Chapter 2
SPECIFICATIONS

DIMENSIONS, MEASURES AND WEIGHTS	
Overall Height (top of exhaust pipe)	7’1” (2172 mm)
Minimum Width (transport)	8’6” (2591 mm)
Maximum Width (operating) (hopper wings down)	10’5” (3200 mm)
Length (augers on screed)	9’7” (2921 mm)
Length (augers on gates)	9’2” (2794 mm)
Truck Clearance (height from ground to asphalt hopper floor)	23” (584 mm)
Weight (approximate)	10,600 lbs. (4808 kg)
ENGINE	
Engine Model	Yanmar 4TNV88-XGP
Type	Vertical In-line 4-cylinder Water-cooled Diesel
Horsepower (net) @ Engine Speed	48 (35.8 kW) @ 3000 rpm
Displacement	134 cu. in. (2.19 L)
Aspiration	Natural
Bore and Stroke	3.46” x 3.54” (88 x 90 mm)
Weight	375 lbs. (170 kg)
Power Take Off Location	Flywheel side
Direction of Rotation	Counter-clockwise (viewed from flywheel side)
Dimensions (L x W x H)	25.9 x 19.6 x 24.3” (658 x 498.5 x 618 mm)
Max. Torque @ Engine Speed	103 lb.-ft. (140 Nm) @ 1200 rpm
Max. Engine Speed (with no load)	3210±25 rpm
Lubricating System	Forced lubrication with trochoid pump
Fuel Injection System	Direct Injection
Engine Cooling System	5.7 qts. (5.4 L)
Engine Oil Capacity	7.8 qts. (7.4 L)
Cooling Fan	17” (432 mm) dia., 8-blade, pusher type
Starting Aid	Intake Air Heater (preheating time: 15 seconds)
SCREED	
Main Width	8”-13” (2438-3962 mm)
Hydraulic Vibrator	3000 vpm - maximum
Heat Medium	Propane
Variable Hydraulic Screed Extension - Max. Extension Length	30” (762 mm) w/ 6” (152 mm) wear plate
Maximum Variable Crown/Invert	0”-3” (0-76 mm)
Extension Width	30” (762 mm)
Dual-Span Operator Platform Type	Isolated
Top Operator Platform Type	Stationary

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CHAPTER 6
MAINTENANCE

The Maintenance Interval Chart contains the maintenance intervals for the service procedures located in "Service and Storage" on page 57. The "Maintenance Log" on page 38 is for recording the service procedures performed.

IMPORTANT: *Under extreme operating conditions, more frequent maintenance than the recommended intervals may be required.*

MAINTENANCE INTERVAL CHART

SERVICE PROCEDURE	Every 10 Hours (or Daily)	Every 50 Hours (or Weekly)	First 50 Hours	Every 250 Hours	Every 500 Hours	Every 1000 Hours (or Yearly)
Check Fuel Tank Level	•					
Check Engine Oil	•					
Check Radiator Coolant Level	•					
Check Instruments Operation	•					
Clean Areas Contacting Asphalt	•					
Check General Machine Operation and Condition	•					
Check Air Cleaner Element		•				
Drain Fuel Water Separator		•				
Check Fan Belt Tension and Condition		•				
Check Battery and Connections		•				
Check Hydraulic Oil Level		•				
Lubricate Grease Points		•				
Change Hydraulic Filter Elements			•	•		
Change Engine Oil and Filter			•	•		
Check Torque Hubs Oil Level				•		
Check Track Adjustment				•		

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Chapter 7
OPERATION

GENERAL INFORMATION

⚠ CAUTION

BEFORE starting the engine and operating the paver, review and comply with all safety recommendations in the SAFETY chapter of this manual. Know how to stop the paver before starting it.

ENGINE BREAK-IN

IMPORTANT: *Do not suddenly change engine speed or carry heavy loads during the first 50 hours of operation because this may damage the engine and/or shorten engine life.*

The paver does not use a special engine "break-in" oil. Do not add special additives or "break-in" components to the crankcase. The oil in the engine crankcase is the same used for regular oil changes. Check the oil level frequently and refill as necessary. See “Check Engine Oil Level” on page 59. Change the oil and replace the oil filter. See “Service Every 250 Hours” on page 63.

BEFORE STARTING ENGINE

Before starting the engine and running the paver, see “Indicators and Controls” on page 25.

STARTING THE ENGINE

Before mounting the screed platform, walk completely around the paver to make sure no one is on or close to it. Let others near the paver know you are going to start the engine and do not start the engine until everyone has moved away from the paver.

Place all hydraulic function controls and the hydraulic pump speed control lever in the "neutral" positions.

Complete the following steps to start the engine:

1. Be sure that the keyswitch is in the STOP position.
2. Set the throttle control to 1/3 open.

NOTE: *If starting a cold engine and the outside temperature is below 40° F (4° C), turn the keyswitch to the RUN position and leave it there for 15 seconds before starting the engine. See item D in “Instrument Module” on page 27.*

3. Turn the keyswitch to the START position. If the engine does not start, turn the keyswitch to the STOP position. Wait 30 seconds to allow battery voltage to recover and follow the cold start procedure noted above.

IMPORTANT: *Do not crank the starter for longer than 15 seconds or the starter motor may overheat. Do not crank the starter if the engine is either not completely stopped or in operation because the starter motor pinion or ring gear will be damaged.*

4. After the engine starts, release the keyswitch. The keyswitch moves to the RUN position.
5. Run the engine at a low, consistent speed for five minutes before operating any controls. Listen for any abnormal sounds during this time.

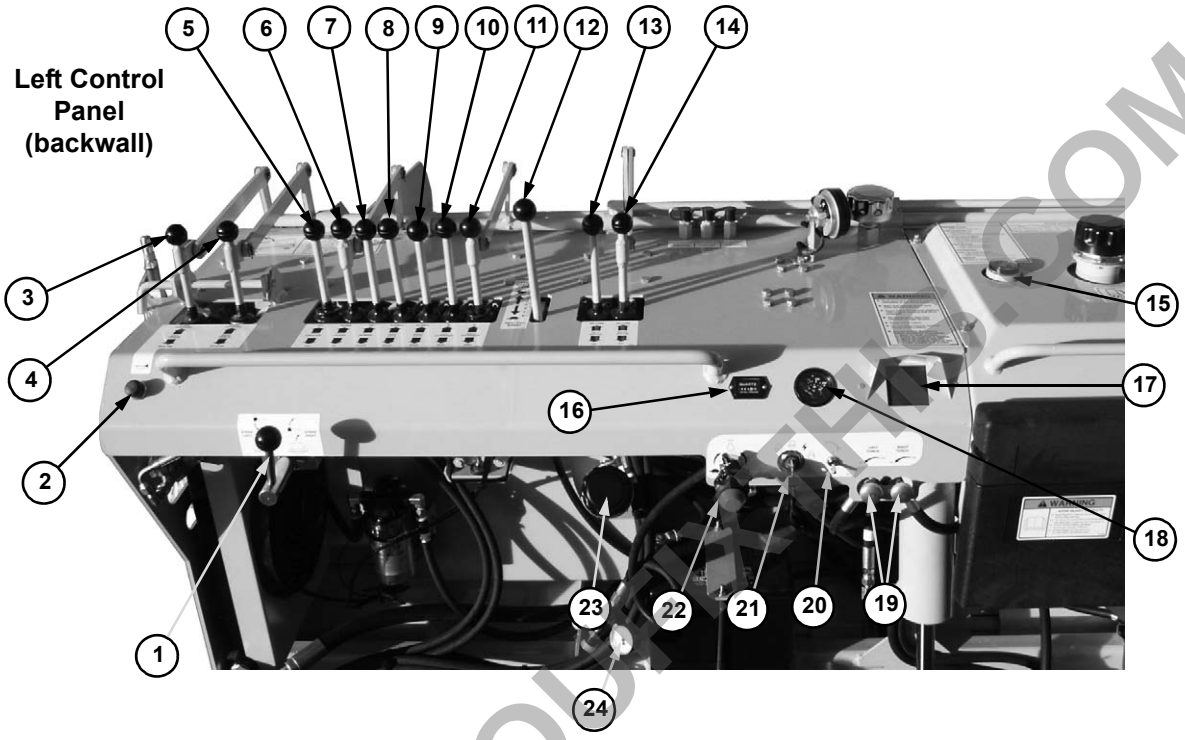
IMPORTANT: *Do not run the engine with a load while the engine is cold/while black smoke emits from the exhaust because the life of the engine may be shortened.*

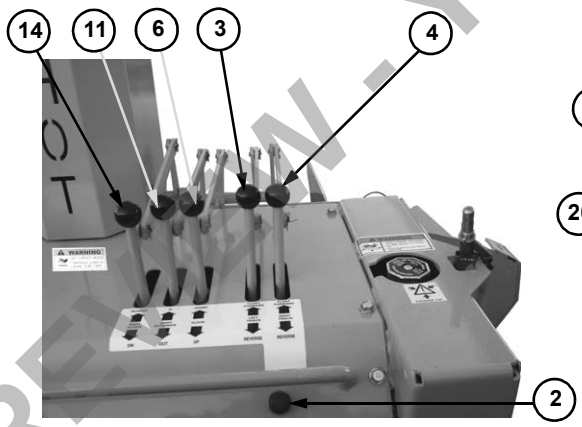
6. Check that indicators are in normal condition.
7. Check the color of the exhaust gas. It should be light blue or colorless.
8. Check that there are no fuel, oil, or engine coolant leaks.
9. Check that there are no abnormal noises or vibrations.

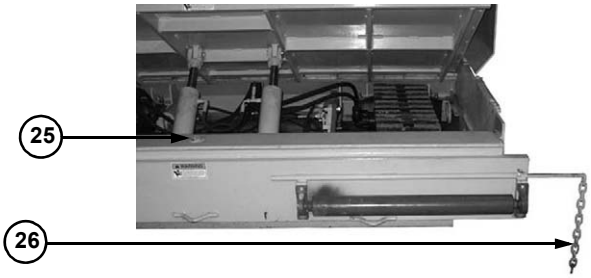
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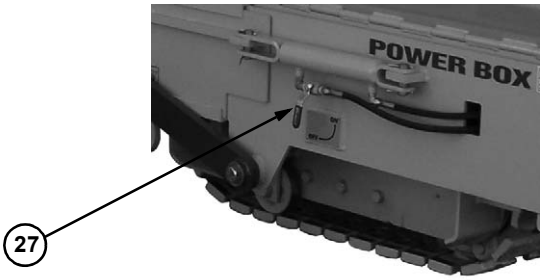
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Chapter 5
INDICATORS AND CONTROLS









1	Steering Control	10	Left Screed Extension	19	Screed Burner Valves
2	Horn	11	Right Screed Extension	20	Washdown Sprayer Switch
3	Left Travel Control	12	Variable Speed Control	21	Ignition Switch
4	Right Travel Control	13	Left Feed Auger Control	22	Engine Throttle
5	Screed Vibrator Control	14	Right Feed Auger Control	23	Releasing Agent Reservoir Fill
6	Hopper Floor Control	15	Fuel Level Indicator	24	Propane Tank Regulator
7	Screed Lift Control	16	Hourmeter	25	Hydraulic Fluid Reservoir Fill
8	Left Flow Gate Control	17	Instrument Module	26	Paving Alignment Guide
9	Right Flow Gate Control	18	Engine Coolant Temperature	27	Flow Gate Control

Fig. 3 - Indicators and Controls

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Electrical Schematic

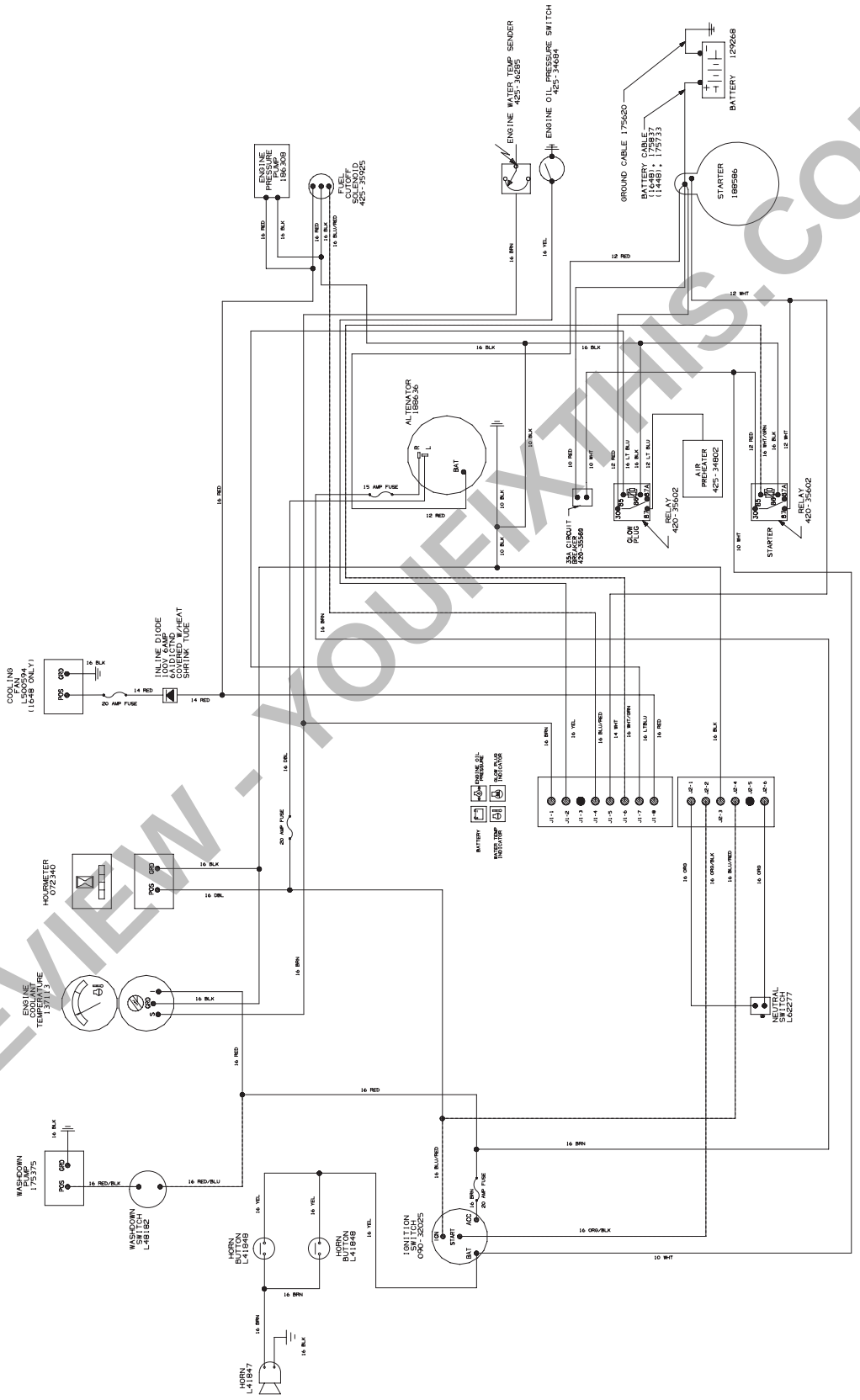


Fig. 36 - Electrical Schematic

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Hydraulic Schematic

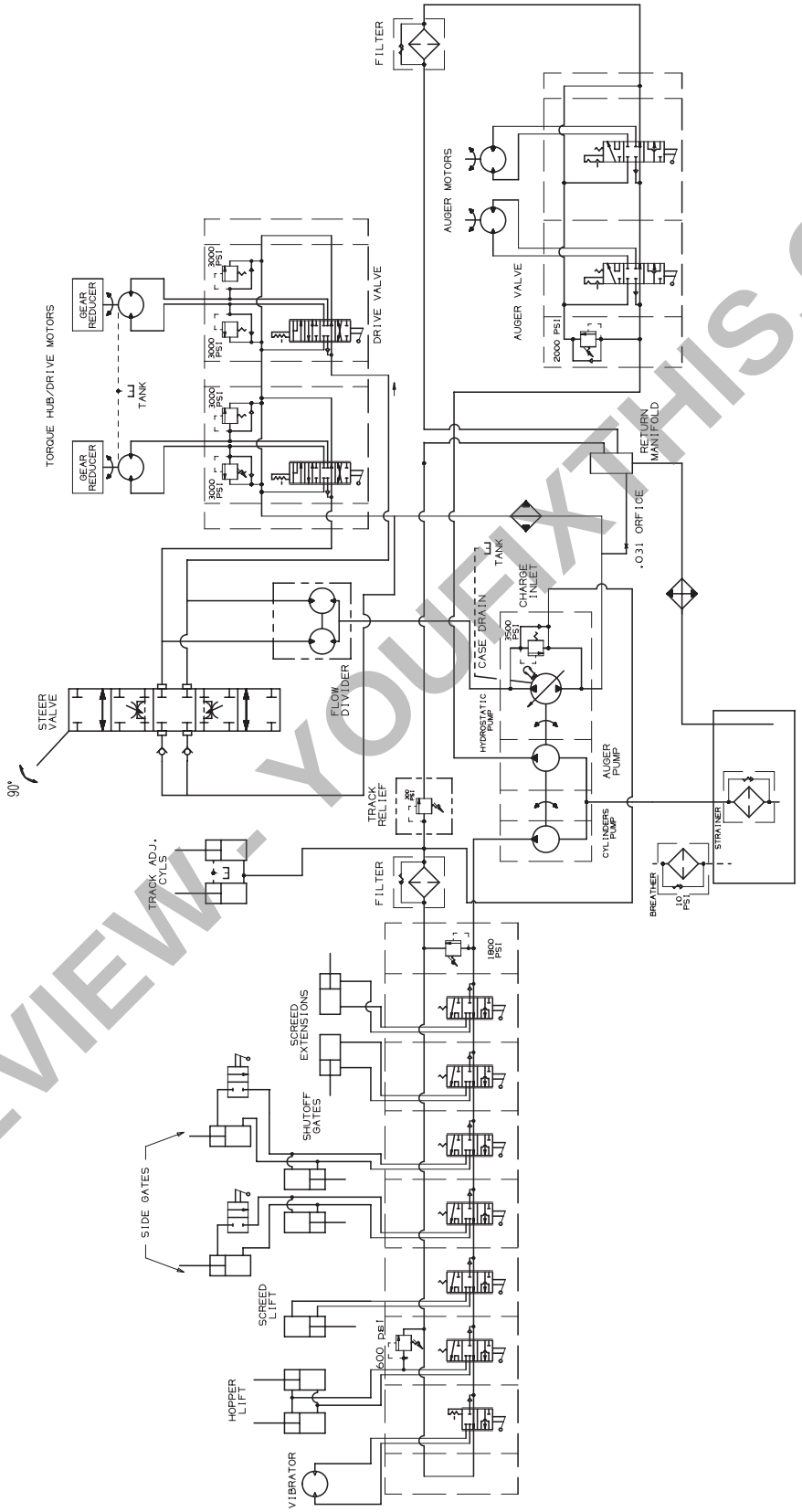


Fig. 35 - Hydraulic Schematic

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TORQUE SPECIFICATIONS

Use these torque values when tightening hardware (excluding locknuts, and self-tapping, thread-forming, and sheet metal screws) unless otherwise specified.

UNIFIED NATIONAL THREAD	GRADE 2		GRADE 5		GRADE 8	
	DRY	LUBED	DRY	LUBED	DRY	LUBED
8-32	19*	14*	30*	22*	41*	31*
8-36	20*	15*	31*	23*	43*	32*
10-24	27*	21*	43*	32*	60*	45*
10-32	31*	23*	49*	36*	68*	51*
1/4-20	66*	50*	9	75*	12	9
1/4-28	76*	56*	10	86*	14	10
5/16-18	11	9	17	13	25	18
5/16-24	12	9	19	14	25	20
3/8-16	20	15	30	23	45	35
3/8-24	23	17	35	25	50	35
7/16-14	32	24	50	35	70	55
7/16-20	36	27	55	40	80	60
1/2-13	50	35	75	55	110	80
1/2-20	55	40	90	65	120	90
9/16-12	70	55	110	80	150	110
9/16-18	80	60	120	90	170	130
5/8-11	100	75	150	110	220	170
5/8-18	110	85	180	130	240	180
3/4-10	175	130	260	200	380	280
3/4-16	200	150	300	220	420	320
7/8-9	170	125	430	320	600	460
7/8-14	180	140	470	360	660	500
1-8	250	190	640	480	900	680
1-12	270	210	710	530	1000	740

METRIC COARSE THREAD	GRADE 8.8		GRADE 10.9		GRADE 12.9	
	DRY	LUBED	DRY	LUBED	DRY	LUBED
M6-1	8	6	11	8	13.5	10
M8-1.25	19	14	27	20	32.5	24
M10-1.5	37.5	28	53	39	64	47
M12-1.75	65	48	91.5	67.5	111.5	82
M14-2	103.5	76.5	145.5	108	176.5	131
M16-2	158.5	117.5	223.5	165.5	271	200

*All torque values are in ft.-lbs. except those marked with an *, which are in lbs.
For metric torque value (N·m), multiply ft.-lbs. value by 1.355, or the in.-lbs. value by 0.113.

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MATERIAL FLOW	
Independent Hyraulic Operated Gates	Standard
Gate Cut-Off Plates	Option, 6”-36” (152-915 mm)
Gravity-Flow Asphalt Hopper Capacity	6 Tons (5443 Kg)
Independent Hydraulic Operating Augers	Located on Gate or Screed Extension
DRIVE CONFIGURATION	
Type	Hydrostatic
Track Type	Self-adjusting, Steel
Track Link Dimensions	12” x 3” (305 mm x 76 mm)
Counter-Rotating	Standard
Steering Valve	Fine-tune
Track Length	48” (1219 mm)
OPERATOR STATION	
Platform	Isolated Dual-Span
Controls	Left and Right Sides
Wash-Down Stations	Dual, 5.5 gal. (21 L) Total
HYDRAULIC SYSTEM	
Variable Hydrostatic Drive Pump - Maximum Flow	37 gpm (140 L/min)
Variable Hydrostatic Drive Pump - Maximum Relief Pressure	3500 psi (241 bar)
Hydraulic Auger Drive Pump - Maximum Flow	10.9 gpm (41.3 L/min)
Hydraulic Auger Drive Pump - Maximum Relief Pressure	2000 psi (138 bar)
Hydraulic Cylinder Pump - Maximum Flow	10.9 gpm (41.3 L/min)
Hydraulic Cylinder Pump - Maximum Relief Pressure	1800 psi (124 bar)
Track Relief Pressure	300-350 psi (21-24 bar)
Return Filter	5 Micron
Suction Strainer	100 Mesh
Hydraulic Oil Cooler Capacity	32.0 gpm (121.1 L/min)
Drive Loop Oil Cooler Capacity	20 gpm (76 L/min)
ELECTRICAL SYSTEM	
Alternator	12-V, 40-A
Starter	12-V, 1.4-kW
Battery	12-V, Group Size 24, 675 CCA

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