

Compact Wheel Loader

takeuchi
From World First to World Leader

TW80 SERIES 2

FSA



John Edwards
Governmental Sales Manager
850-685-7055
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Product Features & Specifications

ENGINE

- U.S. EPA Interim Tier 4 Emission
- DOC Exhaust After Treatment
- Turbocharged
- Water Cooled
- Dual Element Air Cleaner with Restriction Indicator
- High Capacity Radiator

ELECTRICAL

- Multi-Informational Monitor
- 12 volt System with 95 amp Alternator
- Work Lights: Front and Rear
- Driving Lights and Turn Signals
- Directional Lights: Fwd / Rev
- Engine Preheat
- Back-up Alarm

DRIVE TRAIN

- Hydrostatic Drive with 100% Inching Pedal
- 100% Locking Differentials: Front and Rear
- Two-Speed Travel
- Outboard Planetary Drives
- Spring Applied Parking Brake
- Multi-Wet Disc Brake
- Rigid Axles with Outboard Planetary Reduction
- Construction Tire Assembly (optional)
- Flotation Tire Assembly (optional)
- High Speed Road Gear with Ride Control (24.8 mph) (optional)

OPERATOR'S STATION

- Enclosed Cab with Air Conditioning, Heat, Front and Rear Wipers, Front and Rear Washers, and Rear Defrost
- Elevated Operator's Station
- ROPS / FOPS Protection
- Deluxe Air Suspension Seat with Arm Rests
- Multi-Functional Joystick for Machine Direction Forward and Reverse and Loader Controls
- Auxiliary Circuit Thumb Switch and Loader Controls
- Large Steps and Grab Handles
- 2" Retractable Seat Belt
- 3" Retractable Seat Belt (optional)

HYDRAULIC & WORKING EQUIPMENT

- Pilot Control
- Proportional Slide Switch Located in Loader Joystick for Auxiliary Hydraulic Circuit
- Auxiliary Hydraulic Lines Plumbed to End of Loader Arms
- Auxiliary Hydraulic Detent
- Hydraulic Oil Level Sight Gauge
- High Capacity Hydraulic Oil Cooler
- Z-Bar Linkage
- Bucket Float Function
- Mechanical Bucket Positioning
- Heavy Duty Hydraulic Bucket Quick Coupler
- Heavy Duty Self Aligning Loader Bushings with Oversized Pins
- High Flow Auxiliary Hydraulics (26.0 gpm) (optional)
- Combo Hitch to Universal SSL Adaptor (optional)
- Flat Face Hydraulic Coupler Kit (optional)



Operator's Station



Outboard Planetary Drives

OPERATING PERFORMANCE

Operating Weight - Cab	12,700 lb	(5,760 kg)
Tipping Load, Straight	10,065 lb	(4,565 kg)
Tipping Load, Full Turn	8,890 lb	(4,033 kg)
Operating Capacity, SAE J818*	4,445 lb	(2,016 kg)
Bucket Breakout Force	13,960 lb	(6,333 kg)
Lift Arm Breakout Force	12,387 lb	(5,618 kg)
Traction Force	11,802 lb	(5,354 kg)
Travel Speed - Low Range	4.0 mph	(6.5 km/hr)
High Range	12.4 mph	(20.0 km/hr)
Optional High Speed Travel	24.8 mph	(40.0 km/hr)

* Rate Operating Capacity (ROC) for wheel loaders is rated with a bucket according to SAE J818 at no more than 50% of the full turn tipping load.

HYDRAULIC SYSTEM

Auxiliary Flow - Primary Circuit	16.4 gpm	(62.0 Lpm)
Auxiliary Flow - Optional Circuit	26.0 gpm	(98.0 Lpm)
Hydraulic System Pressure	3,335 psi	(23.0 MPa)

ENGINE

Make/Model	Deutz / TD2.9L Turbo
Engine Displacement	176 cu in (2.9 L)
Horsepower @ 2,200 rpm	73 hp (54.0 kW)
Maximum Torque @ 1,800 rpm	192 ft-lb (260.0 Nm)

FLUID CAPACITIES

Engine Lubrication	2.91 qt (11.0 L)
Cooling System	3.96 qt (15.0 L)
Fuel Tank Capacity	26.4 gal (100.0 L)
Fuel Consumption (65% of Full Load)	2.6 gal/hr (10.0 L/hr)
Hydraulic Reservoir Capacity	21.9 gal (83.0 L)
Front Axle Lubrication	1.19 qt (4.5 L)
Rear Axle Lubrication	1.11 qt (4.2 L)



Deluxe Lighting Package



Z-Bar Linkage



Center Frame Oscillation



Hydraulic Oil Sight Gauge

ATTACHMENTS

Takeuchi now offers attachments for all of your Takeuchi equipment. See your authorized Takeuchi dealer for addition information and attachment options.



4-in-1 Bucket



Low Profile Buckets

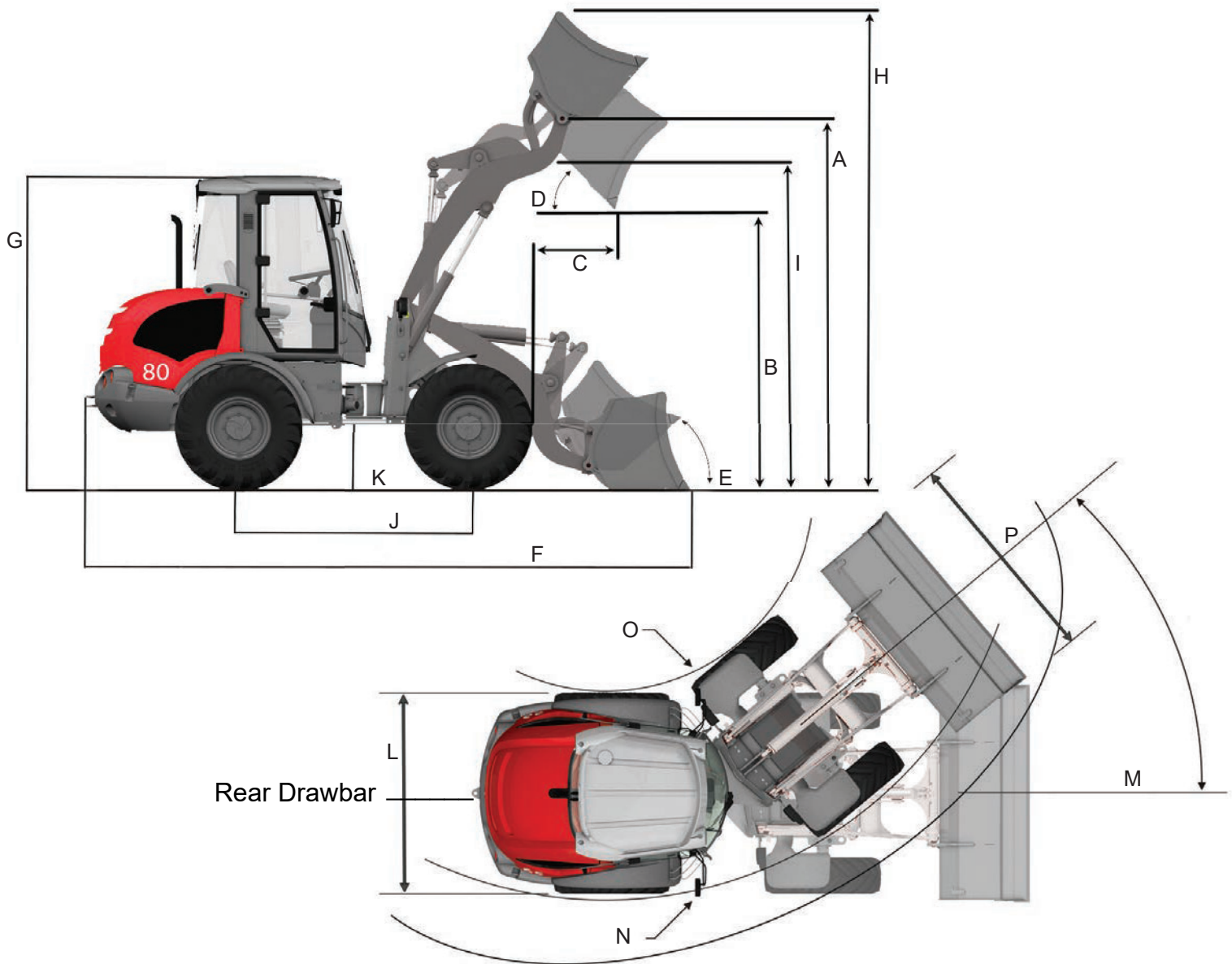


Grapple -Brush



Grapple - Scrap

TW80 Series 2 Wheel Loader



MACHINE DIMENSIONS

A	Max. Lift Height to Bucket Pin	11 ft 1.0 in	(3,380 mm)
B	Dump Height Fully Raised	8 ft 6.0 in	(2,605 mm)
C	Max. Reach Fully Raised	2 ft 5.0 in	(740 mm)
D	Dump Angle	45°	
E	Rollback Angle	48°	
F	Overall Length with Bucket	18 ft 3.0 in	(5,580 mm)
G	Overall Height	8 ft 11.5 in	(2,730 mm)
H	Overall Operating Height	13 ft 10.0 in	(4,220 mm)
I	Bucket Clearance Height	9 ft 11.0 in	(3,025 mm)
J	Wheel Base	7 ft 2.6 in	(2,200 mm)
K	Ground Clearance	1 ft 6.5 in	(470 mm)
L	Overall Width without Bucket	6 ft 9.0 in	(2,050 mm)
M	Turning Radius at Bucket Edge	14 ft 8.0 in	(4,478 mm)
N	Outside Turning Radius	13 ft 3.0 in	(4,046 mm)
O	Inside Turning Radius	6 ft 3.0 in	(1,898 mm)
P	Recommended Bucket Width	81.5 in	(2,070 mm)

TAKEUCHI

TW80

Wheel Loader

SERIES 3

519 Bonnie Valentine Way, Pendergrass, GA 30567

Tel:706-693-3600 Fax:706-693-3725

www.takeuchi-us.com

STANDARD EQUIPMENT

Operating Weight: 12,700 lbs	Enclosed cab w/ air conditioner, heat, front and rear windshield wiper, front and rear washer, rear window defrost
Tip Load, Straight: 10,065 lbs	LCD Gauge panel with multi-function operator information center with diagnostics and anti-theft capabilities
Bucket Breakout Force: 13,690 lbs	Deluxe suspension seat
Lift Arm Breakout Force: 11,802 lb	Pilot operator loader joystick control
HP / RPM: 73 / 2200	EPA Final Tier 4 turbocharged engine with DOC and engine monitoring system
Travel Speed (Max): 12.4 mph	Side by side radiator and hydraulic oil cooler
Auxiliary Flow: 16.4 gpm	Proportional thumb wheel control for auxiliary hydraulic circuit located in joystick
Maximum Height to Bucket Pin: 11' 1"	100% Front and rear differential lock
Height: 8' 11.5"	Euro style attachment mount with hydraulic coupler
Articulation: 40 /40	Bucket float
Reach Fully Raised: 29"	Mechanical bucket positioning
ROPS / FOPS Cab	Safety features include: back up alarm, lights, retractable seatbelt, control lockout, and deluxe lighting package (front and rear working lights), front driving lights, front and rear hazard and directional indicators

ORDER PROCEDURE

ORDER STEPS: 1. Choose base model 2. Choose Tire Option 3. Choose Attachments

BASE MACHINE WITH STANDARD EQUIPMENT

Factory Code	Description
TW80C3	TW80 Cab

Heavy Duty Construction Tire Assy for TW65 / TW80 (4 x Tire Assy) Included

81.5" General Purpose Bucket (1.3 cu. Yd) for TW80 Included
82" Bolt-on Blade for BTW8082

John Edwards, Governmental Sales Manager, 850-685-7055, jedwards@cowin.com

WARRANTY TERMS AND CONDITIONS

1.0 GENERAL WARRANTY INFORMATION

The Takeuchi warranty is a limited warranty that is provided to the retail purchaser in return for consideration paid as part of the purchase price of the product and, in the case of a coverage plan, in return for additional monies paid. The selling dealer must review the warranty coverage with the retail purchaser and obtain a signature on the Delivery Report and Warranty Registration Form. Subject to the terms of the Takeuchi warranty, Takeuchi warrants to the first purchaser that the new Takeuchi machine will be free from defects in material and workmanship for the period set forth below:

- **New Excavators, Rubber Track Loaders, Skid Steer Loaders, and Wheel Loaders** - 24 months or 2,000 machine hours, whichever occurs first.
- **Takeuchi Replacement Parts** - 12 months or to the end of the new machine warranty period, whichever is longer.
- **Batteries** - 12 months, pro rata basis.
- **Takeuchi Attachments and Options** - 12 months (excluding ground engaging attachments).
- **Rubber Tracks** - Takeuchi brand OEM and aftermarket 12 months, pro rata basis (parts only).

The warranty period for all coverage begins at the time that any one of the following conditions are met no matter which occurs first:

- **Unit is sold to a retail customer.**
- **Unit is placed into rental.**
- **Unit accumulates over 100 hours on hour meter.**
- **Twelve (12) months from the Takeuchi invoice due date.**

1.1 RESPONSIBILITY

Takeuchi's Responsibility:

- To provide customers and dealers with high quality and reliable equipment.
- To pay our dealers quickly and fairly for warrantable repairs.
- To analyze failed parts and review warranty claims so that we can take corrective action to reduce warranty incidents and increase customer satisfaction.
- To provide training regarding the maintenance and repair of Takeuchi products.
- To provide quick and easy access to required support information.

Dealer's Responsibility:

- To analyze the customer's needs and specify the right equipment for the application.
- To provide adequate facilities and equipment to properly service Takeuchi products; this includes having all required Takeuchi service tools on hand.
- To employ technicians who are qualified to service Takeuchi products.
- To register equipment promptly when it is placed into service, so warranty coverage is in effect.
- To consider all factors and information when making/submitting a warranty claim and provide all requested information regarding the failure and repair in a timely fashion.
- To determine if the Takeuchi product is under warranty before performing any repairs.

- To repair Takeuchi products in a timely manner.
- To correctly repair Takeuchi products the first time.
- To submit a completed warranty claim online within 30 days of repair date.
- To retain the failed parts for 90 days after payment has been received.
- To perform required updates and modifications in a timely fashion.

Customer's Responsibility:

- To maintain the equipment in accordance with the instructions in the Operator's Manual, and to keep accurate records of this maintenance.
- To operate the equipment in a safe manner that is within the parameters of the designed utility.
- To cease operation of the equipment if a defect occurs so as to avoid extra damage which may be caused by continued operation.
- To deliver the equipment to the dealer so that repairs can be made.
- To comply with all requests for updates and modifications required to be performed on any Takeuchi equipment.

The Takeuchi warranty remains in effect during the warranty period if the owner performs the required maintenance at the recommended intervals outlined in the product Operator's Manual and the unit is operated within its rated capacity. If a defect occurs, either in the material or workmanship, it is the customer's responsibility to cease operating the unit until repairs are made. DAMAGES OCCURRING FROM CONTINUED USE AND/OR NEGLECT MAY NOT BE COVERED BY WARRANTY. Owners should contact their local authorized Takeuchi dealer immediately so that repairs can be made. It is the owner's responsibility to return the machine to an authorized repair facility for warranty repairs.

1.2 SECURING WARRANTY SERVICE

Warranty service must be obtained at an authorized Takeuchi dealer location or an approved Takeuchi service center and requested within the applicable coverage period.

- Takeuchi will, during the applicable warranty period, repair or replace at its option any component or parts (except those specified below) that, as delivered to the original purchaser, are defective in material and workmanship. Takeuchi will determine in its sole discretion, whether a defect of failure is covered by this warranty. No charge shall be made to the purchaser for parts and reasonable labor incurred in making the repairs except as otherwise stated below.
- Warranty repairs will be performed by an authorized Takeuchi service center upon delivery of the machine or defective part to the service center. At the time of requesting warranty service, the purchaser must present evidence of the date of purchase of the machine.
- The purchaser shall pay any premium for overtime and additional labor requested by the purchaser, any charge for field service calls, mileage charges, transporting the machine or parts thereof to and from

the place where the warranty is performed and unusual freight charges for the shipment of parts from Takeuchi which the purchaser may request.

1.3 ITEMS NOT COVERED BY WARRANTY

The Takeuchi New Machine Limited Warranty does not cover:

- Any machine which has been altered or modified in a manner which, in the sole judgment of Takeuchi, affects its performance, stability or reliability, including the use of non-approved attachments.
- Depreciation or damage caused by normal wear and tear, failure to properly maintain the machine, improper use or abuse of the machine, collision, fire or accident, vandalism, negligence, or operation beyond rated capacity or specifications.
- Parts or components that are covered by separate and specific warranties, including but not limited to tires and warranties extended by other manufacturers.
- Accident or damage caused by the environment, such as but not limited to: exposure to corrosive or hazardous materials.
- Replacement of wear items, such as but not limited to buckets and bucket teeth, cutting edges, pins, bushings, glass, radios, tires, wheels, and undercarriage components.
- Normal maintenance parts and labor including, but not limited to: replenishment of oils, lubricants, coolants, fluids, hydraulic oil, lights, filters, belts, hoses and fittings.
- Machines not properly registered with Takeuchi when first placed into service.
- Costs associated with pickup and delivery of the equipment, rental of replacement equipment during the repair period, economic loss during the repair, overtime labor charges, travel time, mileage or zone charges and freight charges of replacement parts.

1.4 WARRANTY REGISTRATION

New machine warranty coverage begins when the machine is properly registered. Registration is realized when the registration is initiated online and completed by the Delivery Report and Warranty Registration Form being received and processed by Takeuchi. A machine must be registered when any of the following conditions are met no matter which occurs first:

Unit is sold to a retail customer.

Unit is placed into rental.

Unit accumulates over 100 hours on hour meter.

Twelve (12) months from the Takeuchi invoice due date.

Please note that if the Warranty registration is not received when the machine is put into service, the warranty start date will be determined by the sole judgment of Takeuchi Mfg. U.S. based on invoice paid date, hours, date sold to retail customer or dealer rental fleet in service date. Warranty claims will not be accepted until the proper registration has been received by Takeuchi Mfg. U.S.

The completed warranty registration form must be sent to:

Takeuchi Mfg. U.S. Ltd.
Attn: Warranty Department
519 Bonnie Valentine Way
Pendergrass, GA 30567

1.5 WARRANTY REIMBURSEMENT

Takeuchi provides for warranty reimbursement due to defects in material or workmanship only. Warranty does not include restoring to factory new condition, any machine or portion thereof which has accumulated hours of operation. This includes customer-owned and used equipment still covered by warranty.

With the exception of only a few parts not available through Takeuchi, all Takeuchi warranty repairs must be performed using ONLY genuine Takeuchi new service parts. Installation of non-Takeuchi replacement parts does NOT qualify for warranty reimbursement and can void the machine's warranty.

Under no circumstance may a dealer take a credit against their open account for a pending warranty claim. Additionally, dealers are responsible for making sure that their parts account is maintained according to the Takeuchi Terms and Conditions Agreement. Failure to comply will subject the dealer to interest penalties, terms reduction, or parts termination.

Pre-Authorization: The dealer must obtain email pre-authorization from the Takeuchi Regional Service Manager for repairs to exceed \$3000. Final approval of repairs will be made by Takeuchi upon inspection of failed components. This email authorization should be attached to the warranty claim when submitted.

Parts: Takeuchi will reimburse servicing dealers for parts approved, based on the price in effect on the date the parts are replaced. Takeuchi will reimburse for approved parts used for repair, at 110% of dealer cost. This cost includes any discounts or programs taken to reduce the part cost. All parts replaced under warranty, not recalled by Takeuchi, must be retained by the dealership for 90 days after payment has been received.

Labor: Takeuchi shall reimburse the dealer at 100% of the dealer's posted retail shop labor rate (for in-shop repairs) on file with Takeuchi at the time the warranty claim is entered. Shop labor rates may be adjusted once a year during the second quarter. This retail shop labor rate shall be subject to verification by Takeuchi from copies of actual invoices to customers.

Outside Charges: Specialized repair, such as machine shop, radiator, or air conditioning repair not normally performed at some dealer locations, will be accepted as part of the warranty claim at actual cost. To support the claim, the dealer must explain the parts used and service work performed in the failure description and probable cause section of the warranty claim and submit a copy of the invoice.

Freight: The cost to return warranty recalled parts to Takeuchi will be reimbursed. Freight expense reimbursements are to be filed on a separate claim for all heavy items that have been recalled by the Warranty Department. The dealer is responsible for attaching a copy of the freight invoice to the warranty claim for processing.

Travel: Takeuchi does not reimburse for travel time or mileage. It is the customer's responsibility to deliver a machine to an authorized service center for repairs.

1.6 FILING A WARRANTY CLAIM

In order to receive reimbursement for warranty work per-

formed, dealers and authorized Takeuchi service centers should enter the claim information via the Takeuchi e-commerce website. All claims should be submitted to Takeuchi no later than 30 days from the date of repair.

NOTE: Failure to submit warranty claims in a timely fashion will result in non-payment of requested warranties.

Once the warranty claim is received by Takeuchi, a warranty claim number will be assigned. Dealers should check the Takeuchi e-commerce website to view the status on warranty claims as well as to see which parts (if any) are being recalled by Takeuchi. Any part recalled by Takeuchi will be noted on the web warranty claim. Takeuchi will also notify the dealer of the recall request. Recalled parts not received by Takeuchi within 45 days from request date will result in a DENIED warranty claim.

All recalled parts returning to Takeuchi must contain a copy of the Return Merchandise Authorization (RMA) Form and the return authorization number should be printed on the outside of the box. Failure to enclose a copy of the RMA form or indicating the RMA number on the outside of the box will result in your parts being refused in the receiving department, thus delaying the claim process.

1.7 EXTENDED WARRANTY

Takeuchi offers Power Protection Plans that are available for purchase on all machines during the New Machine Limited Warranty period. These plans are for varying periods of time and varying degrees of coverage, but are subject to the same conditions as the original Takeuchi limited warranty.

1.8 FEDERAL EMISSIONS WARRANTY

Takeuchi Manufacturing will warrant to the initial owner, and each subsequent owner, the emission control system on the non-road diesel engine installed in Takeuchi equipment for the periods of time listed below.

- The emissions warranty period for all engines rated at 19kW (25 HP) or below is 2 years or 2000 engine hours, whichever occurs first.
- The emissions warranty period for all engines rated above 19kW (25 HP) or above is 5 years or 3000 engine hours, whichever occurs first.

Further detail regarding the Federal Emissions Warranty can be found in Takeuchi's Federal & California Emission Control Systems warranty policy.

1.9 POWER PROTECTION PLAN TRANSFER

The Takeuchi Power Protection Plan is transferable on all machines by filling out a transfer form and remitting the warranty transfer fee of fifty dollars (\$50.00) to:

Takeuchi Mfg. U.S. Ltd.
Attn: Warranty Department
519 Bonnie Valentine Way
Pendergrass, GA 30567

1.10 MODIFICATION/SAFETY BULLETIN NOTIFICATION

Takeuchi strives to provide quality dependable equipment. Problem areas sometimes require correction to maintain customer confidence and loyalty. In such instances, Takeuchi may deem it mandatory that such problems be corrected on both customer machines and dealer inventory units at the earliest possible time. Such action is referred to as a field modification.

Dealers will be advised of the exact procedures to be fol-

lowed and reimbursement rates are as follows:

- Modification and safety bulletin notifications will be emailed to the dealer's specified e-mail address provided by each dealer.
- These bulletins will also be available online through the e-commerce website.
- Parts necessary to complete the modification will be made available either via automatic shipment by Takeuchi to the dealer of record or the dealer will be advised to order the required parts.
- All modifications must be performed in an expeditious manner, as time is of the essence.
- All warranty claims for modifications must reference the modification number on the warranty claim.

2.0 TAKEUCHI FLEET MANAGEMENT - TELEMATICS

Takeuchi MFG U.S. Ltd and its affiliates collect, monitor and use certain data from equipment that you have purchased. This data referred to as "Machine Data" is collected, generated and/ or stored in the equipment you have purchased from Takeuchi. Machine Data generally includes data regarding the operation of the equipment, such as measuring multiple engine data points, fuel consumption, oil pressure and other engine performance factors. Machine Data can also include the collection, monitoring and use of data involving how and where the equipment is being used.

Takeuchi collects and uses this Machine Data, among other things, for purposes of providing customer support, marketing, product safety and other general business purposes. The use of Machine Data will enable Takeuchi to better understand how its equipment is being used, which in turn will allow it to research potential improvements and make its products and services even more useful to its customers.

Takeuchi does not generally share Machine Data it collects with other companies, except that Takeuchi may share such information with its suppliers, customers who have purchased such data for a monthly service fee, affiliates, dealerships, business partners and other companies that are performing services for it. Finally, Takeuchi may disclose Machine Data if required by law to do so.

The execution of this contract/bill of sale constitutes permission for Takeuchi to collect, monitor, store and use the Machine Data for the purposes set forth above.

Dealer: _____

Print Name: _____

Signature: _____

Title: _____

Date: _____