

# GTI 155 AND WAKE 155

| MODEL                         |          |               | GTI 155 / WAKE 155                                                                                      |
|-------------------------------|----------|---------------|---------------------------------------------------------------------------------------------------------|
| ENGINE                        |          |               |                                                                                                         |
| Engine type                   |          |               | ROTAX® 1503 4-TEC™, 4-stroke, Single Over Head Camshaft (SOHC)                                          |
| Induction                     |          |               | Naturally-aspirated                                                                                     |
| Number of cylinders           |          |               | 3                                                                                                       |
| Number of valves              |          |               | 12 valves with hydraulic lifters (no adjustment)                                                        |
| Bore                          |          |               | 100 mm (3.9 in)                                                                                         |
| Stroke                        |          |               | 63.4 mm (2.5 in)                                                                                        |
| Displacement                  |          |               | 1 493.8 cm³ (91 in³)                                                                                    |
| Compression ratio             |          |               | 10.6:1                                                                                                  |
| Maximum RPM                   |          |               | 7300 RPM                                                                                                |
| Lubrication                   | Type     |               | Dry sump (2 oil pumps).<br>Replaceable oil filter.<br>Water-cooled oil cooler                           |
|                               | Oil type |               | XPS synthetic blend oil (summer grade) (P/N 293 600 121). Refer to <i>LUBRICATION SYSTEM</i> subsection |
|                               | Capacity |               | 3 L (3.2 qt (U.S. liq.)) oil change w/filter<br>4.5 L (4.8 qt (U.S. liq.)) total                        |
| Intake valve opening          |          |               | 0° BTDC                                                                                                 |
| Intake valve closing          |          |               | 50° ABDC                                                                                                |
| Exhaust valve opening         |          |               | 50° BBDC                                                                                                |
| Exhaust valve closing         |          |               | 0° ATDC                                                                                                 |
| Valve stem diameter           | Intake   | New           | 5.961 mm to 5.975 mm (.2347 in to .2352 in)                                                             |
|                               |          | Wear limit    | 5.930 mm (.233 in)                                                                                      |
|                               | Exhaust  | New           | 5.946 mm to 5.960 mm (.2341 in to .2346 in)                                                             |
|                               |          | Wear limit    | 5.930 mm (.233 in)                                                                                      |
| Valve guide diameter          |          | New           | 5.994 mm to 6.018 mm (.236 in to .2369 in)                                                              |
|                               |          | Wear limit    | 6.060 mm (.2386 in)                                                                                     |
| Valve spring free length      | Inner    | New           | 41.02 mm (1.615 in)                                                                                     |
|                               |          | Wear limit    | 38.80 mm (1.528 in)                                                                                     |
|                               | Outer    | New           | 45.45 mm (1.789 in)                                                                                     |
|                               |          | Wear limit    | 43.00 mm (1.693 in)                                                                                     |
| Valve seat contact width      | Intake   | New           | 1.10 mm to 1.30 mm (.043 in to .051 in)                                                                 |
|                               |          | Wear limit    | 1.60 mm (.063 in)                                                                                       |
|                               | Exhaust  | New           | 1.25 mm to 1.55 mm (.049 in to .061 in)                                                                 |
|                               |          | Wear limit    | 1.80 mm (.071 in)                                                                                       |
| Rocker arm inner diameter     |          | New           | 20.007 mm to 20.020 mm (.7877 in to .7882 in)                                                           |
|                               |          | Wear limit    | 20.050 mm (.7894 in)                                                                                    |
| Rocker arm shaft diameter     |          | New           | 19.980 mm to 19.993 mm (.7866 in to .7871 in)                                                           |
|                               |          | Wear limit    | 19.970 mm (.7862 in)                                                                                    |
| Cylinder head maximum warpage |          | Service limit | 0.15 mm (.006 in)                                                                                       |

## Subsection XX (GTI 155 AND WAKE 155)

| MODEL                                |                  |                 | GTI 155 / WAKE 155                              |  |
|--------------------------------------|------------------|-----------------|-------------------------------------------------|--|
| ENGINE (cont'd)                      |                  |                 |                                                 |  |
| Cylinder head maximum warpage        |                  | Service limit   | 0.15 mm (.006 in)                               |  |
| Piston ring type                     |                  | 1 <sup>st</sup> | Upper compression ring, rectangular             |  |
|                                      |                  | 2 <sup>nd</sup> | Lower compression ring, tapered face            |  |
|                                      |                  | 3 <sup>rd</sup> | Oil scraper ring                                |  |
| Ring end gap                         | Rectangular      | New             | 0.30 mm to 0.50 mm (.012 in to .02 in)          |  |
|                                      | Taper-face       | New             | 0.35 mm to 0.55 mm (.014 in to .022 in)         |  |
|                                      | Oil scraper ring | New             | 0.35 mm to 0.50 mm (.014 in to .02 in)          |  |
|                                      | All              | Wear limit      | 1.50 mm (.059 in)                               |  |
| Ring/piston groove clearance         | Rectangular      | New             | 0.025 mm to 0.070 mm (.001 in to .003 in)       |  |
|                                      | Taper-face       | New             | 0.015 mm to 0.06 mm (.0006 in to .0024 in)      |  |
|                                      | Oil scraper ring | New             | 0.020 mm to 0.055 mm (.001 in to .002 in)       |  |
|                                      | All              | Wear limit      | 0.15 mm (.006 in)                               |  |
| Piston/cylinder wall clearance       |                  | New             | 0.024 mm to 0.056 mm (.0009 in to .0022 in)     |  |
|                                      |                  | Wear limit      | 0.100 mm (.0039 in)                             |  |
| Cylinder taper                       |                  | Wear limit      | 0.100 mm (.0039 in)                             |  |
| Cylinder out of round (maximum)      |                  |                 | 0.015 mm (.0006 in)                             |  |
| Camshaft bearing journal diameter    | Front            | New             | 24.939 mm to 24.960 mm (.9819 in to .9827 in)   |  |
|                                      |                  | Wear limit      | 24.910 mm (.9807 in)                            |  |
|                                      | PTO and center   | New             | 39.892 mm to 39.905 mm (1.5706 in to 1.5711 in) |  |
|                                      |                  | Wear limit      | 39.880 mm (1.5701 in)                           |  |
| Camshaft bearing inner diameter      | Front            | New             | 25.000 mm to 25.013 mm (.9843 in to .9848 in)   |  |
|                                      |                  | Wear limit      | 25.050 mm (.9862 in)                            |  |
|                                      | PTO and center   | New             | 40.000 mm to 40.020 mm (1.5748 in to 1.5756 in) |  |
|                                      |                  | Wear limit      | 40.050 mm (1.5768 in)                           |  |
| Cam lobe height                      | Intake           | New             | 31.540 mm to 31.740 mm (1.2417 in to 1.2496 in) |  |
|                                      |                  | Wear limit      | 31.50 mm (1.2402 in)                            |  |
|                                      | Exhaust          | New             | 31.430 mm to 31.630 mm (1.2374 in to 1.2453 in) |  |
|                                      |                  | Wear limit      | 31.380 mm (1.2354 in)                           |  |
| Crankshaft deflection                |                  | Maximum         | 0.05 mm (.002 in)                               |  |
| Crankshaft axial clearance           |                  | New             | 0.080 mm to 0.220 mm (.0031 in to .0087 in)     |  |
|                                      |                  | Wear limit      | 0.35 mm (.014 in)                               |  |
| Crankshaft bearing journal diameter  |                  | New             | 49.991 mm to 50.000 mm (1.9681 in to 1.9685 in) |  |
|                                      |                  | Wear limit      | 49.950 mm (1.9665 in)                           |  |
| Crankshaft radial clearance          |                  | Wear limit      | 0.07 mm (.0028 in)                              |  |
| Connecting rod big end diameter      |                  | Service limit   | 45.080 mm (1.7748 in)                           |  |
| Connecting rod big end radial play   |                  | Service limit   | 0.090 mm (.0035 in)                             |  |
| Connecting rod big end axial play    |                  | New             | 0.100 mm to 0.352 mm (.004 in to .014 in)       |  |
|                                      |                  | Wear limit      | 0.500 mm (.0197 in)                             |  |
| Connecting rod small end diameter    |                  | New             | 23.010 mm to 23.020 mm (.9059 in to .9063 in)   |  |
|                                      |                  | Wear limit      | 23.070 mm (.9083 in)                            |  |
| Connecting rod small end radial play |                  | Wear limit      | 0.080 mm (.0031 in)                             |  |

| MODEL                                                      |                                      | GTI 155 / WAKE 155                                                                                                                |
|------------------------------------------------------------|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| <b>ENGINE (cont'd)</b>                                     |                                      |                                                                                                                                   |
| Piston pin diameter                                        | New                                  | 22.996 mm to 23.000 mm (.9054 in to .9055 in)                                                                                     |
|                                                            | Wear limit                           | 22.990 mm (.9051 in)                                                                                                              |
| Balance shaft journal diameter                             | New                                  | 31.984 mm to 32.000 mm (1.2592 in to 1.2598 in)                                                                                   |
|                                                            | Wear limit                           | 31.950 mm (1.2579 in)                                                                                                             |
| Balance shaft radial clearance                             | Wear limit                           | 0.070 mm (.0028 in)                                                                                                               |
| Balance shaft axial clearance                              | New                                  | 0.020 mm to 0.250 mm (.0008 in to .0098 in)                                                                                       |
| Supercharger shaft driven plate journal depth              | New                                  | N.A.                                                                                                                              |
|                                                            | Wear limit                           | N.A.                                                                                                                              |
| Supercharger drive gear thickness                          | New                                  | N.A.                                                                                                                              |
|                                                            | Wear limit                           | N.A.                                                                                                                              |
| Supercharger lock washer thickness                         | New                                  | N.A.                                                                                                                              |
|                                                            | Wear limit                           | N.A.                                                                                                                              |
| Supercharger spring washer package height (not compressed) | New                                  | N.A.                                                                                                                              |
|                                                            | Wear limit                           | N.A.                                                                                                                              |
| <b>AIR INTAKE SYSTEM</b>                                   |                                      |                                                                                                                                   |
| Intake spark arrester                                      |                                      | Tubular, wire screen                                                                                                              |
| <b>COOLING SYSTEM</b>                                      |                                      |                                                                                                                                   |
| Type                                                       |                                      | Closed loop cooling system                                                                                                        |
| Coolant                                                    |                                      | Ethylene-glycol and distilled water (50%/50%). Use premix coolant from BRP or a coolant specially formulated for aluminum engines |
| Cooling system capacity                                    |                                      | 5.5 L (5.8 qt (U.S. liq.)) total                                                                                                  |
| Thermostat                                                 |                                      | 87°C (189°F)                                                                                                                      |
| Monitoring beeper setting                                  |                                      | 100°C (212°F)                                                                                                                     |
| <b>EXHAUST SYSTEM</b>                                      |                                      |                                                                                                                                   |
| Type                                                       |                                      | D-Sea-Bel sound reduction system. Water cooled/water injected (open loop). Direct flow from jet pump                              |
| Water injection in muffler                                 |                                      | 3 x 3.5 mm (.138 in) on exhaust pipe and 1 x 3.5 mm (.138 in) on muffler                                                          |
| <b>FUEL SYSTEM</b>                                         |                                      |                                                                                                                                   |
| Fuel injection type                                        |                                      | Multipoint fuel injection with iTC (intelligent Throttle Control). Single throttle body (62 mm) with an actuator                  |
| Fuel pressure                                              |                                      | 386 kPa to 414 kPa (56 PSI to 60 PSI)                                                                                             |
| Fuel injector                                              | Quantity                             | 3                                                                                                                                 |
| Fuel type                                                  | Inside North America ((RON + MON)/2) | 87 or higher                                                                                                                      |
|                                                            | Outside North America (RON)          | 92 or higher                                                                                                                      |
| Fuel tank (including reserve)                              |                                      | 60 L (15.9 U.S. gal.)                                                                                                             |
| Fuel tank reserve (from low level signal)                  |                                      | approx. 12 L (3.2 U.S. gal.)                                                                                                      |
| Idle speed                                                 |                                      | 1800 ± 50 RPM (not adjustable)                                                                                                    |

## Subsection XX (GTI 155 AND WAKE 155)

| MODEL                                     |                                        | GTI 155 / WAKE 155                                                                                                                    |
|-------------------------------------------|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>ELECTRICAL SYSTEM</b>                  |                                        |                                                                                                                                       |
| Magneto generator output                  |                                        | 360 W @ 6000 RPM                                                                                                                      |
| Stator                                    |                                        | 0.1 to 1.0 $\Omega$                                                                                                                   |
| Battery                                   |                                        | 12 V, 30 A•h                                                                                                                          |
| Anti-start system                         |                                        | D.E.S.S. (Digitally Encoded Security System) with selectable maximum vehicle speed settings for RK (rental key) and LK (learning key) |
| Ignition system type                      |                                        | IDI (Inductive Discharge Ignition)                                                                                                    |
| Ignition timing                           |                                        | Variable (electronically controlled)                                                                                                  |
| Spark plug                                | Make and type                          | NGK DCPR8E                                                                                                                            |
|                                           | Gap                                    | 0.7 mm to 0.8 mm (.028 in to .031 in)                                                                                                 |
| Ignition coil                             | Primary                                | 0.85 to 1.15 $\Omega$                                                                                                                 |
|                                           | Secondary                              | 9.5 to 13.5 K $\Omega$                                                                                                                |
| Engine speed limiter setting              |                                        | 7750 RPM                                                                                                                              |
| Fuse box                                  | #2: Diagnostic connector               | 15 A                                                                                                                                  |
|                                           | #3: START/STOP                         | 3 A                                                                                                                                   |
|                                           | #4: GPS (if so equipped)               | 3 A                                                                                                                                   |
|                                           | #5: iBR power                          | 30 A                                                                                                                                  |
|                                           | #6: Voltage rectifier/regulator        | 30 A                                                                                                                                  |
|                                           | #8: Relay, fuses 2, 3 and 4            | 30 A                                                                                                                                  |
|                                           | #11: Depth sounder (if so equipped)    | 3 A                                                                                                                                   |
|                                           | #12: O.T.A.S., gauge start up and CAPS | 3 A                                                                                                                                   |
|                                           | #13: Inj/Ign cyl 1                     | 10 A                                                                                                                                  |
|                                           | #14: Inj/Ign cyl 2                     | 10 A                                                                                                                                  |
|                                           | #15: Inj/Ign cyl 3                     | 10 A                                                                                                                                  |
|                                           | #16: Starter solenoid                  | 5 A                                                                                                                                   |
|                                           | #17:iBR control                        | 5 A                                                                                                                                   |
|                                           | #18: Fuel pump                         | 10 A                                                                                                                                  |
|                                           | #19: ECM power                         | 15 A                                                                                                                                  |
| <b>STEERING AND PROPULSION</b>            |                                        |                                                                                                                                       |
| Steering                                  |                                        | Fixed column                                                                                                                          |
| Steering nozzle pivoting angle            |                                        | 20°                                                                                                                                   |
| O.T.A.S. (Off-Throttle Assisted Steering) |                                        | Electronically-controlled                                                                                                             |
| Jet pump                                  | Type                                   | Axial flow single stage                                                                                                               |
|                                           | Grease type                            | Jet pump bearing grease (P/N 293 550 032)                                                                                             |
| Impeller                                  | Rotation (seen from rear)              | Counterclockwise                                                                                                                      |
|                                           | Pitch                                  | 11°/18°                                                                                                                               |
|                                           | Outside diameter                       | 155.5 mm $\pm$ 0.06 mm (6.122 in $\pm$ .002 in)                                                                                       |
| Impeller/wear ring clearance              | New                                    | 0 mm to 0.23 mm (0 in to .009 in)                                                                                                     |
|                                           | Wear limit                             | 0.35 mm (.0138 in)                                                                                                                    |
| Impeller shaft                            | End play (new)                         | 0                                                                                                                                     |
|                                           | Side play                              | 0                                                                                                                                     |
| Drive shaft                               | Coupling type                          | Crowned splines, direct drive                                                                                                         |
|                                           | Deflection (max.)                      | 0.5 mm (.02 in)                                                                                                                       |

| MODEL                                              |          | GTI 155 / WAKE 155                                                                                                                                   |
|----------------------------------------------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Minimum required water level for propulsion system |          | 90 cm (3 ft) underneath the lowest rear portion of hull                                                                                              |
| <b>iBR and VTS</b>                                 |          |                                                                                                                                                      |
| Description                                        |          | Intelligent Brake and Reverse activated by a LH lever.<br>Electronically-controlled iBR gate to provide brake, reverse, neutral and forward position |
| Gate angle (from horizontal line of watercraft)    | Forward  | Approx. from +8° to -4°                                                                                                                              |
|                                                    | Neutral  | Approx. -52°                                                                                                                                         |
|                                                    | Braking  | Approx. -70°                                                                                                                                         |
|                                                    | Reverse  | Approx. from -52° to -70°                                                                                                                            |
| VTS system                                         |          | Yes                                                                                                                                                  |
| VTS range angle                                    |          | Approx. from +8° to -4°                                                                                                                              |
| Actuator                                           |          | 12 V, 80 A max. capacity. Reversible PWM (pulse-width modulation) motor                                                                              |
| <b>WEIGHT AND LOADING CAPACITY</b>                 |          |                                                                                                                                                      |
| Dry weight                                         | GTI 155  | 343 kg (755 lb)                                                                                                                                      |
|                                                    | WAKE 155 | 348 kg (765 lb)                                                                                                                                      |
| Number of passenger (driver incl.)                 |          | 3                                                                                                                                                    |
| Load limit (passenger and 10 kg (22 lb) luggage)   |          | 272 kg (600 lb)                                                                                                                                      |
| <b>DIMENSIONS</b>                                  |          |                                                                                                                                                      |
| Overall length                                     |          | 336.8 cm (132.6 in)                                                                                                                                  |
| Overall width                                      |          | 123.1 cm (48.5 in)                                                                                                                                   |
| Overall height                                     |          | 111.8 cm (44 in)                                                                                                                                     |
| <b>MATERIALS</b>                                   |          |                                                                                                                                                      |
| Hull                                               |          | Composite fiberglass                                                                                                                                 |
| Inlet grate                                        |          | Aluminum                                                                                                                                             |
| Steering cover                                     |          | Thermoplastic                                                                                                                                        |
| Impeller material                                  |          | Stainless steel                                                                                                                                      |
| Impeller housing/stator                            |          | Aluminum/aluminum                                                                                                                                    |
| Venturi                                            |          | Aluminum                                                                                                                                             |
| Nozzle                                             |          | Aluminum                                                                                                                                             |
| Fuel tank                                          |          | Polyethylene                                                                                                                                         |
| Seat                                               |          | Polyurethane/foam                                                                                                                                    |
| N.A.: Not Available                                |          |                                                                                                                                                      |