

Ĺ

# Who is JEEE?

**Contemposed** is a small company located in a rural Missouri town. Our employees, who have been with us for years, are the backbone of the company.

**EXAMPLE** 's people have one goal: to produce a product that's worth the money. We believe that means building a quality piece of equipment and supporting that equipment after the sale with assistance and information. Even our competitors acknowledge that **EXAMPLE** does this best!

**Rebuilder/Auto Electric with the BEST test equipment since 1969.** 

We've been asked why our equipment costs more than some other brands. It's for the same reason your rebuilt alternators cost more than the bargain brands: quality and service.

Price is black and white. Quality and service are not. To find out what really makes **INTERCENT** equipment different, ask someone who already owns a **INTERCENT**.

All of us thank you for your interest in **DEFINITION**. We'd like to have <u>your</u> business.

#### TEST EQUIPMENT PICTURE GUIDE TABLE OF CONTENTS

SECTION	ITEMS	NUMBER OF PAGES IN SECTION
QC	QUALITY CONTROL TEST BENCHES	6
BT	BENCH TOP TEST BENCHES	1
ТВ	CONSOLE TEST BENCHES	6
MA	HOOK-UP MANUALS	2
JACC	TEST BENCH ACCESSORIES	4
OS	OSCILLOSCOPE	1
SR	COMBINATION STATOR-ROTOR-DIODE TESTER	2
CP	HEAVY DUTY CARBON PILES	1
TEST	INDIVIDUAL METERS, MEDIUM DUTY CARBON PILE -	5
отст	ON-THE-CAR-TESTERS	4

JIMCO, INC. 611 EAST WALNUT P.O. BOX 137 RAYMORE, MO 64083 USA PHONE 816-331-1917 800-821-7137 FAX 816-331-1971

Information in this publication was obtained from sources believed to be accurate. JIMCO, Inc. assumes no responsibility for possible errors. Permission to reproduce any portion is denied.

COPYRIGHT © 1996 JIMCO, Inc.

#### COMMON SENSE SAFETY PRECAUTIONS

Always work in a well ventilated area. Never start a vehicle's engine in a confined area.

Never smoke or allow any other open flame to come within 25 feet of the vehicle being tested or the test equipment being used.

Always insure that everyone within close proximity of the vehicle being tested or the equipment used is correctly wearing approved safety/protective eyewear before proceeding with testing.

Always insure that the vehicle's engine is turned OFF when connecting or disconnecting any and all test equipment.

Always exercise extreme caution to insure that hands, arms, clothing and tester leads are kept away from all moving parts or test equipment parts.

Because the battery my produce highly explosive gasses, it is extremely important that you carefully observe the following precautions:

- a. Do **NOT** smoke or allow any other open flame or spark within 25 feet of the battery.
- b. Never directly connect the positive and negative battery posts together with any conductive material (such as a screwdriver, jumper lead, etc.) as this causes a short circuit and the spark could result in an explosion.

Battery acid and corrosion can be extremely dangerous and must be dealt with very carefully.

- a. Do **NOT** allow battery acid or corrosion to come in direct contact with skin or eyes. If it does, thoroughly wash skin with warm soapy water immediately and/or rinse eyes with clear water for 15-20 minutes. CONTACT PHYSICIAN IMMEDIATELY.
- b. Extreme caution must be exercised to avoid ingestion of battery acid or corrosives. If ingestion does occur, CONTACT PHYSICIAN IMMEDIATELY.



## "QUALITY CONTROL" ALTERNATOR - GENERATOR - STARTER TESTER

Model TB-QC5J

EASY OPERATION REDUCED WARRANTIES "FULL LOAD" ALTERNATOR TEST "LOAD TEST" BATTERIES (1000 CCA) POWERFUL 5 HP MOTOR INCREASED CUSTOMER CONFIDENCE

JIMCO, Inc. • Phone: 800 - 821 - 7137 • FAX: 816 - 331 - 1971

## "QUALITY CONTROL" ALTERNATOR - GENERATOR - STARTER TESTER

**IDITIES:** Model TB-QC5J "**QUALITY CONTROL**" Alternator-Generator-Starter Tester is designed for the fleet operator, parts jobber or ag-industrial dealer who requires a "**REAL**" tester capable of testing alternators and batteries for **FULL** output.

Model TB-QC5J "QUALITY CONTROL" tester features:

- Fully load tests alternators and generators to 165 amps (12 volt), intermittently to 190 amps
- LOAD test batteries to 1000 cca ratings!
- Free run starter testing.
- TB-QC5J model: **POWERFUL** single speed 5 HP, 220 volt single phase drive motor. TB-QC5VS model: **VARIABLE SPEED** 5 HP, 220 volt single phase OR 3 phase drive motor.
- 6, 12 and 24 volt operation
- Heavy duty carbon pile for completely ADJUSTABLE load from 0 to 500 amps.
- Two easy to read analog meters: Combination 0-35 volt output voltmeter and auxiliary voltmeter (stator or diode trio voltages) Combination 0-200 and 0-500 amp D.C. ammeter
- Pre-test for reversed lead connection or shorted alternator diodes before turning on the motor. Prevents damage to the tester and alternator.
- Uses industry standard IIIII color coded alternator test leads
- Sliding ears with stepped pins hold alternators like the manufacturer intended, by their mounting ears. Starters are held in a slide-in "V" vise.
- Combination "V" belt and "Serpentine" belt drive pulley.
- Optional field adapters for externally regulated "A" and "B" circuit alternators.
- Compact: Only 24 inches wide x 22" high x 36 inches front to back. Optional stand.

TEST BENCH

QCJ 3

FEATURE	TB-QC5J	TB-QC5VS	TB-QC7J
Drive motor Horsepower	5 HP SINGLE speed (\$3,490.00)	5 HP VARIABLE speed (\$4,495.00)	7-1/2 HP SINGLE speed
Drive Motor Power & Phase	(\$3,490.00) 220 V.A.C. 60 HZ single phase	220 V.A.C. 60 HZ single or 3 phase	(\$5,460.00) 220 V.A.C. 60 HZ single phase
Carbon Pile 18 - 1/4" x 4" x 4" plates	intermittently to 500 amps	intermittently to 500 amps	intermittently to 500 amps
Operators Manual	Included	Included	Included
Serpentine Pulley	Included	Included	Included
Test Voltage (batteries <b>NOT</b> included)	6, 12 and 24 volt	6, 12 and 24 volt	6, 12 and 24 volt
Test Leads Included	TB-UNI Universal Lead only	TB-UNI Universal Lead only	TB-UNI Universal Lead only
QC5TLBASIC	Optional	Optional	Optional
11 PieceTest Lead Set	(\$358.00)	(\$358.00)	(\$358.00)
TB990 Alternator	Optional	Optional	Optional
Hookup Manual	(\$400.00)	(\$400.00)	(\$400.00)
TB-FIELD-A12V	Optional	Optional	Optional
12v External Reg. "A" circuit Adapter	(\$23.50)	(\$23.50)	(\$23.50)
TB-FIELD-B12V 12v External Reg. "B" circuit Adapter	included	included	included
TB092	Optional	Optional	Optional
V-vise hold down clamp	(\$195.00)	(\$195.00)	(\$195.00)
TB-FIELD-B24V	Optional	Optional	Optional
24v External Reg. "B" circuit Adapter	(\$28.50)	(\$28.50)	(\$28.50)
TB-TBEN	Optional	Optional	Optional
Adjustable Alternator Bracket	(\$58.00)	(\$58.00)	(\$58.00)
TB-QCYMNT	Optional	Optional	Optional
Alternator Bracket	(\$55.00)	(\$55.00)	(\$55.00)
TB1950 Generator	Optional	Optional	Optional
Hookup Manual	(\$90.00)	(\$90.00)	(\$90.00)
T95-QCSTAND	Optional	Optional	Optional
Bolt Together Stand	(\$205.00)	(\$205.00)	(\$205.00)
T95-QCREV	Optional	included	Optional
Reversible Drive Motor & Control	(\$195.00)		(\$195.00)
T95-QCCAS	Optional	Optional	Optional
Caster Kit for Stand	(\$70.00)	(\$70.00)	(\$70.00)

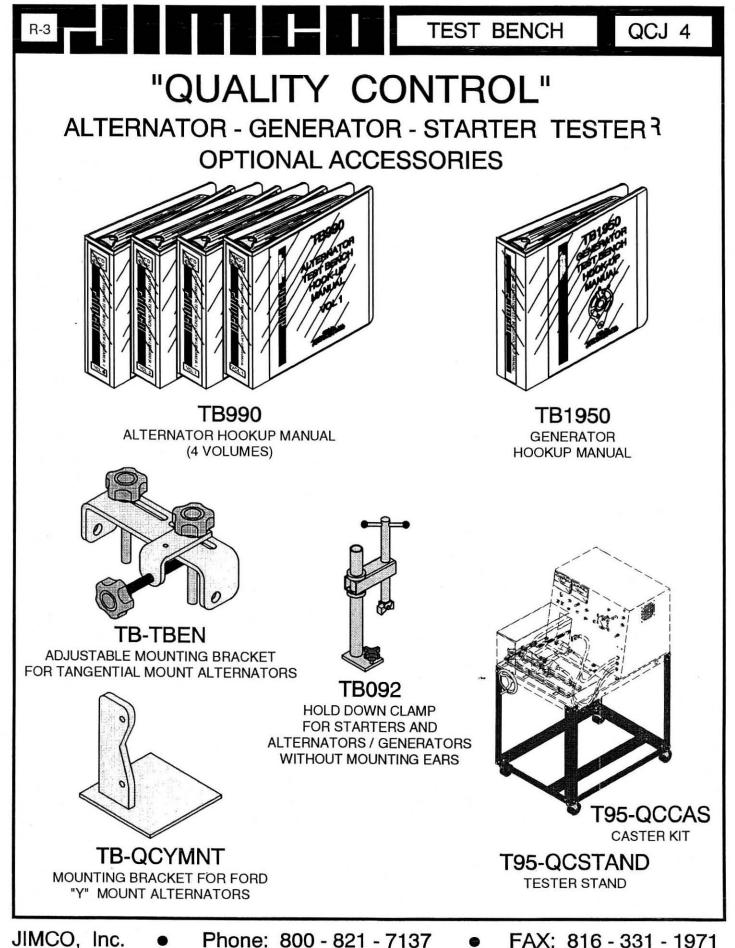
JIMCO, Inc.

TBQC5J.DRW 12-00, R-11 01-19

R-11

Phone: 800 - 821 - 7137 •

FAX: 816 - 331 - 1971



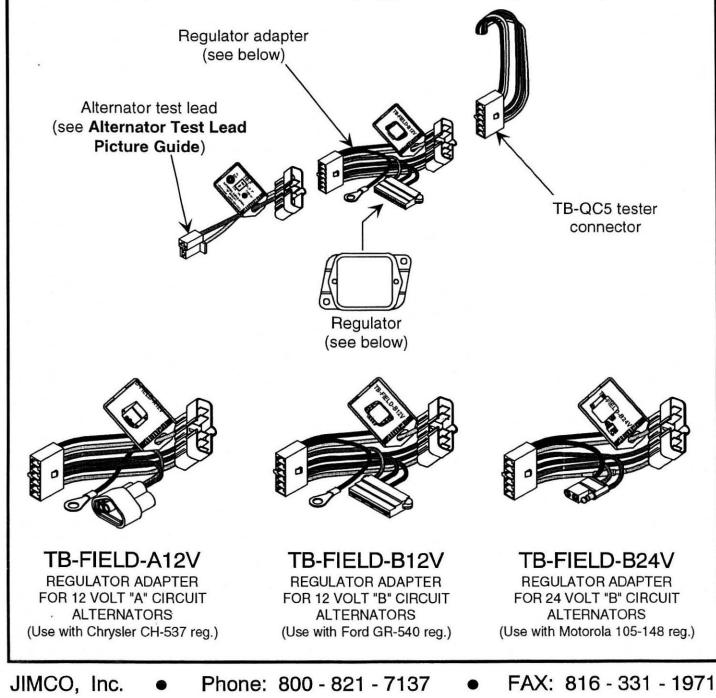
TBQC5J.DRW 12-00, R-3 11-04 OPT

Phone: 800 - 821 - 7137
FAX: 816 - 331 - 1971

# "QUALITY CONTROL"

#### ALTERNATOR - GENERATOR - STARTER TESTER OPTIONS

On externally regulated alternators a **REGULATOR ADAPTER** and a regulator must be used. The regulator adapter plugs into the TB-QC5 test lead connector with the appropriate alternator test lead plugged into the regulator adapter.





TEST BENCH

**BT** 1

#### THE INDUSTRY'S BEST TECH SUPPORT

- Heavy Duty Alternator Generator load system
- Combination Digital Analog Meters
  - ✓ Easy to read and dependable
  - ✓ Output voltmeter
  - ✓ Output ammeter
  - ✓ Field ammeter

R-6

- ✓ Auxiliary volt meter
- ✓ Tachometer (Variable-speed models ONLY)
- Industry standard Hook-up Manuals
- Voltage Selector Switch ✓ 6 - 12 - 24 volt operation #
- Test Leads, engineered to work the same as "on the car", built by JIMCO Includes the most popular leads, test lead set "BASIC" (see page TB 5)
- Automatic or Manual Field Regulation for external regulator alternators
- Safe Alternator Mounting
  - ✓ Sliding ears with stepped pins hold alternators like the manufacturer intended, by their mounting ears.
- Load Test Regulators with JIMCO regulator test leads
- Pre-Test for reversed lead connection or shorted alternator diodes

FEATURE	TB200BT	TB210BT	TB320BT	TB330BT	TB420BT	TB430BT	TB520BT	TB530BT
Drive Motor Horsepower	5	5	5	5	7-1/2 #	7-1/2 #	10 #	10 #
Drive Motor Phase ★	3	1	3	1	3	1	3	1
Variable Speed	NO	NO	YES	YES	YES	YES	YES	YES
12 V Alternator Load	150	150	150	150	200	200	275	275
24 V Alternator Load	75	75	75	75	100	100	140	140
Maximum Amp Load	200	200	200	200	250	250	300	300
Load System Plate Size	1/4 x 4 x 4	1/4 x 6 x 6						
No. of Load System Plates	28	28	28	28	32	32	48	48
Shipping Weight (lbs.)	375	400	450	475	550	550	650	650
PRICE (U.S. Dollars)	\$5,610.	\$5,950.	\$7,590.	\$8,140.	\$10,100.	\$10,600.	\$11,400.	\$12,210

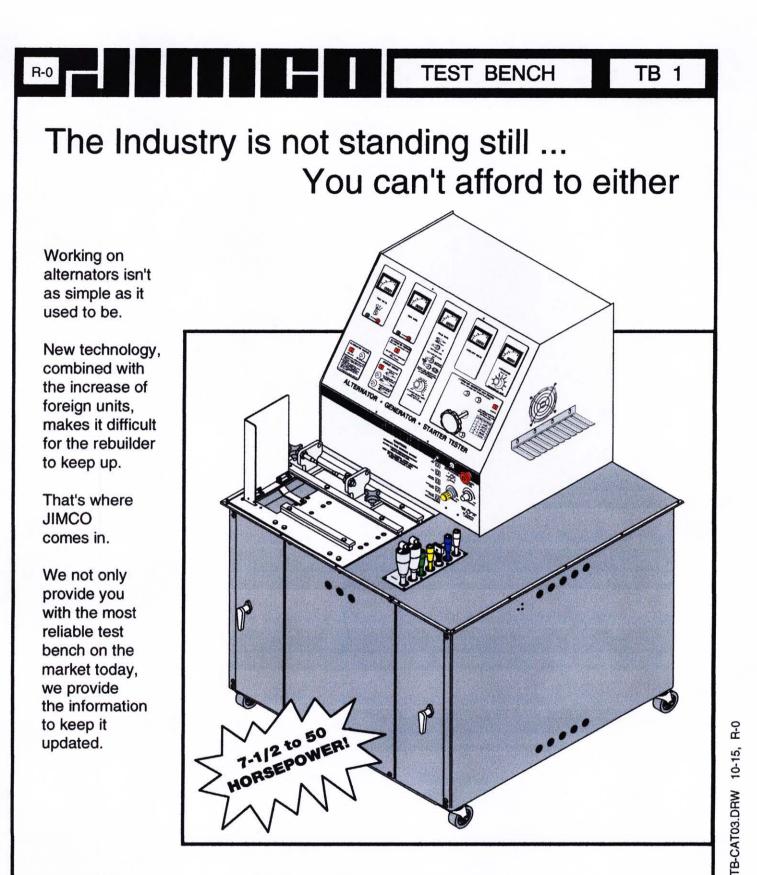
# Includes 32 volt

★ Drive motor voltage: 230 volt, 60 Hz., Other voltages available, consult factory

JIMCO, Inc.

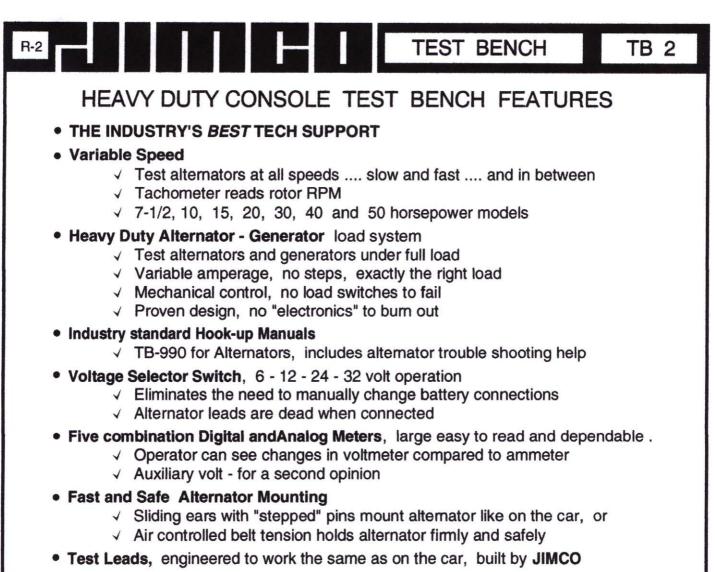
Phone: 816 - 331 - 1917 •

FAX: 816 - 331 - 1971



Need more information? Call and ask for a FREE samples of JIMCO Hook-up manuals.

Phone: 816 -331 - 1917



- Automatic or Manual Field Regulation for external regulator alternators
- Load Test Regulators with JIMCO regulator test leads
- Pre-Test for reversed lead connection or shorted alternator diodes
- Easy to Service
  - All wires are numbered to match wiring diagrams
- Free standing Console Unit
  - $\checkmark\,$  All steel lower cabinet houses motor and variable speed drive
  - ✓ Built-in battery compartment (batteries not supplied)
  - Main test leads are self storing

#### SUPER DUTY CONSOLE TEST BENCH FEATURES

#### • ALL OF THE FEATURES ABOVE PLUS:

- Drive system designed for maximum torque at LOWER speeds in a larger base console.
- $\checkmark~$  Additional "0" gauge output leads for high output alternators.
- ✓ Higher capacity load bank cooling.
- TB900, TB1000, TB1200, TB1500 and TB1800 have an additional, separate free-standing, fan-cooled, step load system that can be operated continuously with no time limit.

		TEST B	ENCH	1 -
COMBINATION DI	GITAL -	ANALO	GМ	ETERS
TEST VOLTS (CUTPUT VOLTS)	FIELD AMPS		VOLTS	
LITERNATOR TESTING     LITERNATOR     LITERNATOR	Минан, ЕКСЬ СОНТНОЛ. НЕТ ЧОЛТЬ ИЛИ ВИСПТАТАНО А.Т. СИЛКОВИ ПАВОСИЛТКО. К. С. СОНТНОЛ. НИКОВТАТ И СОНТНОЛ. НИКОВТАТ И СОНТНОЛ. НИКОВТАТ И МИНАН. РЕС.D. СОНТНОЛ.			
MET	ER SPECIFIC	ATIONS		gylania a shekara da sa ku ka sa ku ka
MET Output Voltmeter; the back ground color will be WHITE when below normal charging voltage, GREEN when at normal charging voltage and RED when above normal charging voltage	Voltage V 6 12	VHITE below     GR       6.5     6       13.2     13	EEN from .5 to 7.8 .2 to 15.2 .4 to 30.4 no color cl	7.8 15.2 30.4
Output Voltmeter; the back ground color will be WHITE when below normal charging voltage, GREEN when at normal charging voltage and RED when above normal charging	Voltage V 6 12 24 32	VHITE below     GR       6.5     6       13.2     13.       26.4     26.	.5 to 7.8 .2 to 15.2 .4 to 30.4 no color cl	7.8 15.2 30.4 nange
Output Voltmeter; the back ground color will be WHITE when below normal charging voltage, GREEN when at normal charging voltage and RED when above normal charging voltage	Voltage V 6 12 24 32 TB200 thru TB800	VHITE below     GR       6.5     6       13.2     13       26.4     26       White with     13       TB850 thru TB1000     13	5 to 7.8 2 to 15.2 4 to 30.4 no color cl TB1200 0-800	7.8 15.2 30.4 nange TB1500 thru TB1800
Output Voltmeter; the back ground color will be WHITE when below normal charging voltage, GREEN when at normal charging voltage and RED when above normal charging voltage Output Ammeter	Voltage V 6 12 24 32 TB200 thru TB800	VHITE below GR 6.5 6 13.2 13 26.4 26 White with TB850 thru TB1000 0-600	5 to 7.8 2 to 15.2 4 to 30.4 no color cl TB1200 0-800	7.8 15.2 30.4 nange TB1500 thru TB1800

•

JIMCO, Inc.

Phone: 816 - 331 - 1917 • F.

FAX: 816 - 331 - 1971

TB700 "BT"	<b>TB700</b>	TB710 "BT"	TB710	TB760 "BT"	<b>TB760</b>	TB770 "BT"	TB77(	
7-1/2	7-1/2	7-1/2	7-1/2	10	10	10	10	
3	3	1	1	3	3	1	1	
230	230	230	230	230	230	230	230	
110/130 VOLTS A.C., 50-60 Hz.								
200	200	200	200	275	275	275	275	
100	100	100	100	140	140	140	140	
400	400	400	400	400	400	400	400	
"BASIC"	"PREM"	"BASIC"	"PREM"	"BASIC"	"PREM"	"BASIC"	"PREI	
optional \$395.00	YES	optional \$395.00	YES	optional \$395.00	YES	optional \$395.00	YES	
optional \$210.00	optional \$210.00	optional \$210.00	optional \$210.00	optional \$210.00	optional \$210.00	optional \$210.00	option \$210.0	
optional \$400.00	optional \$400.00	optional \$400.00	optional \$400.00	optional \$400.00	optional \$400.00	optional \$400.00	option \$400.1	
optional \$90.00	optional \$90.00	optional \$90.00	optional \$90.00	optional \$90.00	optional \$90.00	optional \$90.00	option \$90.0	
optional \$75.00	optional \$75.00	optional \$75.00	optional \$75.00	optional \$75.00	optional \$75.00	optional \$75.00	option \$75.0	
44x44x54	44x44x54	44x44x54	44x44x54	44x44x54	44x44x54	44x44x54	44x44x	
850	850	875	875	875	875	895	895	
	"BT"     7-1/2     3     230     200     100     400     "BASIC"     optional     \$395.00     optional     \$210.00     optional     \$210.00     optional     \$200.00     optional     \$90.00     optional     \$75.00     44x44x54	"BT"     7-1/2   7-1/2     3   3     230   230     200   200     100   100     400   400     "BASIC"   "PREM"     optional \$395.00   YES     optional \$210.00   optional \$210.00     optional \$210.00   optional \$210.00     optional \$210.00   optional \$210.00     optional \$210.00   optional \$210.00     optional \$210.00   optional \$210.00     optional \$210.00   optional \$210.00     optional \$210.00   \$210.00     optional \$210.00   \$210.00     optional \$210.00   \$210.00     optional \$210.00   \$210.00     optional \$210.00   \$210.00     optional \$210.00   \$210.00     optional \$20.00   \$210.00     optional \$210.00   \$210.00     optional \$210.00   \$210.00     optional \$20.00   \$210.00     optional \$210.00   \$210.00     optional \$210.00   \$210.00     optional \$210.00   \$210.00  >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	"BT"     "BT"       7-1/2     7-1/2     7-1/2       3     3     1       230     230     230       230     230     230       230     230     230       200     200     200       100     100     100       400     400     400       "BASIC"     "PREM"     "BASIC"       optional     YES     optional       \$395.00     optional     \$395.00       optional     optional     \$395.00       optional     \$210.00     \$210.00       \$90.00     \$90.00     \$90.00       optional     \$90.00     \$90.00       optional     \$75.00     \$75.00       \$75.00     \$75.00     \$75.00	"BT"     "BT"       7-1/2     7-1/2     7-1/2     7-1/2       3     3     1     1       230     230     230     230       230     230     230     230       200     200     200     200       100     100     100     100       400     400     400     400       400     400     400     400       "BASIC"     "PREM"     "BASIC"     "PREM"       optional \$395.00     YES     optional \$395.00     YES       optional \$210.00     \$210.00     \$210.00     \$210.00       optional \$400.00     \$400.00     \$400.00     \$400.00       optional \$90.00     \$90.00     \$90.00     \$90.00       optional \$90.00     \$90.00     \$90.00     \$90.00       optional \$75.00     \$75.00     \$75.00     \$75.00       44x44x54     44x44x54     44x44x54     44x44x54	"BT"     "BT"     "BT"       7-1/2     7-1/2     7-1/2     7-1/2     10       3     3     1     1     3       230     230     230     230     230     230       230     230     230     230     230     230       200     200     200     200     275       100     100     100     140       400     400     400     400     400       "BASIC"     "PREM"     "BASIC"     "PREM"     "BASIC"       optional \$395.00     YES     optional \$395.00     yES     optional \$395.00       optional \$400.00     \$210.00     \$210.00     \$210.00     \$210.00     \$210.00       optional \$400.00     \$400.00     \$400.00     \$400.00     \$400.00     \$400.00       optional \$90.00     \$90.00     \$90.00     \$90.00     \$90.00     \$90.00       optional \$90.00     \$75.00     \$75.00     \$75.00     \$75.00     \$75.00       44x44x54     44x44x54	"BT"     "BT"     "BT"       7-1/2     7-1/2     7-1/2     7-1/2     10     10       3     3     1     1     3     3       230     230     230     230     230     230     230       110/130 VOLTS A.C., 50-60 Hz.       200     200     200     275     275       100     100     100     100     140     140       400     400     400     400     400     400       "BASIC"     "PREM"     "BASIC"     "PREM"     "BASIC"     "PREM"       optional     optional     \$395.00     YES     \$395.00     \$210.00     \$210.00     \$210.00     \$210.00     \$210.00     \$210.00     \$210.00     \$240.00     \$400.00	"BT"     "BT"     "BT"     "BT"     "BT"       7-1/2     7-1/2     7-1/2     10     10     10       3     3     1     1     3     3     1       230     230     230     230     230     230     230     230     230       110/130 VOLTS A.C., 50-60 Hz.       200     200     200     275     275     275       100     100     100     140     140     140       400     400     400     400     400     400     400       400     400     400     400     400     400     400     400       90tional     systo.00     \$210.00     \$210.00     \$210.00     \$210.00     \$210.00     \$210.00     \$210.00     \$210.00     \$400.00     \$400.00     \$400.00     \$400.00     \$400.00     \$400.00     \$400.00     \$400.00     \$400.00     \$400.00     \$400.00     \$400.00     \$400.00     \$400.00     \$400.00     \$400.00     \$400.00	

★ Other voltages available, consult factory

"**BT**" above indicates a "**Basic**" tester, more a concept than a model. There is **NO** difference between a Premium machine and a Basic machine. The difference is in the accessories.

With a Premium machine you get a bigger accessory package. You purchase a "Basic" machine and add the accessories you want. Or add the accessories later. That way you control the price.

JIMCO, Inc. Phone: 816 - 331 - 1917

R-3

TEST BENCH

TB

**4** 

FEATURE	TB800	TB810 SINGLE PHASE	TB850	CONTINUOUS DUTY LOAD BANK W/1 CARBON PILE	TB950	TB1000 CONTINUOUS DUTY LOAD BANK W/1 CARBON PILE	1 DUTY LOAD BANK	TB1500 CONTINUOUS# DUTY LOAD BANK W/1 CARBON PILE	TB1800 CONTINUOUS DUTY LOAD BAN W/1 CARBON PH
Drive Motor Horsepower	10	10	15	15	20	20	30	40	50
Drive Motor Phase	3	1	3	3	3	3	3	3	3
Motor Voltage, 60 Hz.*	230	230	230	230	230	230	230	230	230
Cooling Fan Voltage				110/130 V(	OLTS A.C., 50	J-60 Hz.			
12 V Alternator Load	325	325	400	400 CONTINUOUS	400	400 CONTINUOUS	800 CONTINUOUS	1000 CONTINUOUS	1000 CONTINUOU
24 V Alternator Load	175	175	205	205 CONTINUOUS	275	300 CONTINUOUS	400 CONTINUOUS	500 CONTINUOUS	600 CONTINUOU
Max. Amp Load (12 volt)	350	350	400	500	450	600	800	1000	1000
Test Lead Set	"PREM"	"PREM"							
Starter Test Kit			optional \$395.00	optional \$395.00	optional \$395.00	optional \$395.00	optional \$395.00	optional \$395.00	optional \$395.00
Regulator Test Kit	optional \$210.00	optional \$210.00	optional \$210.00	optional \$210.00	optional \$210.00	optional \$210.00	optional \$210.00	optional \$210.00	optional \$210.00
TB990 Alternator Manual	optional \$400.00	optional \$400.00	optional \$400.00	optional \$400.00	optional \$400.00	optional \$400.00	optional \$400.00	optional \$400.00	optional \$400.00
TB1950 Generator Manual	optional \$90.00	optional \$90.00	optional \$90.00	optional \$90.00	optional \$90.00	optional \$90.00	optional \$90.00	optional \$90.00	optional \$90.00
RT990 Regulator Manual	optional \$75.00	optional \$75.00	optional \$75.00	optional \$75.00	optional \$75.00	optional \$75.00	optional \$75.00	optional \$75.00	optional \$75.00
Dim. Wide" x Deep" x Ht."	55x44x54	55x44x54	55x44x54	55x44x54	55x44x54	55x44x54	55x44x54	55x44x54	55x44x54
Crated Shipping Wt (lbs.)	950	950	1100	1450	1200	1500	2300	2500	2900
PRICE (U.S. Dollars)	\$18,690.	\$19,500.	\$23,675.	\$35,850.	\$31,780.	\$43,958.	\$54,040.	\$64,100.	\$86,850.

TEST

BENCH

Е

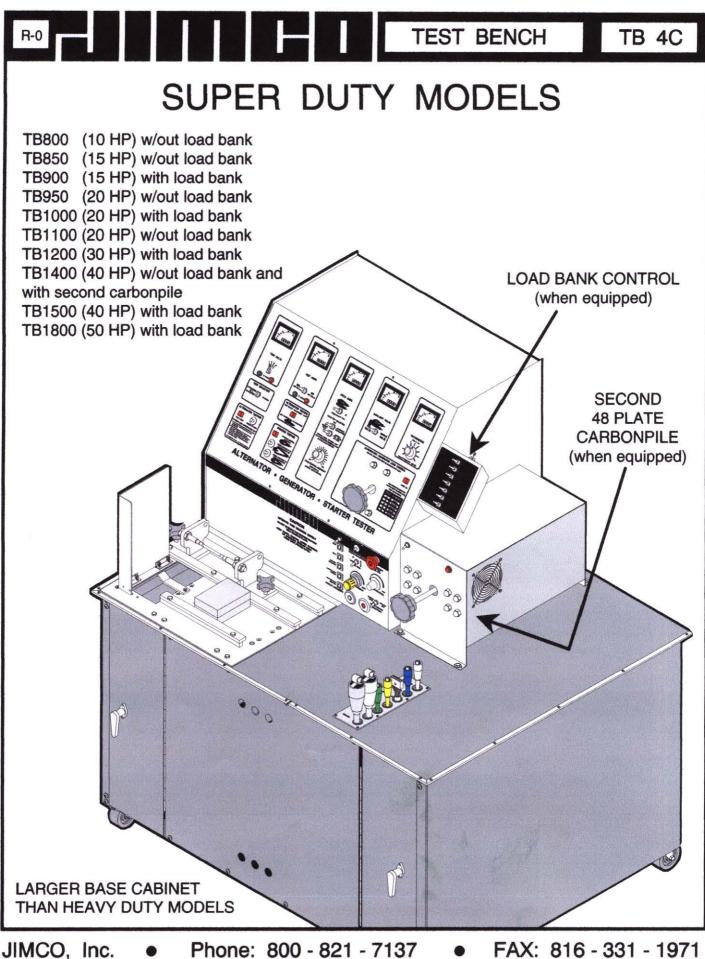
**4**B

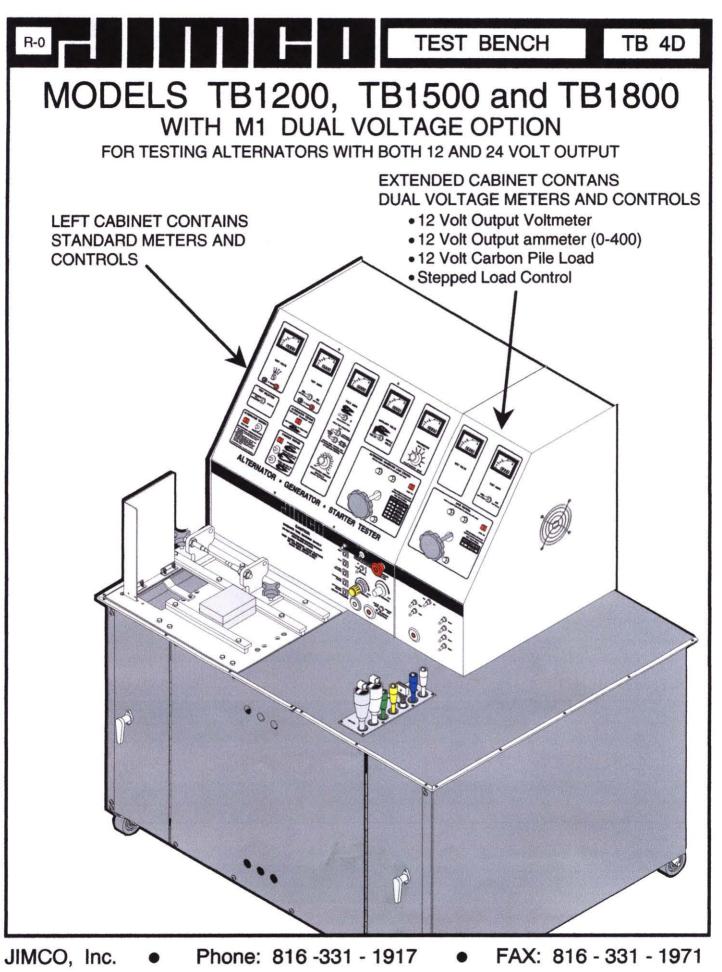
oltages available, consult factory π

CONTINUOUS DUTY LOAD BANK: separate free-standing, fan-cooled, step load system that can be operated with no time limit. Loads: 12 volt @ 100, 200, 300, and 400 amps, 24 volt @ 100, and 200 amps, carbon pile is used for additional loads under 200 amps. Example: 275 amps - step load is set for 200 amps, carbon pile is adjusted for additional 75 amps.

# CONTINUOUS DUTY LOAD BANK WITH CARBON PILE : Continuous duty load bank loads are 12 volt @ 100, 200, amps, 24 volt @ 100, 200, 300, 400 amps load. Carbon pile is adjusted to share addition load. All SUPER DUTY carbon piles have (48) 1/4" x 6" x 6" carbon plates, fan cooled.

FAX: 816 - 331 -1971





TBSUPER.DRW 10-15, R-0

R-2			TE	EST BENCH	TB 5
		ST BENCH 1	EST LE	AD SETS	
	Dest Lead BASIC ( part no. T95-TL)			PREMIUM S	
TB-B TB-C TB-D TB-H TB-LN TB-SL TB-UNI TB-3G67 * TB-41 TB-42S TB-43S79S * TB-43S79S * TB-52S TB-6G TB-8S53S * TB-9S * Com	Delco 10-20 "S, L" & "R, Chrysler sm Hit., Mits. ov Universal w Ford 3G con Nippon. "L, Nippon./Mits Nippon./Mits Ford 6G	2-15-17-27 S DN L" int. reg. hall terminal val "S, L / clips mbo S, IG" s 3 terminal s 4 term. combo s Oval 3 terminal S130D, AD combo mple	TB-24V TB-7 TB-75 TB-80 TB-303/34 TB-337 TB-93 TB-93 TB-346	Delco 10 SI w/ "R" Ford side terminal Motorola John Deel	re m. uppressor apter stor S, L, F" L" "M, G, L" nputer oper.) M" F" Set)
(pa	<b>QC5BT</b> rt no. T95-QC5J		AG	<b>&amp; INDUSTRI</b> (part no. T95-TBTLAGK	
TB-C TB-H TB-SL TB-3G67 * TB-41 TB-42S TB-43S79S * TB-52S TB-52S TB-8S53S * TB-9S TB-96 * Com	"S, L" & "R, Hit., Mits. ov Ford 3G cor Nippon. "L, Nippon./Mits Nippon./Mits Nippon./Mits	val "S, L nbo S, IG" s 3 terminal s 4 term. combo s Oval 3 terminal s130D, AD combo s) dicator light	TB-B TB-C TB-D TB-G TB-H TB-JD TB-42S TB-7 GENREG	Lucas, Bosch int. re Delco 10-12-15-17- Delco 10-20 DN "F, N" ext. reg. "S, L" & "R, L" int. re Motorola John Deer Nippon./Mits 3 term Ford tractor thermis "Generator & Regul	97 S 9g. re inal tor
		000 800 80			

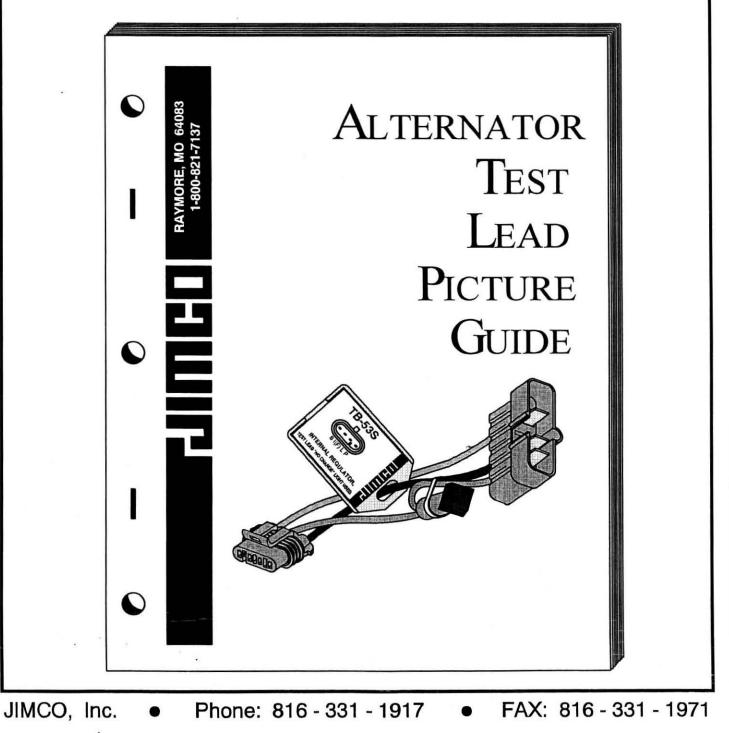
LEADCHK2.DRW 04-06 R-2 01-18

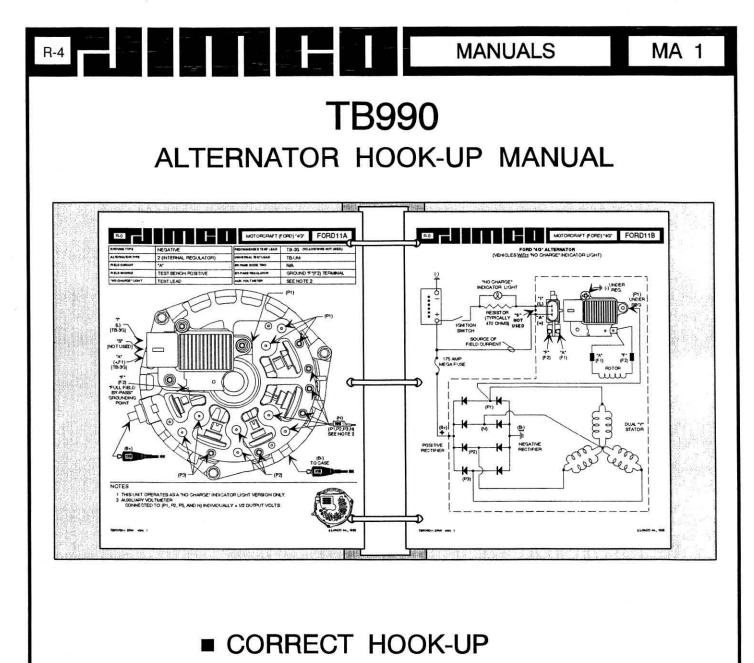
JIMCO, Inc. • Phone: 800 - 821 - 7137 • FAX: 816 - 331 - 1971

The test bench is the most important part of alternator testing, but test leads are what makes the tester fast and easy to use.

R-2

For information on JIMCO's alternator test leads please refer to the "Alternator Test Lead Picture Guide".





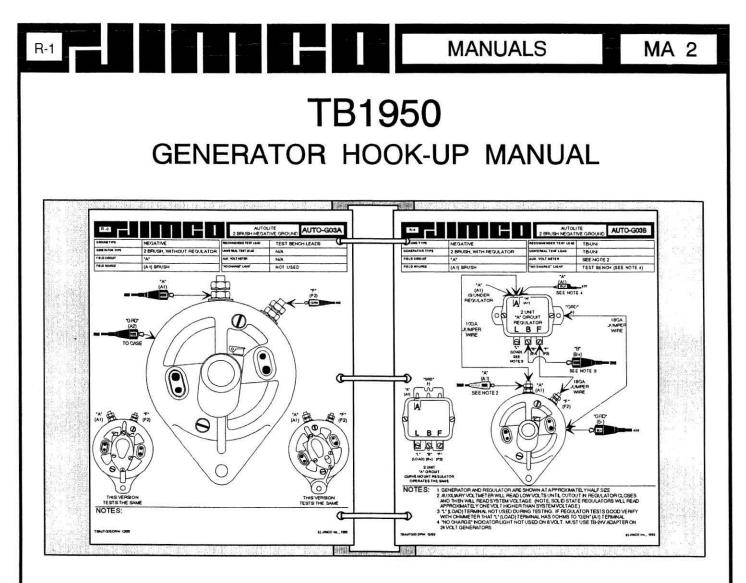
- TESTING PROCEDURE
- TROUBLE SHOOTING HELP

Over 540 diagrams as shown above

of **I** test benches will have the best test bench

Need more information? Call and ask for a **FREE** sample of the TB990 Hook-up manual.

JIMCO, Inc. • Phone: 800 - 821 - 7137 • FAX: 816 - 331 - 1971



# CORRECT HOOK-UP TESTING PROCEDURE TROUBLE SHOOTING HELP

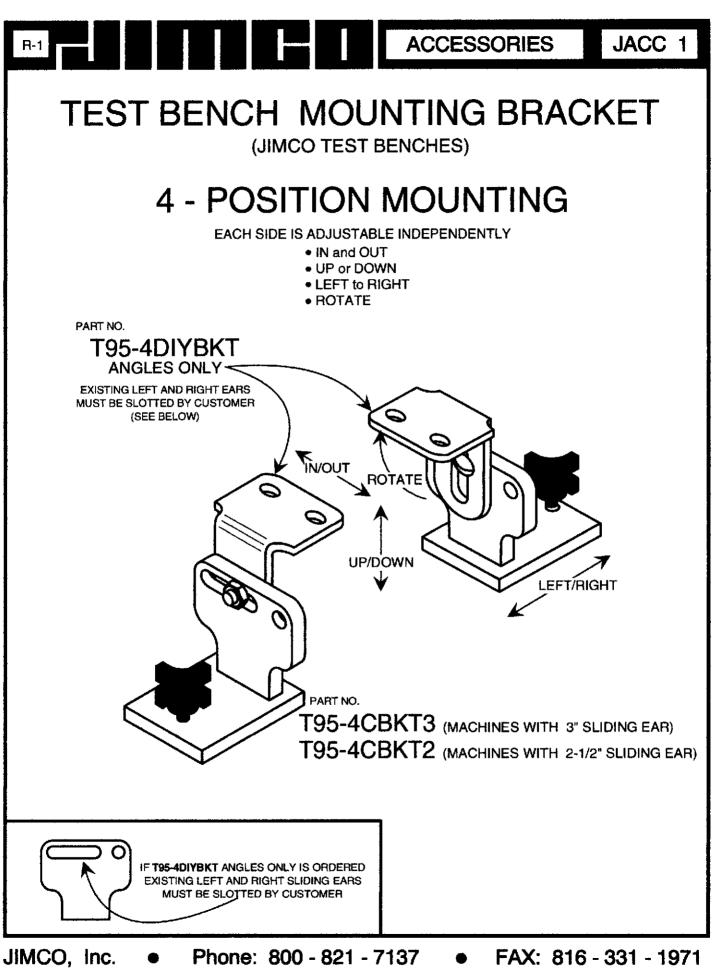
Pictorial Hook-Up information for testing generators by themselves and with their respective cutouts and/or regulators.

Sections on testing procedure, generator and regulator principles of operation and a complete pictorial glossary. Starter-Generators are also covered.

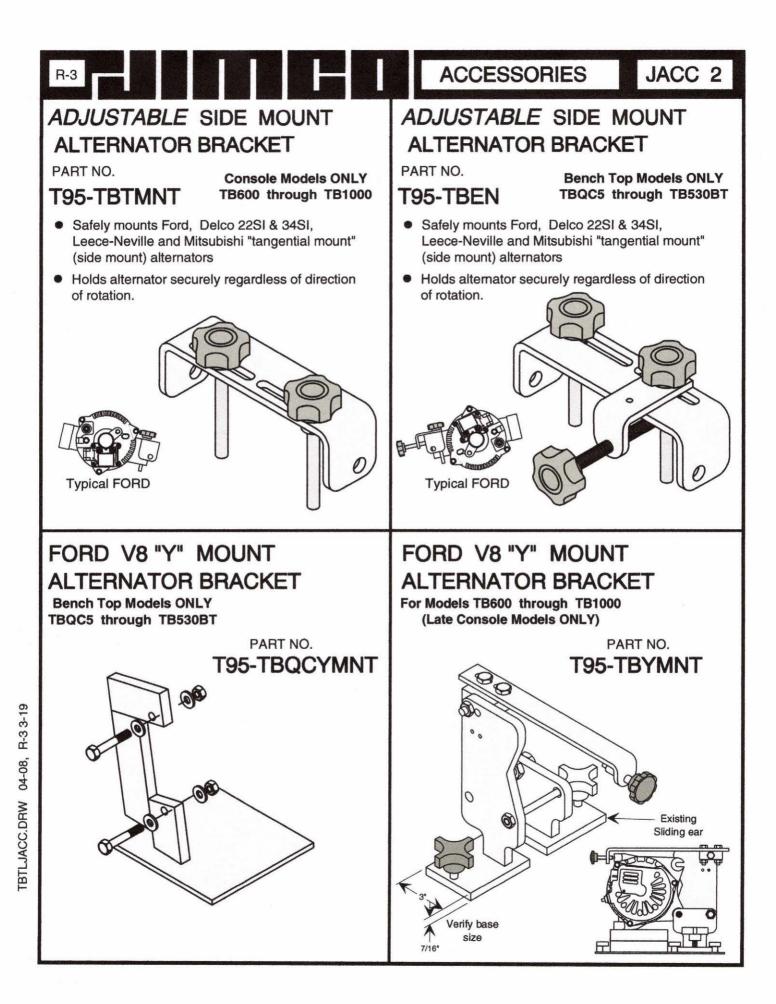
Generators covered are: American Bosch, Autolite (Prestolite), Robert Bosch, Delco Remy, Ford, Hitachi (golf cart starter/generator) and Lucas

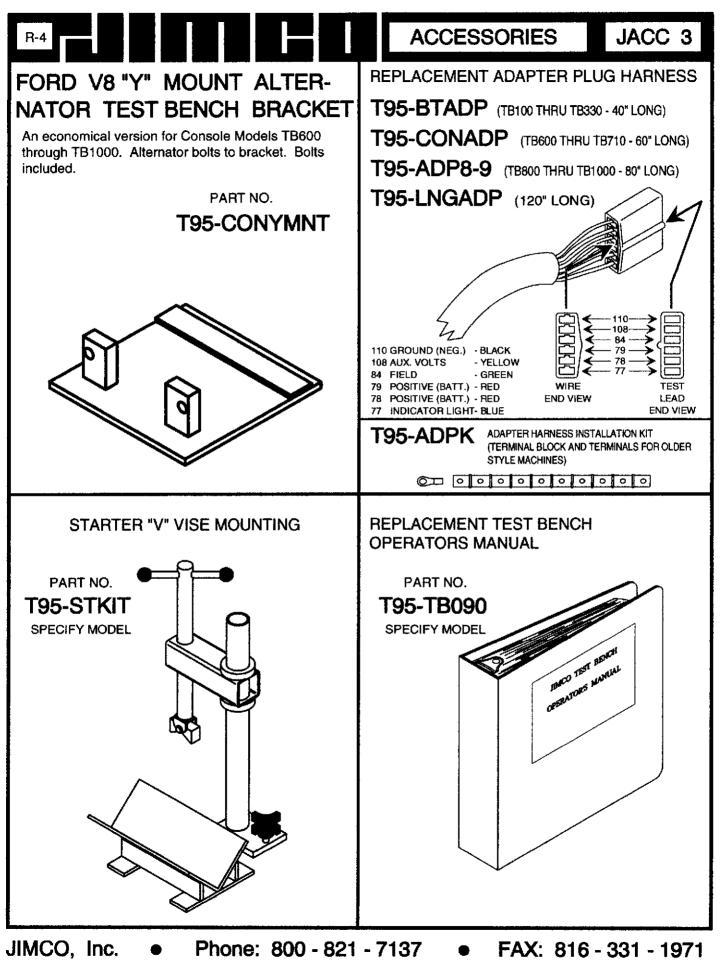
Need more information? Call and ask for a **FREE** sample of the TB1950 Hook-up manual.

JIMCO, Inc. • Phone: 800 - 821 - 7137 • FAX: 816 - 331 - 1971

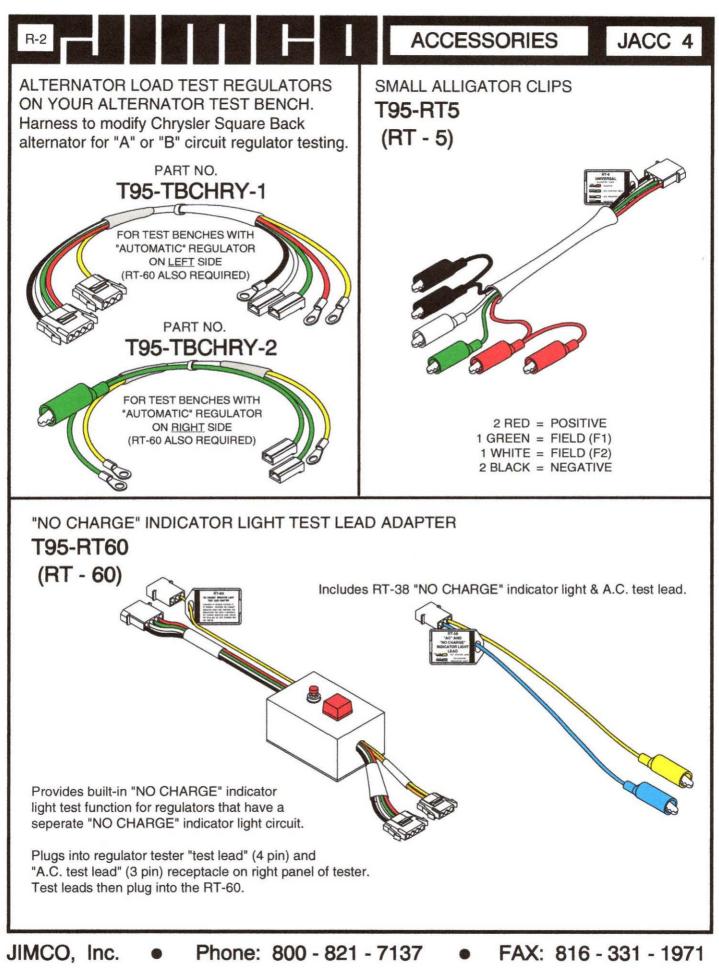


IBTLJACC.DRW 04-08, R-1 7-14





TBTLJACC.DRW 01-19, R-4



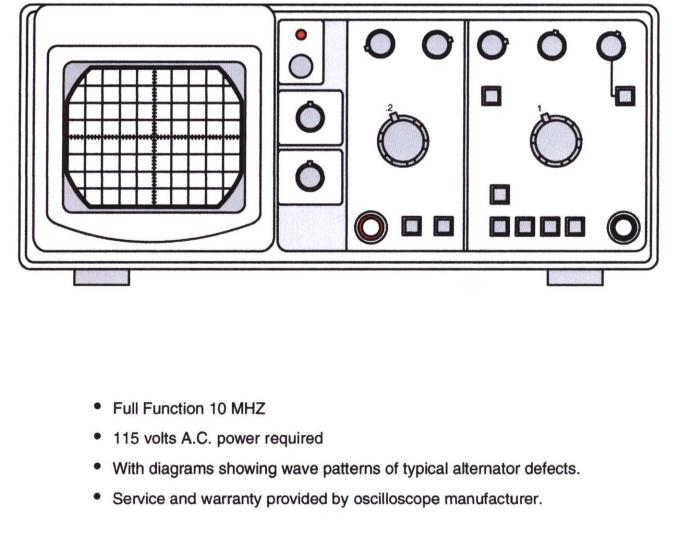
TBTLJACC.DRW 04-98 R-2 01-19



#### ALTERNATOR OSCILLOSCOPE

For use with alternator test benches to actually see alternator output.

The best way to detect open and shorted diodes, open or shorted stator phases and grounded leads.



JIMCO, Inc. • Phone: 800 - 821 - 7137 • FAX: 816 - 331 - 1971

SR 1

#### METHODS OF DIODE TESTING

There are several methods and kinds of equipment for testing alternator rectifier diodes, each with advantages and disadvantages. Only you can determine what method best fits your needs. Those recommended by **LINE** are indicated.

#### 1. LOAD TESTING -

R-1

Diode load testing utilizes an A.C. high current to make the diode operate just like it would in an alternator. An example of equipment that operates in this manner is the **LITTLED SR200**. The significant advantage of this type of test is that our confidence as to the ability of a diode to actually perform in an alternator is increased when we "stress it" by passing approximately 25 amps through it rather than one amp or less. A secondary but extremely convenient advantage is that this type of tester can test diodes while they are still connected to the stator. This is certainly an important advantage considering the increasing use of soldered and/or welded stator-diode connections. If both the stator and rectifier assembly test good as a unit why seperate them? When looking at this type of tester select one that can also load test diode trios (at an appropriately lower amperage) while also connected to the stator. It doesn't make much sense to buy a tester that can test the main rectifier diodes while connected to the stator to find that you must unsolder the rectifier to test the diode trio!

IT IS OUR OPINION THAT THIS TYPE OF LOAD TEST SHOULD BE USED AS THE PRIMARY TEST AND OTHER TESTS (AVALANCHE OR LEAKAGE) USED AS SECONDARY TESTS.

#### 2. AVALANCHE TESTING -

This type of test verifies that a diode is the avalanche type and still has the ability to zener within the intended voltage range. Although the avalanche function has little if any affect on the ability of the alternator to produce current and maintain stable voltage, it must be considered important to the protection of the system and its function should, therefore, be verified. When you stop to think about it you're checking the voltage "setting" of the diode. One of the easiest ways to check the voltage "setting" is on your regulator tester. The AD100 adapter for the **LITTER** RT1224C voltage regulator tester is intended for this purpose. Again, however, it is our opinion that load testing has to take priority in all diode testing.

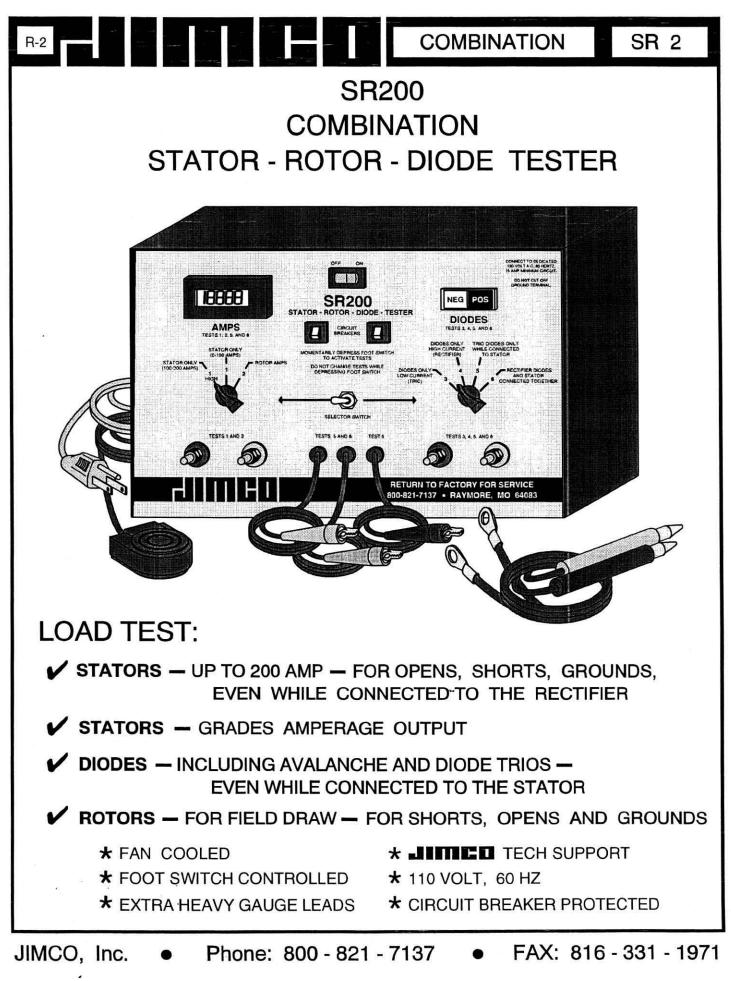
#### 3. REVERSE DIODE LEAKAGE -

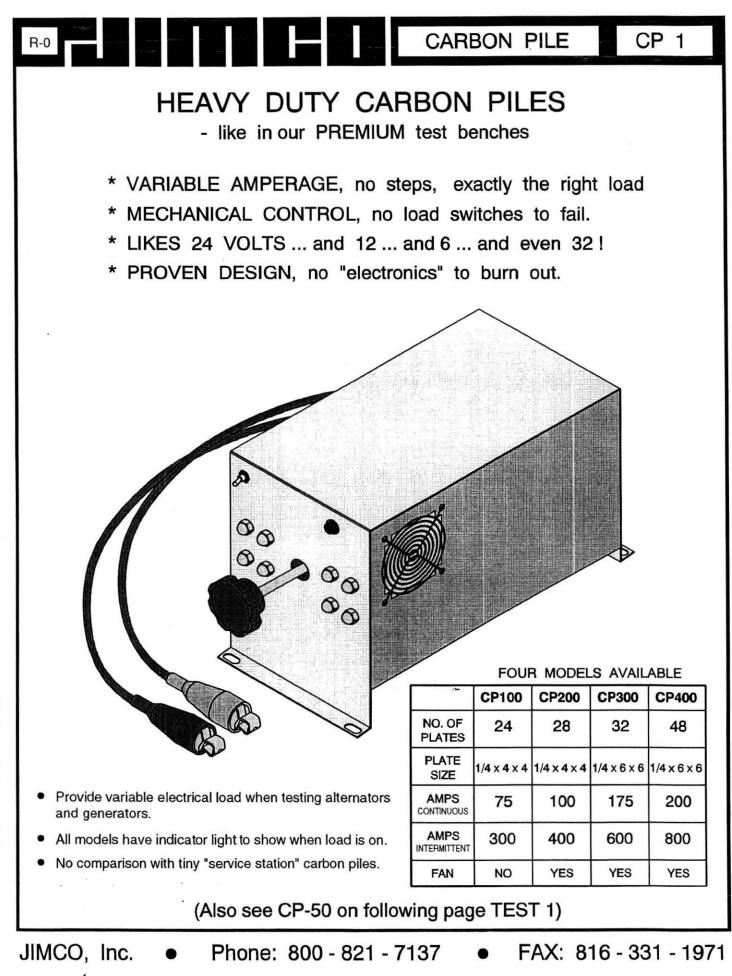
Reverse diode leakage, or the diode's resistance in the reverse direction, is another parameter of diode performance. Although this is a legitimate test, **LINTER** believes that diode failure due to leakage is extremely rare, IF the diode has passed a load test. THIS IS TRUE IF THE DIODES ARE CLEAN AND GREASE FREE. Grease and metal shot dust on the diode stem are one of the main culprits mistaken as diode leakage. Our only complaint with this type of test is why buy a \$700.00 tester to perform it when a good \$30.00 to \$50.00 analog ohmmeter (not digital) will do the job as well. Remember, on avalanche diodes be sure to use an ohmmeter with battery voltage of less than 20 volts.

#### 4. FORWARD DIODE CURRENT VOLTAGE DROP -

This, too, can be used as a good indicator of a diode's ability to continue operating. This type of test is based on the premise that the higher the forward voltage drop, the hotter the diode will operate, and the greater the probability of diode failure. Again, the frustrating thing about the equipment on the market that tests for this is that the current passed through the diode during this measurement is ONE amp or less. This extremely small amount of current is too small to create a voltage drop in a diode that has been overheated, become unsoldered internally, cooled and resoldered which created a cold solder joint (almost guaranteeing future trouble). Again, in our opinion, a high current load test will catch more potentially bad diodes.

JIMCO, Inc.





TEST EQUIPMENT

TEST 1

### CP - 50, Medium Duty CARBON PILE

R-4

Self contained carbon pile in portable cabinet. 18 carbon plates, each 1/4" x 4" x 4".

For intermittent use up to 150 amps. The same carbon pile as in our "Quality Control" model test benches.

May be used on your test bench or on the vehicle.

Capable of load testing batteries.

## D. C. VOLTMETER

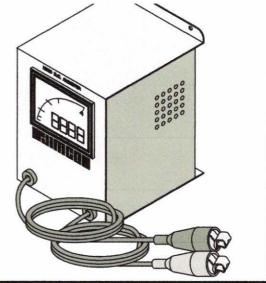
Self contained voltmeter, 0 - 40 V.D.C. 1scale May be used on your test bench or on the vehicle. The same meter in JIMCO's "**PREMIUM**" test benches.



#### M320 AMMETER

Self contained ammeter. 0 - 400 AMP D.C. scale with internal shunt. Ammeter leads must be connected in series with the circuit to be measured.

May be used on your test bench or on the vehicle. The same meter in JIMCO's "**PREMIUM**" test benches.



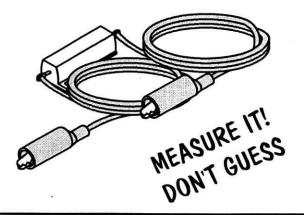
• Ph

Phone: 800 - 821 - 7137

FAX: 816 - 331 - 1971

## 1-OHM RESISTOR LEAD ASSEMBLY

TEST EQUIPMENT

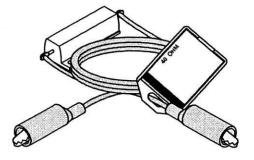


- When used with your milli-voltmeter accurately measures vehicle parasitic current draw.
- Protects your meter from damage if current draw is excessive.
- Instructions included

part no. 1-OHM

TEST 2

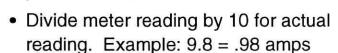
## 40-OHM RESISTOR LEAD ASSEMBLY



- Provides a safe 30 milliamp load to verify that alternator "sense" and "IG" wires are good
- Instructions included

part no. 40-OHM

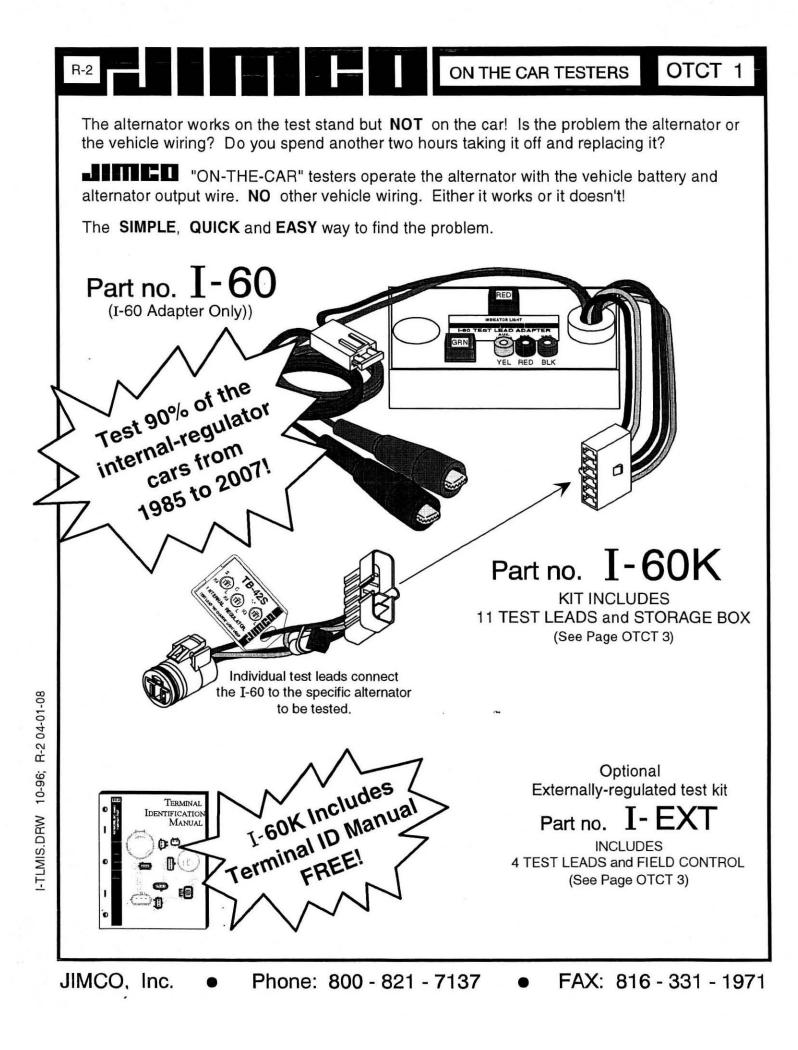
## "TIMES 10" MULTIPLIER ASSEMBLY Use with your "clamp on" ammeter probe to measure low current.

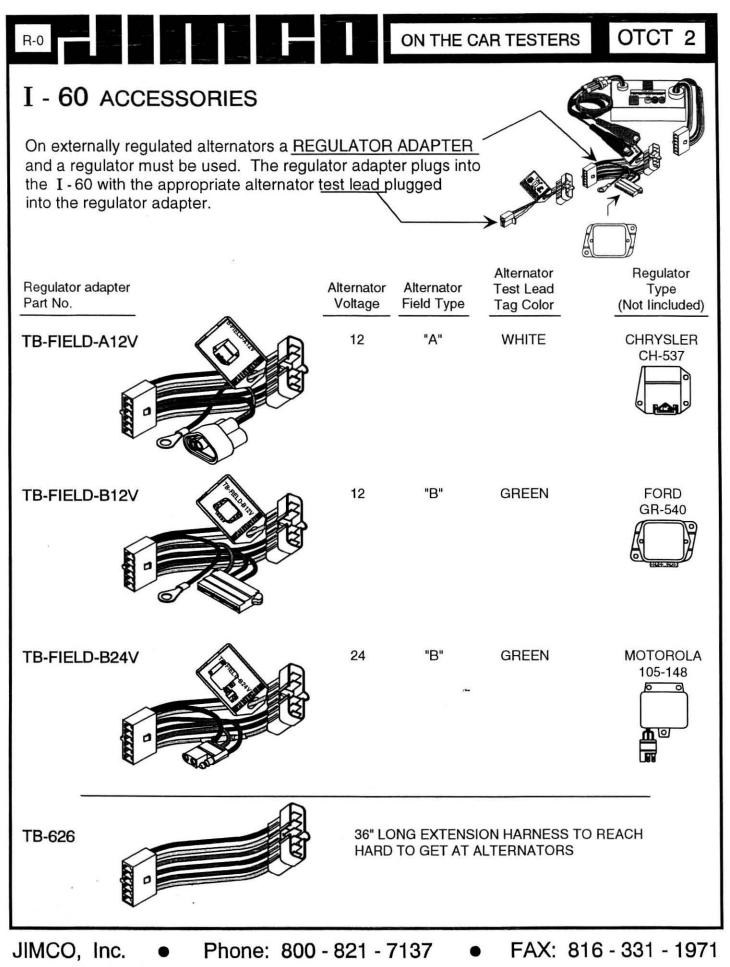


- Fused for over current protection.
- Instructions on tag

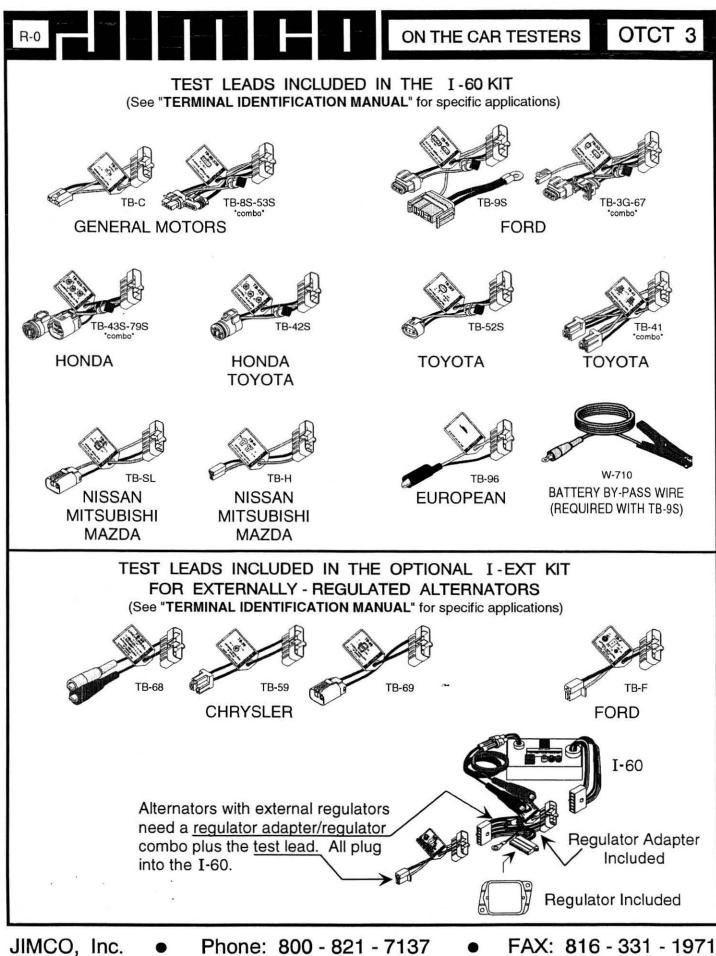
part no. 10X



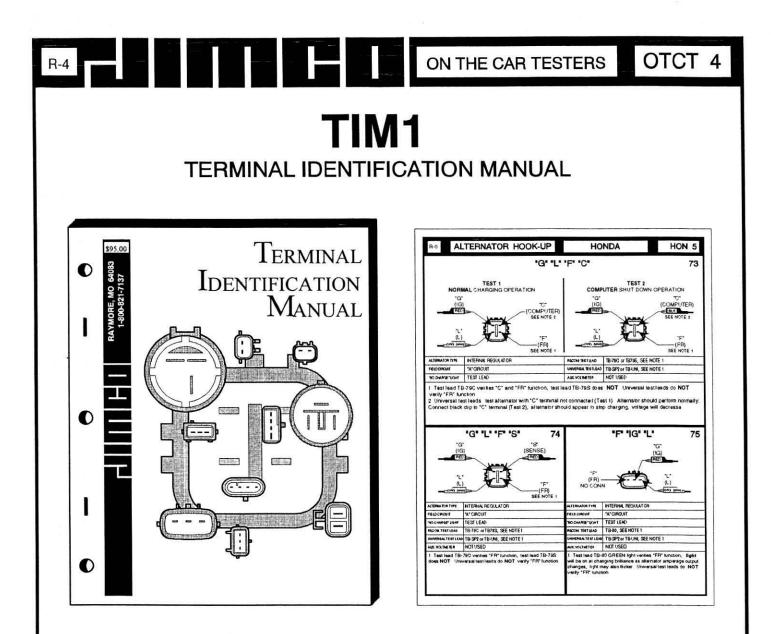




I-TLMIS.DRW 08-97; R-1 09-12-01



I-TLMIS.DRW 10-96; R-2 04-01-08



"TERMINAL IDENTIFICATION MANUAL", part no. TIM1, details alternator terminal markings along with their function for accurate testing, on or off the vehicle. This book also lists the recommended test lead, universal test lead hook-up information and important notes.

Information is categorized by specific automobile manufacturer for use by rebuilder or installer. An index is available for cross referencing to car make, year and model. Using this manual to test alternators on the vehicle can reduce "no fault found-working" alternator warranties.

**TIM1** is available in quantity with your company name on the cover for distribution to your installer customers.

I-TLMIS.DRW 12-99; R-0