



The New 5T A Speed Twin Prepared for Class "C" Road Racing

Our 1959 "short stroke," unit construction Speed Twin model offers a new opportunity for a winning combination in Class "C" racing activity. Here are the pictures of Ralph Tysor's Daytona racer that set the fastest Amateur time trial at Daytona Beach, an impressive speed of 120.8 MPH which was faster than all but one of the Expert riders.

Several dealers are now preparing new Triumph 5T/A racers and the experience gained thus far proves beyond a doubt that the new "over-square" engine has great possibilities and is a potential winner.

Here are the specifications of Ralph Tysor's Daytona model.

Essential Modifications to Convert the Speed Twin to Racing Specification

1. Remove road equipment such as rear wheel enclosure, front fender, lights, etc.
2. Strip engine-gearbox unit, clean parts, and carefully re-assemble, replacing standard parts with racing parts as follows:
3. Fit 9 to 1 compression ratio pistons and heavy duty rings which will soon be available from stock.
4. Install racing cams, E4038 inlet and E4039 exhaust. (Available from stock).
5. Replace standard tappets with racing type, E4040. (Available from stock).
6. Modify cylinder head by enlarging inlet ports to 1" diameter and fit oversize valve seat inserts to take 1-9/16" diameter inlet valves which will soon be available from stock.

NOTE: We suggest that you send cylinder head to your distributor (The Triumph Corporation in the east or Johnson Motors, Inc. in the west) for rework if you do not have facilities for modifying cylinder head.

7. Fit racing kit type dual carburetor manifold (CD4) and a pair of 1" G.P.15 carburetors, (available from stock).
8. Fit top feed racing carburetor float bowl (302/13) to L.H. carburetor and modify bowl to feed both carburetors. A remote float bowl (302/11) could be used if preferred.

Optional Modifications and Specifications of Tysor's Daytona Racer

IGNITION: Flywheel magneto (Tri-Cor or Jomo type) replaces alternator, battery and distributor. This new magneto (soon available from stock) incorporates its own condenser. (Remove Lucas condenser from distributor body). The Lucas contact breaker and points are used without modification but the auto advance mechanism is eliminated and spark timing is set at 40° B.T.C.

WHEELS and TIRES: 18" alloy rims with 3.00x18 racing Rib front tire and 3.25x18 Directional tread racing rear tire were used. A 1953 T100 7" front brake and hub were fitted. Standard rear wheel brake was used but a special 41 tooth sprocket was necessary to obtain proper gearing for Daytona.

HANDLEBARS. The 1953 T100/C 1" handlebar (H820) was fitted with 3/4" Twin cable twistgrip and two D275T cables.

CLUTCH. Standard 5T/A four plate type except the standard T1362 plates were replaced with heavy duty plates, T414AT and standard springs were replaced with T741 heavy racing type.

GEARBOX. No modification required to gearbox except the fitting of a set of close ratio gears which will soon be available from stock. These close ratio gears are only recommended for Daytona or Laconia road races and give the following internal ratios as compared to the standard ratios:

Close Ratio Gears		Standard Gears	
1st	1.86 to 1	1st	2.41 to 1
2nd	1.35 to 1	2nd	1.74 to 1
3rd	1.11 to 1	3rd	1.17 to 1
4th	1.00 to 1	4th	1.00 to 1

GEARING. 4.57 to 1 using 20 tooth countershaft sprocket and special 41 tooth rear wheel sprocket. (Std. R/W sprocket is 43T).

TANKS. Standard oil tank used with capacity increased to three quarts. 1959 6T gas tank fitted. Because the large (5 gal.) tank with bottom mounting pads was required for Daytona, a tubular reinforcing piece was bolted to the standard tank mounting holes on head lug and frame lug at top of seatpost to reinforce the front frame section. This special piece would not be required if the regular 5T/A tank or standard Cub tank is used. The A.M.A. rules do not allow any alteration to standard frame but a reinforcing tube can be bolted in place providing no cutting, welding or drilling is required.

EXHAUST SYSTEM. Best results were obtained by using standard 5T/A exhaust pipes (1 1/2" dia.) with 4" reverse cone megaphones E3479RH and E3479LH fitted.

VALVE GEAR. The standard 5T/A valve springs E4010 and E4011 were used with standard collars and keepers. Rocker arms and push rods were standard parts, polished for increased strength and reliability.

CARBURETOR SETTINGS. G.P.15 1" carburetors, main jets 180 R.H. and 190 L.H., air jets .100", needles std. G.P., needle position #3, slides #4 cutaway.

SPARK PLUGS. RL49

OIL. Engine, primary and front forks—Castrol SAE30. Gearbox—Castrol "R" 20.

Total Dry Weight 290 Lbs.