Ramps or the Load Wings)	
5.	Cleats	
]	Describe condition	

Axle Assembly

- 1. Super Nuts and Bolts to Mount to Center Section
- 2. Axle Mounting Bolts
- 3. Wheel Studs
- 4. Push Block
- 5. Fenders
- 6. Cooling and/or Brake System
- 7. Electrical System
- 8. Access Doors into the Bucket Platform

Inspe	ect:		NOTES:
1.	Super Nuts and Bolts to Mount to	o Center Section	
	Ensure they are in place and tight		
2.	Axle Mounting Bolts		
	Ensure they are in place and tight		
3.	Wheel Studs		
	Ensure they are in place and tight		
4.	Push Block		
	Ensure pins, keepers, and hardware are in place		

	ect:	
5.	Fenders	
	Inspect the welds to the Bucket Platform for cracking Inspect the Mud Flaps and hardware	
]	Confirm the signal lights and beacons are working	
6.	Cooling and/or Brake System	r
	Check for hydraulic leaks in the system	
	Check that the oil tank is to the full mark on the sight glass on a BCS unit	
	Check that the brake makeup tanks are full on dry drum units (air/hydraulic)	
	Air drains (are they functioning) On electric/hydraulic units check the fluid level on the brake reservoir tank sight glass, it should be full to the	
	accumulator charged line Check the oil level in the axle sight glasses	
	Ensure the cooler is free of mud and debris	
	Check the oil level in the pump drive gear box on the BCS units with the dipstick	
	Ensure the clutch and driveline have been greased and are in good working condition	
7.	Electrical System	·
	Check wiring connections and Pressure Transmitters (look for damaged or broken transmitters)	
8.	Access Doors into the Bucket Pla	tform
	Condition— bent, functioning, missing	