

SPECIFICATION

1.0 BLOWER CONTROL SYSTEM TRAINER – J1850 (MODEL 320FJ)

This trainer is part of an electrical systems program for presenting the live operation and study of Blower Control Systems. The program also provides courseware for use by students and instructors.

1.1 CONSTRUCTION

The trainer cabinet is constructed of laminated plywood with a front panel of Lexan and 2nd surface graphics. The supporting legs are made of square steel tubing.



1.2 COMPONENTS

This trainer uses actual new-model vehicle components and connectors.

Features Include:

- HVAC Control Module
- Blower Motor/Fan
- Blower Motor Control Processor
- Connector Tip Jacks
- Fuse Panel
- Keypad / Display
- Power Supply Posts

1.3 TRAINER OPERATION

The trainer features actual Blower Control System operation. It is connected either to a 12VDC automotive battery (not included) or power supply (not included).

2.0 SYSTEM DIAGNOSTICS

This trainer provides an advanced level of instruction by duplicating actual on-vehicle troubleshooting procedures. Actual vehicle wire colors are used to be compatible with wiring diagrams. It is also capable of actual service manual test procedures.

3.0 FAULT INSERTION

Faults can be inserted via keypad, local computer, or ATech Network System (ANS). A Software interface allows hard and intermittent faults to be entered by selecting from a pictorial schematic. Software interface faults are entered either randomly or as specified by an instructor.

Faults:

Fault #	Description	Fault	Circuit #	Wire Color
1	Blower Motor Always On	Short to ground	2150	BLK
2	Blower Motor Inoperative	High Resistance	754	GY/BLK
3	Blower Motor Inoperative	Open	442	RD
4	No Communication With Scan Tool/No Power	Open	1038	WH
5	No Power	Open	1551	BLK/WH
6	No Power	Open	1040	OG
7	Blower Motor Inoperative	Open	1450	BLK
8	Blower Motor Inoperative	Open	754	GY/BLK

3.1 FAULT INSERTION VIA KEYPAD

Realistic faults can be inserted via the keypad to provide troubleshooting practice.

3.2 FAULT INSERTION VIA LOCAL COMPUTER

Faults are entered via the serial communications port or USB of a single computer using a software interface (installed on the computer hard drive). A proprietary USB cable is included for connecting to a computer.

3.3 FAULT INSERTION VIA ATECH NETWORK SYSTEM (ANS)

Connection to the LAN is achieved with an optional ANS (ATech Network System). The ANS is a 16-port serial hub with standard CAT5 cable. An Ethernet connection is required from the serial hub to the LAN. The Software interface can be installed on any LAN computer.

4.0 POWER REQUIREMENTS

Requires 12VDC automotive battery (not included) or 12VDC/16.7Amp power supply (not included). Current Draw = 9 Amps.

An internally mounted power supply is included. It is a filtered and regulated power source with fused protection. The power cord is for a North America (Nema 5-15) 110VAC/15Amp electrical outlet. A power switch with indicator light to control the power supply. Current Draw = .3Amps. Optional 220VAC/50Hz power supply available.

5.0 OPERATIONS MANUAL

The Ops manual provides instructors with Trainer Orientation, Start-up Procedures, Equipment Operation, Maintenance and Service Information.

6.0 BLOWER CONTROL SYSTEM COURSEWARE

All items are part of a complete courseware package and include a photocopy site license to allow for the distribution of student manuals. Courseware is provided in Adobe PDF file format on CD-Rom or USB flash drive.

6.1 STUDENT MANUAL

The courseware includes a Student Manual containing on-trainer activities and work sheets written specifically for use with the ATech Blower Control System Trainer and Service Manual Information.

The units of instruction are based on NATEF tasks. The Blower Control System Activities include:

1. Program Overview
2. Description and Familiarization
3. Blower Control System Operation
4. Blower Control System Diagnosis and Testing

6.2 NATEF TASK RECORD KEEPING SHEET

An included NATEF Task Record Keeping Sheet aids the instructor in recording the progress of each student as NATEF tasks are completed.

6.3 INSTRUCTOR GUIDE

This guide assists in managing the program material. The Instructor Guide provides product information and student manual answers.

6.4 SERVICE MANUAL INFORMATION

The courseware includes the appropriate manufacturer's Service Manual Information for use during student activities and system diagnosis.

7.0 SHIPPING

The trainer has an approximate shipping weight of 70 lbs (32 Kg). Its shipping size is approximately 37"W x 14"D x 27"H (94cm W x 36cm D x 69 H). Cartons are made from 100% recycled paper.