

# A/S32A-42 Aircraft Mid-Range Tow Vehicle

This shore-based tractor (fig. 2-16) is designed for towing aircraft weighing up to 100,000 lbs. The tractor

operates much like any automobile, but the high gear ratio in the rear axle gives this tractor its towing ability. It has a drawbar pull of 10,000 lbs., and a maximum forward speed of 13 m.p.h. The four-cylinder diesel

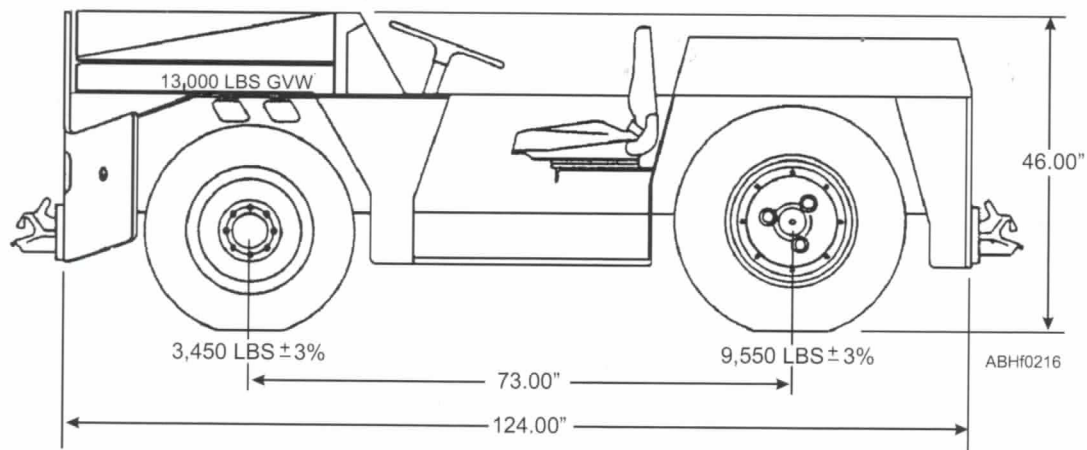
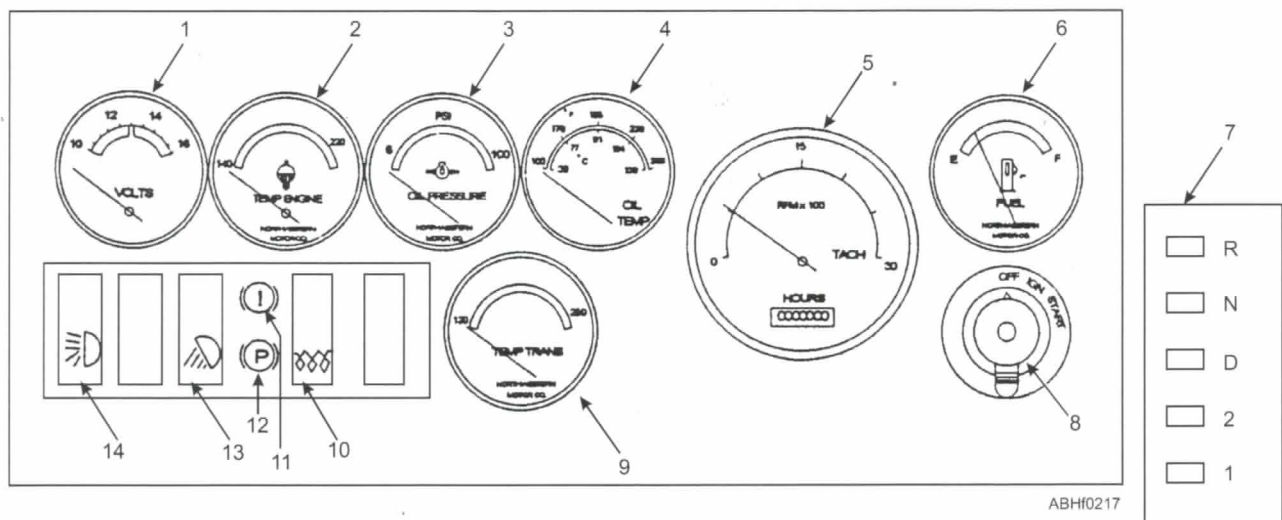


Figure 2-16.—A/S32A-42 Aircraft Mid-Range Tow Vehicle.



1. Voltmeter
2. Engine coolant temperature gauge
3. Oil pressure gauge
4. Engine oil temperature gauge.
5. Tachometer/Hourmeter
6. Fuel gauge
7. Gear shift lever
8. Ignition switch
9. Transmission oil temperature gauge
10. Manifold preheat switch
11. Brake failure light
12. Park brake light
13. Rear work light switch
14. Head and tail light switch

Figure 2-17.—A/S32A-42 Instrument Panel.

engine displaces 236 cubic inches and produces 80 horsepower at 2600 rpm's. Figure 2-17 shows the location of instrument panel components. Table 2-4 contains the leading particulars of the A/S32A-42 tow tractor.

Before starting the tractor when it has a cold engine, place the gear selector to N (neutral), turn the ignition switch to IGN, and push in the preheater switch for about 15 seconds. Then turn the ignition switch to start and crank the engine to start. Cranking should never exceed 15 seconds; if the engine has not started, try the preheater again for an additional 10 seconds

before you attempt to crank start the engine again. The transmission is a three speed automatic with a torque converter enclosed within the same housing. A gear selection lever allows the operator to choose from five different gear positions. The transmission will automatically shift up as the vehicle gains speed, unless the transmission is placed in either 1 or R. Select the appropriate speed range based on the following: R-Reverse; D-No load or light load; 2-Medium load; 1-Heavy load. For specific information concerning operating instructions for the tow tractor, refer to NAVAIR 19-40-522.

Table 2-4.—Leading Particulars of the A/S32A-42 Mid-Range Tow Vehicle

Gross vehicle weight	13,000 lbs.	Drawbar pull	10,000 lbs.
Vehicle length	124 inches	Vehicle width	70 inches
Vehicle height	46 inches	Ground clearance	5-1/2 inches
Maximum speed	13 miles per hour	Turning radius	200 inches
Fuel capacity	20 gallons	Tire pressure	60 psig