

## TRACTOR LOADER BACKHOE



## **TX970B**

## **Specifications:**

Max Gross Vehicle

Weight 17,663 lbs (8,029 kg)

Net Engine Power 94 hp (70.3 kW)

Dig Depth (Std) 15' 11" (4.9 m)
Dig Depth (Ext) 20' 4" (6.2 m)

Dig Depth (Ext) Steering

Configuration All Wheel Steer

## Features:

- Large 1.56 yd³ (1.2 m³) bucket decreases loader cycle times
- An exceptionally narrow boom gives the operator excellent visibility
- A strong loader with excellent lift capacity and bucket breakout force will improve productivity
- With 19 inches of ground clearance Terex® backhoes are impressive around the job site
- Tandem gear pumps and a closed loop hydraulic system provide more controlled power to get this job faster
- Large comfortable cab with a full suspension seat is standard equipment on all Terex® backhoes



## **Standard Equipment**

| 12 | ï | (i) | Τï | е |
|----|---|-----|----|---|

| Manufacturer, model                            | Perkins, Model 1104D-44T    |
|--|-----------------------------|
| Induction                                      | Turbo                       |
| Gross power rating<br>@ 2,200 rpm (SAE J 1995) | 100 hp (74.8 kW)            |
| Net power rating<br>@ 2,200 rpm (SAE J 1349)   | 94 hp (70.3 kW)             |
| Net torque @ 1,400 rpm (SAE                    | J 1349) 290 lbf (395 Nm)    |
| Displacement                                   | 269 in <sup>3</sup> (4.4 L) |

Tier-3 1100 Series with reduced noise and lower exhaust emissions. Electric fuel lift pump for increased reliability. Easy service Ecoplus fuel filters. Service periods at 500 hours. Integrated closed circuit breather further reduces emissions. Key stop/start. Two-stage dry air cleaner.

## **Electrical System**

| Alternator       | 100 A                           |
|------------------|---------------------------------|
| Battery (single) | 770 CCA, 115 amp/hr -12 V       |
| Battery (double) | 590 CCA - each, 72 amp/hr -12 V |

Battery step-mounted for good access. Low maintenance battery. Connectors sealed against water and dust. 33 circuit fuses. 25 circuit relays.

#### **Transmission & Ground Speeds**

Dana transmission. Full Powershift gearbox with 4 speeds forward and 2 speeds reverse. Single-stage torque converter with 2.60:1 stall ratio. Soft shift direction changes. Automatic up-shifting by selecting 4th gear. Kick-down button is standard. Fast, smooth gear changes on the move without clutching. High transport speed reduces highway travel times. High tractive effort in first and second gears for high loader performance. Modulated forward and reverse clutch packs enable smooth direction changes. Front console switch allows effortless engagement of 4WD on the move.

Travel speeds 16.9x24 10 ply front tires and 16.9x24 10 ply rear tires:

|      |     | Forward |      |      | Reve | erse |
|------|-----|---------|------|------|------|------|
| Gear | 1   | 2       | 3    | 4    | 1    | 2    |
| mph  | 3.6 | 6.8     | 13.6 | 25.8 | 4.2  | 7.9  |
| km/h | 5.8 | 10.9    | 21.9 | 41.6 | 6.9  | 13.0 |

## **Turning Circle (4 WD)**

|                 | Over tires      | Over bucket     |
|-----------------|-----------------|-----------------|
| 2 WS            | 37' 4" (11.4 m) | 43' 0" (13.1 m) |
| 4 WS            | 23' 9" (7.3 m)  | 30' 5" (9.3 m)  |
| 4 WS (w/brakes) | 22' 0" (6.7 m)  | 28' 9" (8.8 m)  |

#### Axles

|   | Front and Rear                            |
|---|---|
| Static loading rating                                     | 32,498 lbs (14,772 kg)                    |
| SAE J 43  | 13,541 lbs (6,155 kg)                     |
| Outhoard planetary final drives for easier servicing. For | nt-actuated differential lock for ease of |

Outboard planetary final drives for easier servicing. Foot-actuated differential lock for ease of operation. 16° front axle oscillation to maintain maximum ground contact and traction.

#### **Brakes**

Long life sealed wet disk brakes. Self-equalizing and self-adjusting. Friction area per brake assembly 113 in $^2$  (728 cm $^2$ ). Selectable 2 or 4 wheel braking..

## **Hydraulic System**

| Main pump @ 2,200 rpm      | 21 gpm (80 Lpm)     |
|----------------------------|---------------------|
| Secondary pump @ 2,200 rpm | 21 gpm (80 Lpm)     |
| System main relief setting | 3,250 psi (225 bar) |
| Unloader settings          | 3,000 psi (207 bar) |

Closed center system incorporating load-sensing and flow-sharing. Twin gear pumps for reliability. Power Boost to match digging power and speed to application. Automatic or manually activated to give more precise control as required. Single pedal operation of auxiliary circuit and extending dipper (optional). Hydraulic oil cooler reduces operating temperatures and tilts forward for easy cleaning. Hydraulic tank easily accessed from ground level. Commercial hydraulic pumps. Rexroth hydraulic valves. Pacoma hydraulic cylinders.Low effort, pilot operated controls are standard with two position valve to allow for either ISO or SAE control patterns.

## Cab (Optional)

Wide opening doors with steps and large grab rails. Large windows, lowline curved hood and full depth rear window enhance all-around visibility. Door windows can be partially or fully opened for ventilation. Raised rear window provides ventilation and protection from the rain. Backlit, touch-operated switches. Adjustable tilt steering wheel. Two front and rear defrosting vents. Powerful 3-speed heater with two forward and three rear vents. Adjustable rear working lights.

Noise emission ambient LWA 78 dB (A)

Air conditioning standard.

Pilot operated backhoe controls are standard equipment.

#### **Weight Configuration**

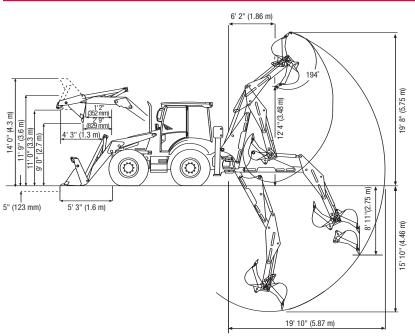
Total machine weight 17,663 lbs (8,029 kg)

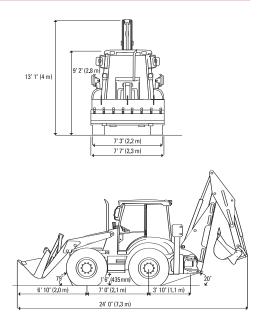
| Loader | Perfor | mance |
|--------|--------|-------|
|--------|--------|-------|

|                              | 1.56 yd³ Bucket        | 1.56 yd³ 7-in-1 Bucket |
|------------------------------|------------------------|------------------------|
| Bucket breakout              | 12,291 lbf (5,575 kgf) | 12,114 lbf (5,495 kgf) |
| Arms breakout                | 10,917 lbf (4,952 kgf) | 11,649 lbf (5,284 kgf) |
| Lift capacity to full height | 8,783 lbf (3,984 kgf)  | 7,921 lbf (3,593 kgf)  |

| Fluid Capacities              |                  |                  |                  |
|-------------------------------|------------------|------------------|------------------|
| Fuel tank                     | 34.2 gal (130 L) | Rear axle (4WD)  | 4.6 gal (17.5 L) |
| Engine coolant                | 4.2 gal (16 L)   | Front axle (4WD) | 3.3 gal (12.5 L) |
| Engine oil (including filter) | 2.2 gal (8.5 L)  | Hydraulic system | 37.6 gal (143 L) |
| Transmission                  | 5.1 gal (16 L)   |                  |                  |

# **Working Ranges**





## **Standard Equipment**

| Loader Dimensions                 |                 |                           |  |
|-----------------------------------|-----------------|---------------------------|--|
|                                   | 1.56 yd³ Bucket | 1.56 yd³<br>7-in-1 Bucket |  |
| Dump clearance<br>at 45°          | 9' 0" (2.74 m)  | 9' 0" (2.71 m)            |  |
| Dump height<br>(fully dumped)     | 8' 9" (2.66 m)  | 8' 9" (2.66 m)            |  |
| Load over height                  | 11' 0" (3.34 m) | 11' 0" (3.34 m)           |  |
| Hinge pin height                  | 11' 9" (3.58 m) | 11' 9" (3.58 m)           |  |
| Pin forward reach                 | 1' 2" (352 mm)  | 1' 2" (352 mm)            |  |
| Reach at ground                   | 5' 3" (1.60 m)  | 5' 3" (1.60 m)            |  |
| Max. reach at full height         | 4' 3" (1.28 m)  | 4' 3" (1.28 m)            |  |
| Reach at full<br>height - 45°     | 2' 9" (829 mm)  | 2' 9" (829 mm)            |  |
| Reach at full height fully dumped | 2' 1" (645 mm)  | 2' 1" (645 mm)            |  |
| Dig depth                         | 5" (123 mm)     | 5" (123 mm)               |  |
| Rollback at ground                | 45°             | 45°                       |  |
| Maximum dump angle                | 57°             | 57°                       |  |
| Overall operating height          | 14' 0" (4.3 m)  | 14' 0" (4.3 m)            |  |

| Backhoe Dimensions                |                              |                              |                              |  |
|-----------------------------------|------------------------------|------------------------------|------------------------------|--|
|                                   | Standard Dipper              | Deep Dig Dipper (Ret.)       | Deep Dig Dipper (Ext.)       |  |
| Dig depth SAE                     | 15' 11" (4.9 m)              | 15' 11" (4.85 m)             | 20' 4" (6.20 m)              |  |
| 2 ft (0.61 m)<br>flat bottom SAE  | 15' 10" (4.84 m)             | 15' 10" (4.84 m)             | 20' 3" (6.18 m)              |  |
| Reach ground level to swing post  | 19' 10" (6.03 m)             | 19' 10" (6.03 m)             | 24' 0" (7.32 m)              |  |
| Loading reach                     | 6' 2" (1.87 m)               | 6' 2" (1.87 m)               | 9' 11" (3.03 m)              |  |
| Operating height                  | 19' 8" (5.99 m)              | 19' 8" (5.99 m)              | 22' 6" (6.86 m)              |  |
| Loading height SAE                | 12' 4" (3.75 m)              | 12' 4" (3.75 m)              | 14' 7" (4.44 m)              |  |
| Maximum load height               | 13' 1" (3.99 m)              | 13' 1" (3.99 m)              | 16' 3" (4.96 m)              |  |
| Maximum straight wall dig depth   | 8' 11" (2.71 m)              | 8' 11" (2.71 m)              | 13' 5" (4.08 m)              |  |
| Bucket rotation<br>Speed<br>Power | 194°<br>163°                 | 194°<br>163°                 | 194°<br>163°                 |  |
| Side reach from stabilizers       | 13' 5" (4.07 m)              | 13' 5" (4.07 m)              | 17' 7" (5.36 m)              |  |
| Stabilizer spread                 | 11' 3" (3.43 m)              | 11' 3" (3.43 m)              | 11' 3" (3.43 m)              |  |
| Maximum leveling angle            | 15°                          | 15°                          | 15°                          |  |
| Backhoe Performance               |                              |                              |                              |  |
| Swing torque                      | 11,875 lbf-ft<br>(16,100 Nm) | 11,875 lbf-ft<br>(16,100 Nm) | 11,875 lbf-ft<br>(16,100 Nm) |  |
| Dipper tearout                    | 8,329 lbf (3,778 kgf)        | 8,329 lbf (3,778 kgf)        | 5,580 lbf (2,531 kgf)        |  |
| Bucket tearout                    |                              |                              |                              |  |
| Speed                             | 11,636 lbf (5,278 kgf)       | 11,636 lbf (5,278 kgf)       | 11,636 lbf (5,278 kgf)       |  |
| Power                             | 14,445 lbf (6,552 kgf)       | 14,445 lbf (6,552 kgf)       | 14,445 lbf (6,552 kgf)       |  |

## **Attachments / Accessories**

| Loader Attachments |                          |                             |  |  |  |  |
|--------------------|--------------------------|-----------------------------|--|--|--|--|
|                    | Standard Capacity Bucket | 7-in-1 Bucket               |  |  |  |  |
| Width              | 7' 7" (2.31 m)           | 7' 7" (2.31 m)              |  |  |  |  |
| Capacity           | 1.32 yd³ (1.0 m³)        | 1.32 yd3 (1.0 m³)           |  |  |  |  |
| Weight             | 880 lbs (400 kg)         | 1,606 lbs (730 kg)          |  |  |  |  |
|                    | High Capacity Bucket     | High Capacity 7-in-1 Bucket |  |  |  |  |
| Width (Optional)   | 7' 10" (2.39 m)          | 7' 10" (2.39 m)             |  |  |  |  |
| Capacity           | 1.56 yd3 (1.2 m3)        | 1.56 yd³ (1.2 m³)           |  |  |  |  |
| Weight             | 946 lbs (430 kg)         | 1,687 lbs (767 kg)          |  |  |  |  |

| Forks (bucket-mounted) |                |                |  |  |  |
|------------------------|----------------|----------------|--|--|--|
|                        | Std Cap Bucket | 7-in-1 Bucket  |  |  |  |
| Fork length            | 3' 6" (        | 1.07 m)        |  |  |  |
| Section width          | 3" (8          | 0 mm)          |  |  |  |
| Assembly weight        | 330 lbs        | (150 kg)       |  |  |  |
| Max. operating heigh   | t 10' 2"       | (3.09 m)       |  |  |  |
| Reach at ground leve   | 8' 10"         | (2.71 m)       |  |  |  |
| Reach at full height   | 7' 4" (2.23 m) | 7' 5" (2.25 m) |  |  |  |
| S.W.L. at 20" load ce  | nter 2,204 lbs | (1,000 kg)     |  |  |  |

## **Hydraulic Hammer**

Sound-insulated. Tools: Moil point or chisel point

| Bucket Pin HT BOOM LIFT Above/Below lbs (kg) Extending |                | BOOM LIFT      |                | DIPPER LIFT   |               | CRANING LIFT  Extending |               |               |               |
|--|----------------|----------------|----------------|---------------|---------------|-------------------------|---------------|---------------|---------------|
|  |                | ding           | Extending      |               |               |                         |               |               |               |
| Ground   | Std            | Ret            | Ext            | Std           | Ret           | Ext                     | Std           | Ret           | Ext           |
| +18'   | -              | -              | -              | -             | -             | _                       | -             | -             | 3,209 (1,455) |
| +16'   | _              | -              | -              | -             | _             | 2,346 (1,064)           | -             | _             | 3,209 (1,455) |
| +14'   | 3,532 (1,602)  | 3,250 (1,474)  | 2,134 (968)    | 3,814 (1,730) | 3,752 (1,418) | 2,152 (976)             | 4,875 (2,211) | 4,853 (2,201) | 3,179 (1,442) |
| +12'   | *3,593 (1,629) | 3,269 (1,482)  | 2,231 (1,012)  | 3,404 (1,544) | 3,131 (1,418) | 1,995 (904)             | 4,519 (2,049) | 4,417 (2,003) | 3,154 (1,430) |
| +10'   | *3,377 (1,531) | *3,153 (1,430) | 2,200 (997.9)  | 3,307 (1,500) | 2,932 (1,418) | 1,896 (860)             | 4,434 (2,011) | 4,377 (1,985) | 3,154 (1,430) |
| +8'  | *3,201 (1,451) | *2,976 (1,349) | *2,165 (982)   | 3,466 (1,572) | 3,051 (1,418) | 1,995 (904)             | 4,469 (2,027) | 4,417 (2,003) | 3,268 (1,482) |
| +6'  | *3,071 (1,393) | *2,844 (1,290) | *2,097 (951.2) | 4,012 (1,819) | 3,638 (1,418) | 2,385 (1,081)           | 5,232 (2,373) | 4,992 (2,264) | 3,645 (1,653) |
| +4'  | *2,989 (1,355) | *2,765 (1,254) | *2,055 (932.1) | -             | _             | 2,914 (1,321)           | -             | -             | 4,195 (1,902) |
| +2'  | *2,963 (1,344) | *2,736 (1,241) | *2,041 (925.8) | -             | _             | 3,876 (1,758)           | -             | _             | 4,860 (2,204) |
| 0  | *2,989 (1,355) | 2,740 (1,242)  | 2,033 (922.2)  | -             | _             | 4,398 (1,994)           | -             | _             | 5,613 (2,546) |
| -2'  | 3,053 (1,384)  | 2,707 (1,227)  | 2,019 (915.8)  | -             | _             | _                       | -             | -             | -             |
| -4'  | 2,989 (1,355)  | 2,782 (1,261)  | 2,019 (915.8)  | -             | -             | -                       | -             | -             | -             |
| -6'  | 3,038 (1,378)  | 2,859 (1,296)  | 1,997 (905.8)  | -             | -             | -                       | -             | -             | -             |
| -8'  | 3,239 (1,469)  | 2,859 (1,296)  | 2,341 (1,061)  | -             | -             | -                       | -             | -             | -             |
| -10'   | -              | 2,919 (1,324)  | 2,615 (1,186)  | _             | _             | _                       | _             | -             | _             |

- 1. Figures stated apply within 90° either side of machine.
- 2. Figures stated are determined by static tests and do not include dynamic factors.
- 3. Figures stated are without bucket fitted.

- 4. Boom is angled at 78° for dipper lift capacities.
- 5. Loader bucket is on ground.
- 6. Crane capacity determined with hydraulic boom lock-up feature selection.

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