

RECOVERY EQUIPMENT

RECOVER REFRIGERANTS
QUICKLY & EFFICIENTLY



Pro-Set®

PRO-SET® TR600 SERIES REFRIGERANT RECOVERY MACHINES

Fast. Compact. Reliable.

The Pro-Set TR600 is a lightweight, efficient and reliable refrigerant recovery machine in a compact, rugged, contemporary housing. The TR600 offers the ideal combination of form and function to make refrigerant recovery fast and easy!

We took six competing recovery machines and their *verified recovery rates (shown on page 21).

Pro-Set TR600 was the undisputed hands-down leader for fastest recovery of R410a, and fastest overall for R22, R134a and R407c.

- Powerful 2/3 HP oil-less 2 cylinder reciprocating recovery compressor
- Exceptional compressor, condensing and cooling systems allow fast recovery in high temperature environments
- R-410a ready with fastest R-410A flow rates in its class!
- 550 psi high pressure shut-off switch
- Durable inlet and outlet ball valve construction with 1/4 turn gauges
- Integrated component moorings for quiet operation
- High impact injection molded housing
- Ergonomic well balanced design for easy transport
- No tool access suction housing for easy filter clean/change
- Less parts provides greater reliability
- Worldwide patents pending

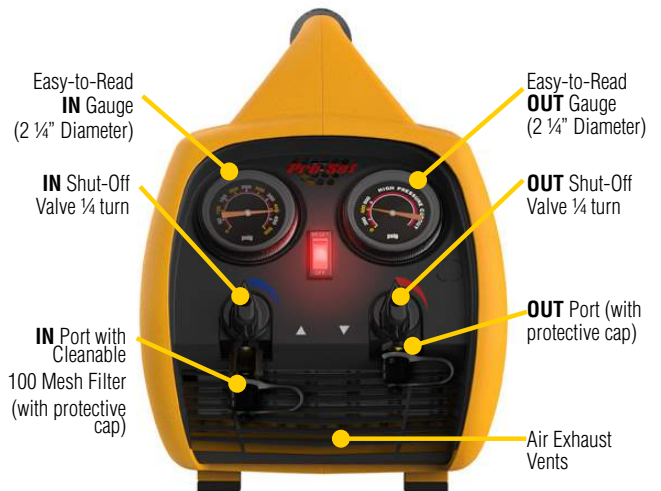
TR21X1 Valve Rebuild Kit

TR21X3 Piston/Connecting Rod Replacement

TR21X2 Complete Rebuild Kit

TR700X1 Head Replacement

CRXF3 (6) Suction Filters

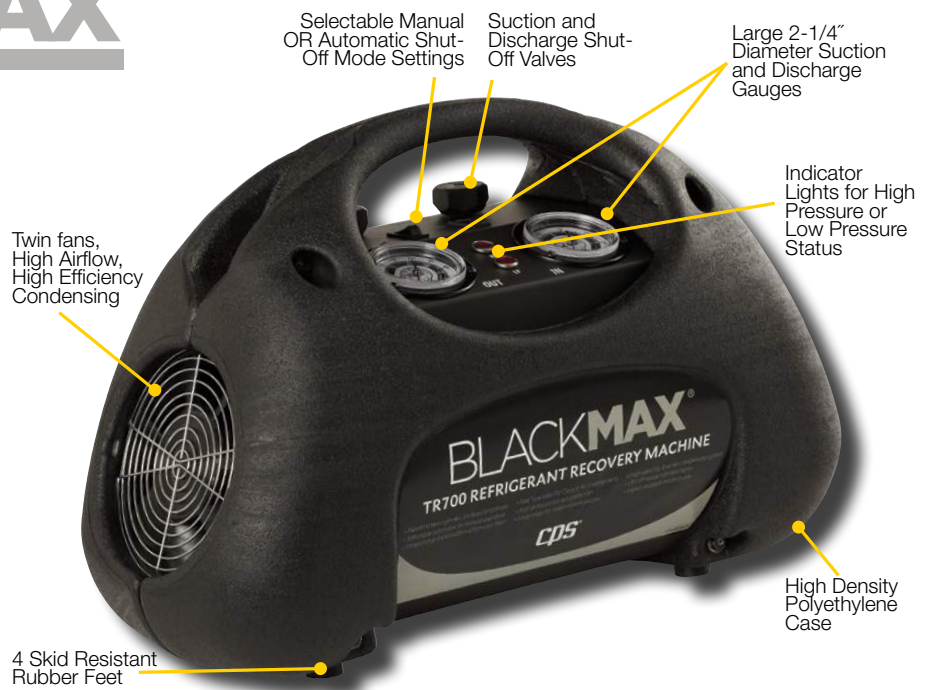


Designed and assembled in USA with US and globally sourced components

BLACKMAX[®] TR700 SERIES REFRIGERANT RECOVERY MACHINES

The ultimate in dependability.

Designed for servicing residential and commercial refrigeration systems, the BlackMax TR700 is the industry's best-looking and best-performing refrigerant recovery machine incorporating non-restrictive piston manifold valves, a powerful two cylinder oil-less reciprocating compressor and twin fans. The resulting system provides superior airflow and condensing, which maximizes speed in both direct liquid and direct vapor recovery.



- Powerful 2 cylinder, 2/3 HP oil-less reciprocating compressor
- Exceptional compressor, condensing and cooling systems allow fast recovery in high temperature environments
- Automatic low pressure shut-off feature turns unit off when recovery is complete
- Rugged high density, double-wall, contemporary plastic housing with easy-view top mounted controls
- R-410a ready with 550 psi high pressure shut-off switch

- Ergonomic well balanced design for easy transport (includes shoulder strap)
- Built-in, removable, replaceable suction filter located under suction port
- Compact design with easy 4 bolt access
- Externally serviceable valves and gauges
- Integrated component mounts for quiet operation
- Less parts provide greater reliability
- Worldwide patents pending

- TR21X1** Valve Rebuild Kit
- TR21X3** Piston/Connecting Rod Replacement
- TR21X2** Complete Rebuild Kit
- TR21X5** Eccentric Crank Set
- TR700X1** Head Replacement
- CRXF3** (6) Suction Filters



Designed and assembled in USA with US and globally sourced components

For more information visit www.cpsproducts.com

***CERTIFIED REFRIGERANT RECOVERY RATES (LB/MIN.)**

Competing Brands		REFCO Powermax*	Robinair RG3*	Yellow Jacket YJ-LTE*	Bacharach ECO-2020**	Inficon Vortex Dual**	Appion G5 Twin*	BLACKMAX TR700*	Pro-Set TR600*
R410A	Vapor Rate	0.53	0.14	0.35	0.55	0.55	0.55	0.703 (0.319 kg/min)	0.703 (0.319 kg/min)
	Liquid Rate	4.99	3.57	9.25	5.71	3.55	3.48	11.95 (5.42 kg/min)	11.95 (5.42 kg/min)
	Liquid Push-Pull	17.56	12.69	10.91	15.85	16.82	10.20	31.7 (14.38 kg/min)	31.7 (14.38 kg/min)
R22	Vapor Rate	0.50	0.20	0.37	0.55	0.53	0.61	0.597 (0.271 kg/min)	0.597 (0.271 kg/min)
	High Temp Vapor Rate	NA	0.22	NA	0.60	0.57	0.41	0.86 (0.39 kg/min)	0.86 (0.39 kg/min)
	Liquid Rate	4.50	6.39	6.83	6.35	5.97	6.21	8.86 (4.02 kg/min)	8.86 (4.02 kg/min)
	Liquid Push-Pull	11.81	11.83	9.17	11.40	11.0	16.62	31.53 (14.3 kg/min)	31.53 (14.3 kg/min)
R134A	Vapor Rate	0.50	0.18	0.35	0.46	0.42	0.41	0.503 (.228 kg/min)	0.503 (.228 kg/min)
	Liquid Rate	4.25	5.48	5.35	4.52	4.03	4.34	7.8 (3.54 kg/min)	7.8 (3.54 kg/min)
	Liquid Push-Pull	12.06	8.86	6.94	10.89	11.64	11.08	25.66 (11.64 kg/min)	25.66 (11.64 kg/min)
R407C	Vapor Rate	NA	0.18	0.30	NA	0.55	0.55	0.536 (.243 kg/min)	0.536 (.243 kg/min)
	Liquid Rate	NA	5.48	7.53	NA	5.49	7.01	9.5 (4.31 kg/min)	9.5 (4.31 kg/min)
	Liquid Push-Pull	NA	11.68	10.05	NA	14.0	17.61	29.14 (13.22 kg/min)	29.14 (13.22 kg/min)

*UL ONLINE CERTIFICATIONS DIRECTORY (DATABASE.UL.COM) **AHRI CERTIFIED® (AHRIDIRECTORY.ORG) DISCLAIMER: The information found within this chart is not reflective of all competitors. All trademarks and copyrights on this page are owned by their respective owners. Data collected is based on technical specification literature available through the worldwide web and other publicly available marketing literature.

Recovery Equipment

Model#	PRO-SET® TR600 SERIES SPECIFICATIONS						BLACKMAX® TR700 SERIES SPECIFICATIONS						
	TR600	TR610	TR600C	TR610C	TR600K	TR600S	TR700	TR710	TR700C	TR710C	TR700S	TR710S	
Voltage (Hz)	115V (60 Hz)				220V (50 Hz) 230V (60 Hz)	220-240V (50 Hz)	115V (60 Hz)				220-240V (50 Hz)		
Motor Size	2/3 HP						2/3 HP						
Motor Thermally Protected	✓						✓						
Compressor Type	Two cylinder, oilless						Two cylinder, oilless						
Overload Protection	15 Amp	13 Amp		10 Amp			15 Amp	13 Amp		10 Amp			
Power Consumption	1000 W						1000 W						
Tank Overfill Sensor Cord	✗	✓	✗	✓	✗		✗	✓	✗	✓	✗	✓	
Suction Pressure Gauge	Outer Scale	-30~Hg to 500 psig						-30~Hg to 500 psig					
	Inner Scale	-76 cm Hg to 35 kg/cm						-76 cm Hg to 35 kg/cm					
Discharge Pressure Gauge	Outer Scale	0-550 psig						0 to 1000 psig					
	Inner Scale	0-550 psig						0 to 70 kg/cm					
High Pressure Shut-Off	550 psig (38 bar)	450 psig (31 bar)		550 psig (38 bar)			550 psig (38 bar)	450 psig (31 bar)		550 psig (38 bar)			
AHRI 740 Class Refrigerants	Class III	R-12, R-134A, R-401C, R-406A, R-500						R-12, R-134A, R-401C, R-406A, R-500					
	Class IV	R-22, R-401A/B, R-402B, R-407/C/D/E/F, R-408A, R-409A, R-411A/B, R-412A, R-502, R-509A						R-22, R-401A/B, R-402B, R-407/C/D/E/F, R-408A, R-409A, R-411A/B, R-412A, R-502, R-509A					
	Class V	R-402A, R-404A, R-407A/B, R-410A/B, R-507A						R-402A, R-404A, R-407A/B, R-410A/B, R-507A					
Operating Temperature Range	32°F to 120°F (0°C to 49°C)						32°F to 120° (0°C to 49° C)						
Power Cord Length	3.5 ft (1.06 m)						6' (1.82 m) Detachable						
Dimensions	Inch: 8.5" x 16.7" x 12.3" (cm: 21.6 x 42.4 x 31.2)						Inch: 9.75" x 21" x 14.0" (Cm: 24.7x 53.3x 35.6)						
Weight	28 Lb (12.7 Kg)						32 Lb (14.5 kg)						
Approvals	*UL, CE		*UL, CE, CSA		*UL, CE	*UL, CE, TUV	*UL, CE		*UL, CE, CSA		*UL, CE	*UL, CE, TUV	
Warranty (Years)	1						1						

* Evaluated for performance rated at 60Hz in accordance with Sec. 608 of the Clean Air Act (Feb. 29, 1996) using AHRI-740-98 test methods.

PRO-SET® TR21 SERIES REFRIGERANT RECOVERY MACHINES

- Weighs only 25 pounds!
- Fastest ARI recovery rates in its class, best speed-to-weight ratio in the industry!
- Revolutionary “vacuum pump” style design
- Five unique patented and patent pending design elements
- Vapor or liquid recovery, including R-410A
- Extremely compact and easy to carry



TR21 SERIES

- TR21X1** Valve Rebuild Kit
- TR21X3** Piston/Connecting Rod Replacement
- TR19X2** Eccentric Crank Set
- TR21X5** Eccentric Set
- TR21X4** Complete Head Replacement
- TR21X2** Complete Rebuild Kit

*Verified UL Flow Rate @ 60Hz (Reduce 15% for all 50Hz models)

TR21 SERIES REFRIGERANT RECOVERY RATES

Refrigerant	Direct Vapor	Direct Liquid	Push - Pull Liquid	High Temp Vapor Rate
R410a	.703 lb/min (0.319 kg/min)	11.95 lb/min (5.42 kg/min)	31.7 lb/min (14.38 kg/min)	0.816 lb/min (.37 kg/min)
R22	.597 lb/min (0.271 kg/min)	8.86 lb/min (4.02 kg/min)	31.53 lb/min (14.3 kg/min)	0.86 lb/min (0.39 kg/min)
R134a	.503 lb/min (0.228 kg/min)	7.8 lb/min (3.54 kg/min)	25.66 lb/min (11.64 kg/min)	n/a
R407c	.536 lb/min (0.243 kg/min)	9.50 lb/min (4.31 kg/min)	29.14 lb/min (13.22 kg/min)	n/a

*Evaluated for performance in accordance with Sec. 608 of the Clean Air Act (Feb 29, 1996) using AHRI-740-98 test methods.

PRO-SET® TRS21 SERIES IGNITION PROOF REFRIGERANT RECOVERY MACHINES

- Designed and tested to meet ANSI 12:12.01 Ignition Proof standards
- For use on refrigeration systems utilizing:
 - Class A1** (nontoxic, nonflammable),
 - Class A2L** (nontoxic, low flammability)
 - Class A2** (nontoxic, flammable) and
 - Class A3** (nontoxic, flammable)
- Maintenance free oilless compressor
- Permanently lubricated and sealed main bearings
- Improved piston seal design for less leakage and deeper vacuums
- 550 Psig high pressure cutoff switch with LED indicator
- Cleanable 100 mesh inlet filter
- Fastest recovery rates in its class
- Ignition proof ON-OFF switch
- Sealed start relay

- TR21X1** Valve Rebuild Kit
- TR21X3** Piston/Connecting Rod Replacement



TRS21 SERIES

For more information visit www.cpsproducts.com

TECH-SET® TR19 SERIES REFRIGERANT RECOVERY MACHINES

- Critical oilless compressor components use high temperature resistant materials
- Main bearing is completely sealed and isolated from refrigerant contact.
- Maintenance free oilless compressor design
- Precision machined from aluminum and steel components
- Permanently lubricated and sealed main bearings
- Improved piston seal design for less leakage and deeper vacuums
- Weighs less than 19 pounds
- Special cooling system design improves compressor longevity
- Efficient suction and discharge valve design for faster recovery
- Durable crankshaft design for improved reliability
- Unique head design for superior performance

TR21X1 Valve Rebuild Kit

TR21X3 Piston/Connecting Rod Replacement

TR19X1 Complete Rebuilt Kit

TR19X2 Eccentric Crank Set

TR21X4 Complete Head Replacement



TR19 SERIES

PRO-SET® TR21 & TRS21 and TECH-SET™ TR19 SERIES SPECIFICATIONS											
Model #	TR19	TR19C	TR19S	TR21	TR21C	TR21S	TR21E	TRS21	TR22	TR22C	
Voltage	115V (60Hz)		220-240V (50 Hz)	115V (60Hz)		230 V (50Hz)	220-240 V (50Hz)		115V (60Hz)		
Motor Size (Horsepower)	1/2 HP			1			1				
Motor thermally protected							✓				
Power Consumption	550W			1000W			850W				
Two Cylinder, Oil-less Reciprocating Compressor							✓				
ON-Off Power Switch							✓				
Spark Proof Starting Components	✗			✗			✓	✗			
High Pressure Shut-Off	550 Psig (38 bar)	450 Psig (31 Bar)	550 Psig (38 bar)	550 psig	450 psig	550 psig	525 psig (38 bar)	550 Psig (38 bar)	550 Psig (38 bar)	450 Psig (31 Bar)	
Selectable Manual OR Automatic Shut-Off Mode Settings	Auto Reset High Pressure Switch			Auto Reset High Pressure Switch			Manual Reset	Auto Reset High Pressure Switch			
Tank Overfill Switch Kit	✗			Optional			✗	✗	✓	✗	
Maximum Flow Rate @ 60 Hz (Reduce 15% for 50 Hz)	Direct Vapor	Up to 1.2 lb/min (33 kg/hr)				Up to 2.5 lb/min (67 kg/hr)					
	Direct Liquid	Up to 9.5 lb/min (260 kg/hr)				Up to 12 lb/min (271 kg/hr)					
	Push-Pull Liquid	Up to 20.3 lb/min (550 kg/hr)				Up to 34 lb/min (922 kg/hr)					
AHRI 740 Class Refrigerants	Class III	R-12, R-134A, R-401C, R-406A, R-500									
	Class IV	R-22, R-401A/B, R-402B, R-407/C/D/E/F, R-408A, R-409A, R-411A/B, R-412A, R-502, R-509A									
	Class V	R-402A, R-404A, R-407A/B, R-410A/B, R-507A									
ASHRAE/ISO Class A2, A2L and A3	✗						R1234yf, R32, R290, R600, R601, R1276	✗			
Operating Temperature Range	32°F to 120°F (0°C to 49°C)										
Cleanable, 100-Mesh Screen Filtration (Into Suction Port)							✓				
High Pressure Cutout LED							✓				
Heavy Gauge Aluminum Chassis							✓				
Skid Resistant Rubber Feet							✓				
Power Cord Length, Type	6 Ft.										
Dimensions (W x L x H)	6" x 12" x 9" (15cm x 30cm x 23cm)										
Weight	18.7 lb (8.5 kg)			24.3 lb (11.0 kg)							
Approvals	UL, CE, CSA, TUV										
Warranty (Years)	1										

TRANSFORM YOUR BOTTOM LINE WITH THE MT69 MOLECULAR TRANSFORMATOR. IT DRAMATICALLY INCREASES THE SPEED OF ANY RECOVERY MACHINE.

CUT YOUR RECOVERY TIME IN HALF.

The MT69 is the *only* commercialized recovery sub-cooler manufactured for the professional A/C & R technician. It transforms molecules of hot refrigerant gas into molecules of refrigerant liquid and also transforms molecules of cold refrigerant liquid into a warm refrigerant gas. Use the MT69 in-line with the discharge line of any recovery machine to dramatically increase the speed of recovery.

- Dramatically increases the speed and performance of your recovery machine- **(up to 95% increase in recovery speed!)**



MT69

COMPARATIVE DATA

Time needed to recover 15 lb of R22 at 120° F:	WITH MT69	WITHOUT MT69
	17 minutes	32 minutes

- Functions as a submersible condenser or evaporator
- Rugged, compact and easy to use
- Eliminates the need to change tanks when recovering R410A
- Eliminates annoying shutdown due to high pressure switch limit
- Essential for recovering R410A on hot days
- The hotter it is, the better it works
- Essential for recovering liquid refrigerant on cold days
- Eliminates liquid slugging at colder temperatures
- Patents Pending
- Designed and manufactured in USA with U.S. and globally source components

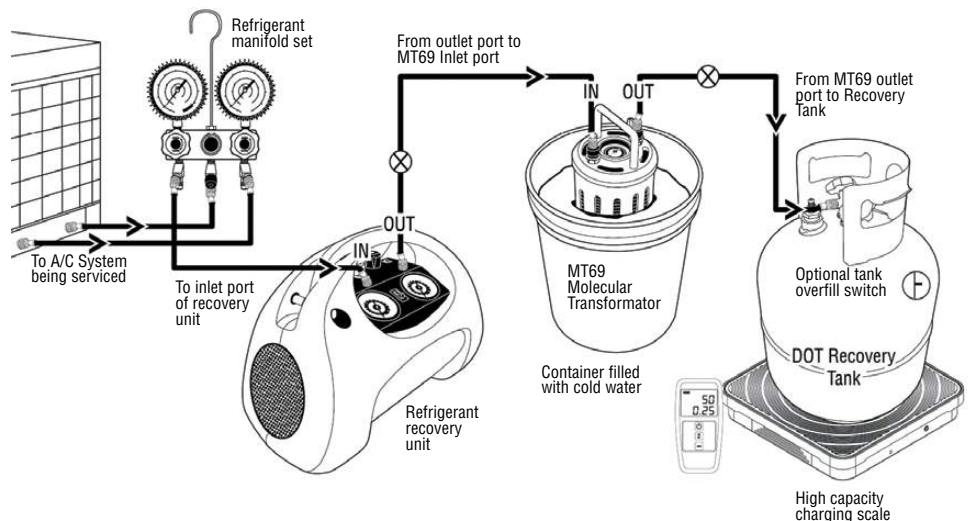
MT69 SPECIFICATIONS

Dimensions	4.25" x 9" (10.9 cm x 22.9 cm)
Weight	3.6 lb (1.6 kg)
Maximum Operation Pressure	500 Psig
Discharge Pressure Gauge	0 to 600 Psig
Inlet/Outlet Connections	1/4" SAE male
Refrigerant Compatibility	All

Item	Description
MT69	MT69 Molecular Transformator
TR21MT69KIT	TR21 & MT69 kit

HOW THE MT69 MOLECULAR TRANSFORMATOR WORKS:

The effects of ambient temperature and elevated tank pressures on the speed of the refrigerant recovery process are in many cases more important than the speed of the recovery machine itself. As ambient temperature increases, pressure in the recovery cylinder increases, reducing the recovery speed and in many cases can lead to a high pressure shutdown as the recovery equipment and tank pressure limits are reached. The Molecular Transformator reduces the temperature and pressure of recovered refrigerant during the recovery process, dramatically improving the recovery speed and high ambient temperature performance of all commercially available recovery machines in addition to extending the life of the equipment.



HEATER STRAPS

Charge faster in cold weather! Ideal for use on portable refrigerant charging or recovery tanks, especially in cold weather when transfer times increase, or when a tank is low on refrigerant. These durable straps create a positive pressure between the refrigerant tank and an A/C or refrigeration system, thereby reducing refrigerant transfer time.



CCXHB (120V)



CCXHBV (220V/240V)

Model	CCXHB	CCXHBV
Voltage (Hz)	120 VAC (50/60 Hz)	240 VAC (50/60 Hz)
Watts	340 W	
Amps	2.8	1.4
For Cylinder Sizes	From 8" (20 cm) to 14" (35 cm) Diameter Tanks	
Control (Overheat Protection)	Automatic Thermal Cutoff (Encapsulated Thermostat)	
Minimum Surface Temperature Of Tank	115°F (46°C)	
Maximum Thermostat Temperature	130°F (55°C)	
Power Cord Length	20" (0.50 m)	
Adjustable Velcro Strap Max Length	19" (0.48 m)	
Heater Strap Width	3" (76 mm)	
Heater Strap Length	24" (.60 m)	
Heater Strap Color	Dark Orange	
Electrical Connection Type	Nema 5-15P	IEC320 Inlet
Packaging	Header Card + Clear Poly Bag	



CRX430T
CRX430TS with overfill sensor
1/4" SAE Male



CRX400T
CRX400TS with overfill sensor
1/4" SAE Male



(Automotive use)
ARX134T
ARX134TS with overfill sensor
1/2" ACME Male fitting



CRX390T
CRX390TS with overfill sensor
1/4" SAE Male fitting



REFRIGERANT RECOVERY TANKS

- DOT Certified for refrigerant storage
- Refrigerant compatible sealant used on all mechanical connection points
- Auxillary port for optional overfill sensor
- Liquid and Vapor UL listed Y-valve
- Powder coated for maximum rust protection

		Weight Of Empty Tank		Tank Water Capacity		Total Weight (Tank & Refrigerant)		Tank Foot Ring Diameter		Tank Outside Diameter		Tank Height		Max. Pressure Rating (psig)	
		lb	kg	lb	kg	lb	kg	in	mm	in	mm	in	mm		
For HVAC/R Use															
30 Lb	CRX430T	17.5	7.9	26.2	11.9	43.7	19.8	7.8	198.1	9.5	241.3	18.1	459.7	400	
	CRX430TS	17.5	7.9	26.2	11.9	43.7	19.8	7.8	198.1	9.5	241.3	18.1	459.7	400	
50 Lb	CRX400T	28.3	12.8	47.4	21.5	75.7	34.3	8	203.2	12.5	317.5	19.75	501.7	400	
	CRX400TS	28.3	12.8	47.4	21.5	75.7	34.3	8	203.2	12.5	317.5	19.75	501.7	400	
90 Lb	CRX390T	49.5	22.5	92.5	42	142.0	64.4	9.5	241.3	12	304.8	31.75	806.5	350	
	CRX390TS	49.5	22.5	92.5	42	142.0	64.4	9.5	241.3	12	304.8	31.75	806.5	350	
For Automotive Use															
50 Lb	ARX134T	28.3	12.8	47.4	21.5	75.7	34.3	8	203.2	12.5	317.5	19.75	501.7	400	
	ARX134TS	28.3	12.8	47.4	21.5	75.7	34.3	8	203.2	12.5	317.5	19.75	501.7	400	