

Los Angeles County Sheriff's Department

## **43rd ANNUAL**

## LAW ENFORCEMENT VEHICLE TEST AND EVALUATION PROGRAM

**VEHICLE MODEL YEAR 2018** 

Jim McDonnell, SHERIFF

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## PREFACE

The Los Angeles County Sheriff's Department first implemented its police vehicle testing program in 1974. Since that time, our department has become nationally recognized as a major source of information relative to police vehicles and their use. It is our goal to provide law enforcement agencies with the information they require to successfully evaluate those vehicles currently being offered for police service. The Los Angeles County Sheriff's Department is proud to publish this information, via the internet, to all law enforcement agencies.

Since the inception of our vehicle testing program in 1974, we have continually refined our efforts in this area in order to provide the law enforcement community with the most current information available. During the 1997 model year testing, the Sheriff's department expanded its existing criteria to include an urban or city street course. This course consists of multiple city block distances punctuated by the various types of turns normally found in most inner city environments. The "city street" course is designed to simulate the conditions encountered by most officers working in typical urban communities. The test is only conducted on vehicles offered with a factory "Police Package". Since many law enforcement agencies buy "non-police packaged" vehicles, we also test vehicles offered in a "Special Service" configuration when offered by the manufacturers. These vehicles are tested in a similar fashion as "Police Package" vehicles however we do not subject them to the city course.

The booklet is not intended as a recommendation for any specific vehicle contained within. The Sheriff's Department conducts the vehicle testing program in order to accomplish two primary goals. To provide law enforcement agencies with the data necessary to assist those in the vehicle selection process, and to provide the various vehicle manufacturers with the input necessary to better meet the needs of law enforcement. We recognize the fact that individual agency needs can be influenced by cost, operational considerations and other factors.

Our testing process is designed to address the law enforcement officer's operational requirements in terms of vehicle performance, vehicle safety, and comfort. Each test is designed and executed to simulate actual field conditions as closely as possible. The vehicles being tested are driven by law enforcement personnel on city streets and interstates, as well as the performance track. The maneuvers duplicated during the electronic test procedures are those encountered in actual patrol and emergency operations which the law enforcement officer may encounter in the field.

Interpretation of test results is the responsibility of each agency. The importance with which each individual phase is weighted is a subjective decision which should be made by each agency based upon that agency's needs.

## ACKNOWLEDGEMENTS

The Los Angeles County Sheriff's Department, Fleet Management Bureau would like to thank all those who contributed their time and efforts in making this year's test a success.

#### Vehicle Test Track Drivers

Deputy Joe Rosales - LASD Deputy Ramiro Juarez - LASD Officer Alex Penrith - LAPD Officer Baqnhart Douglas - LAPD

#### Vehicle Manufactures

FORD MOTOR CO POLICE VEHICLES GENERAL MOTORS POLICE PROGRAM (CHRYSLER) FCA USA, LLC

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#### Vehicle Test Sponsors

FEDERAL SIGNAL SETINA MANUFACTURING WHELEN MANUFACTURED FORD MOTOR CO POLICE VEHICLES GENERAL MOTORS POLICE PROGRAM (CHRYSLER) FCA USA, LLC

We would like to give a special thanks to the Auto Club Speedway staff for helping to make this event possible.

LASD Reserve Forces Bureau LASD Food Services LASD Print Shop LASD Sign Shop LASD Web Development Unit PENSKE Vincent Santiago PENSKE Robert Yip PENSKE Lupe Granados

## ACKNOWLEDGEMENTS (Continued)

The Los Angeles County Sheriff's Department Fleet Management Bureau would like to thank the following companies for their participation and continued support of the LASD Vehicle Test vendor expo.

10-8 RETROFIT INC. AIRWAVE COMMUNICATIONS IMPERIAL WESTIN PUBLIC SAFETY TRUCK VAULT CROSSCO/CODE 3 FEDERAL MOGUL MOTORPARTS HUNTINGTON BEACH HONDA BMW MOTORRAD USA YAMAHA POLICE MOTORCYCLES GETAC HARLEY DAVIDSON MOTORCYCLE COMPANY HAVIS/ ASG MARKETING TROY PRODUCTS WEST COAST LIGHTS AND SIRENS WATTCO EQUIPMENT, INC INDUSTRIAL VAN & TRUCK JOTTO DESK LINK ENGINEERING CO. PRISONER TRANSPORT SYSTEMS RACEWAY FORD RAYBESTOS TOMAR ELECTRONICS. INC

## **2018 MODEL YEAR VEHICLE TEST**

On October 10th–13th, 2017, vehicle testing was performed at the Auto Club Speedway in Fontana, California. Chrysler, General Motors, and Ford all submitted vehicles in the "Police Package" category. Police Package vehicles have been identified by the manufacturers as factory installed Police package vehicles. All of the vehicles satisfactorily completed the test.

The vehicles submitted for evaluation were all 2018 models and are identified below.

#### HIGH SPEED POLICE PACKAGE VEHICLE CATEGORY:

2018 Ford PI Sedan FWD 3.5L:	Full size four door sedan, front wheel drive, 3.5 liter V-6 engine, 6 speed automatic transmission with overdrive and a 3.16:1 axle ratio.
2018 Ford PI Sedan AWD 3.7L:	Full size four door sedan, all-wheel drive, 3.7 liter V-6 engine, 6 speed automatic transmission with overdrive and 3.39:1 axle ratio.
2018 Ford PI Sedan AWD Eco.:	Full size four door sedan, all-wheel drive, 3.5 liter EcoBoost V-6 engine, 6 speed automatic transmission with overdrive and a 3.16:1 axle ratio.
2018 Ford PI Utility AWD 3.7L:	Full size four door sport utility, all-wheel drive, 3.7 liter V-6 engine, 6 speed automatic transmission with overdrive and a 3.65:1 axle ratio.
2018 Ford PI Utility AWD Eco.:	Full size four door sport utility, all-wheel drive, 3.5 liter EcoBoost Turbo- charged V-6 engine, 6 speed automatic transmission with overdrive and a 3.16:1 axle ratio.
2018 Ford PI Sedan FWD 2.0L:	Full size four door sedan, front wheel drive, 2.0 liter, turbocharged engine, direct injection, 6 speed electronic automatic transmission with overdrive and a 3.07:1 axle ratio.
2018 Ford F150 4WD 3.5L Eco.:	Full size four door pickup truck, four-wheel drive, 3.5 liter, V6, EcoBoost engine with 10 speed SelectShift automatic transmission configured with progressive range select and selectable drive models with 3.55:1.axle ratio.
2018 Ford Responder Hybrid Sedan	:
	Full size four door sedan. front wheel drive, 2.0 liter, Atkinson cycle engine & electric A/C motor managed by power-split hybrid technology and automatic electronically controlled continuously variable transmission with a 2.57:1 axle ratio.

#### HIGH SPEED POLICE PACKAGE VEHICLE CATEGORY: (CONTINUED)

2018 Dodge Charger V-6 RWD:	Full size four door sedan, rear wheel drive, 3.6 liter V-6 engine, 5 speed automatic transmission with overdrive and a 2.62:1 axle ratio.
2018 Dodge Charger V-8 RWD:	Full size four door sedan, rear wheel drive, 5.7 liter , naturally aspirated V-8 5 speed automatic transmission with overdrive and a 2.62:1 axle ratio.
2018 Dodge Charger V-8 AWD:	Full size four door sedan, all-wheel drive, 5.7 liter, naturally aspirated V8, 5 speed automatic transmissions with overdrive and a 3.08:1 axle ratio.
2018 Chevrolet Tahoe PPV 2wd:	Full size four door sport utility, rear wheel drive , 5.3 liter V-8 engine, 6 speed automatic transmission with overdrive and a 3.08:1 axle ratio.
2018 Chevrolet Tahoe PPV 4wd:	Full size four door sport utility, four wheel drive, 5.3 liter V-8 engine, 6 speed automatic transmission with overdrive and a 3.08:1 axle ratio.

## VEHICLE SPECIFICATIONS

#### MAKE: FORD MODEL: 2018 PI SEDAN FWD 3.5L

SALES CODE: P2L, 998

Vehicle Type: speed automatic	Full size fo transmissic	ur door sedan, n with overdriv	front wheel drive, 3.5 lite and a 3.16 axle ratio.	r V-6 engine, 6	EI	PA	TEST	TED		
1					СІТҮ	HWY	СІТҮ	HWY		
					17	25				
<u><u>I</u></u>	NTERIOF	<u>k</u>	DIMENSI	ONS		<u>CH</u> A	ASSIS			
<u>SEATS</u>			Fuel Capacity:	19.0 Gallons	STEERI	ING				
Front: Heavy	duty cloth	ı bucket; adjustable	GVWR:	5,460 lbs.	<b>Type:</b> El	lectric po	ower assis	t rack		
headrest.	ole, i way	uujustuote	Wheelbase:	112.9 in	Curb-to	-curh·	3	8 4 ft		
Rear: Vinyl b	ench stand	dard; cloth	<b>Ground Clearance:</b>	6.0 in	SUSPEN	ISION	2	0.4 10.		
MEASUREN	TENTS		<b>Overall Length:</b>	202.9 in	Front: I	Front: Independent MacPherson				
	Front	Rear	<b>Overall Height:</b>	61.3 in	coil over strut.					
Headroom:	39.0 in	36.7 in			Rear: M suspensio	ulti-link on.	fully indep	pendent		
Legroom:	41.9 in	41.6 in			WHEEI	+ TIRE	S			
Shoulder:	57.9 in	60.9 in			Wheel si	ize/type:		_		
Hip Room:	56.3 in	56.8 in			Tire ma	18" x ke:	8", steel, 5 Goo	5-spoke odyear		
Interior Volu	me:				Tire mo Tire size	del:	Eagle 245/	e RS-A 55R18		
Front:	54.8 c	u- ft.			Speed ra	ating:		103V		
Rear:	48.1 c	u-ft.			BRAKE	<u>S</u>				
Comb: Trunk:	103.0	cu-ft.			Type: Po front, sin	ower – du Igle pistor Id ABS	al piston c n calipers	alipers rear, 4		
ITUIIK.	10.0 0	<i>i</i> -11.			Front Di		139 in	vented		
	<u>ENGINE</u>		DRIVETR	Rear Die		13.6  in	vented			
Natura	ally aspirate	ed V6	Transmission: Mode electronic automatic v	l 6F50; 6 speed vith lockup	INCAT DI		15.0 m,	vented		
Fuel delivery Displacement	system: t:	MPFI 3.5 Liters	torque converter.	1						
Compression Horse Power	<b>Ratio:</b> 288 bhp (	214 cid 10.8:1 @ 6500 rpm	Axle Ratio:	3.16:1						
Torque (SAE	2 <b>net):</b> 245 ft-lb (	a) 4000 rpm								
Alternator: Battery:		220 amp 750 CCA								
			TEST RES	ULTS						
ACCELERA	TION		BRAKI	NG	32	2 LAP HI	(GH SPE)	ED		
0-30mph-		2.80 sec	149.5 ft. @ 6	50 mph	Avera	age Lap T	Time -	1:25.50		
0-60mph- 0-100-mph-	;	7.50 sec 19.40 sec		· · ····	Ave	rage Spee	ed – 61.6	5 mph		
30-60mph- 60-100mph-	, 1	4.97 sec 1.43 sec				<u>CITY (</u>	COURSE			
1/4 mile – 15	5.80 sec @	91.30 mph			Ave Ave	erage Lap grage Spe	Time $-4$ : ed $-34$ .	:30.95 :50 mph		
								T		

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#### Vehicle Type: Full size four door sedan, rear wheel drive, 3.6 liter V-6 engine, 5 EPA TESTED speed automatic transmission with overdrive and a 2.62:1 axle ratio. CITY HWY CITY HWY 18 26 **CHASSIS INTERIOR DIMENSIONS** SEATS **Fuel Capacity:** 18.5 Gallons **STEERING** Front: Heavy duty cloth bucket **Type:** Electric power assisted rack GVWR: 5.450 lbs. and pinion. Rear: Vinyl bench 120.2 in Wheelbase: 37.7 ft. Curb-to-curb: MEASUREMENTS **Ground Clearance:** 5.1 in SUSPENSION Front Rear **Overall Length:** 198.4 in **Front:** Independent high arm SLA with dual ball joint lower, coil spring over gas-charged mono-tube shock absorbers and stabilizer bar. Lateral and diagonal lower links with dual ball Headroom: 38.6 in 36.7 in **Overall Height:** 58.4 in 41.8 in 40.1 in Legroom: Shoulder: 59.5 in 57.9 in joint knuckles Hip Room: 56.2 in 56.1 in **Rear:** 5 link independent with coil springs, gas charged load-leveling NIVOMAT rear shocks, suspension **Interior Volume:** Front: 55.6 cu-ft. cradle. Rear: 49.2 cu-ft. WHEEL + TIRES Comb: 104.7 cu-ft. 18" x 7.5" steel Wheel size/type: Tire make: Goodyear Eagle RS-A 245/55R18 **Trunk:** 16.5 cu-ft. Tire model: Tire size: **Speed rating:** V-rated **ENGINE** DRIVETRAIN BRAKES Naturally aspirated V6 Transmission: Model A580, 5 speed automatic with overdrive and **Type:** Power with dual piston front **SPFI Fuel delivery system:** lockup torque converter. calipers, single piston rear calipers, anti-lock. **Cubic Inches:** 220 **Axle Ratio:** 2.62:1 Front Disc: 388 sq. in swept area vented disc 3.6 liters **Displacement:** 300 sq. in swept area **Rear Disc:** \*The standard tire size for this vehicle is 225/60R18.This vehicle was vented disc 10.2:1 **Compression Ratio:** tested with tire option 245/55R18. Horse Power: 292bhp @ 6350 rpm Torque (SAE net): 260 ft-lb @ 4800 rpm Alternator: 220 amp **Battery:** 800 CCA **TEST RESULTS** ACCELERATION BRAKING **32 LAP HIGH SPEED** Average Lap Time – 1:25.30 Average Speed – 61.70 mph 0-30mph-3.29 sec 145.3 ft. @ 60 mph 0-60mph-8.00 sec 21.20 sec 0-100-mph-**CITY COURSE** 30-60mph-5.30 sec 60-100mph-13.36 sec Average Lap Time – 4:33.85 Average Speed – 34.20 mph 1/4 mile<sup>-1</sup> 16.20 sec (a) 90.8 mph

#### SALES CODE: 27A, Z1B

#### MAKE: DODGE MODEL: 2018 CHARGER V6 2.62

#### MAKE: FORD MODEL: 2018 PI SEDAN AWD 3.7L

SALES CODE: P2M, 99K

Vehicle Type:	Full size for	ur door sedan, a	ll-wheel drive, 3.7 liter V	7-6 engine, 6 speed	EP	A	TES	TED	
automatic trans	mission with	overdrive and	3.39 axle ratio.		СІТҮ	HWY	СІТҮ	HWY	
					16	22			
]	INTERIOF	<u> </u>	DIMENSI	ONS		CHA	ASSIS		2
<u>SEATS</u>			Fuel Capacity:	19.0 Gallons					
Front: Heavy	duty cloth	ubucket;	GVWR:	5.700 lbs.	<u>STEERIN</u>	<u>NG</u>			
headrest.	.010, 4 way	aajustaote	Wheelbase	112 9 in	<b>Type:</b> Ele pinion	ectric po	wer assis	t rack ai	nd
Rear: Vinyl b	pench stand	lard; cloth	Cuound Cleananae	( ) in	- Curb-to-c	curb:		38.4 ft.	
MFASURFN	IFNTS		Ground Clearance:	0.0 III	<b>SUSPENS</b>	SION			
MEASUNEN	Front	Door	Overall Length:	202.9 m	<b>Front:</b> Independent MacPherson				
Headroom:	39.0 in	36.7 in	<b>Overall Height:</b>	61.3 in	coil over s	strut.			
Legroom:	41.9 in	39.9 in			Rear: Mu suspension	lti-link n.	fully inde	pendent	
Shoulder:	57.9 in	60.9 in			WHEEL	+ TIRES	<u>S</u>		
Hip room:	56.3 in	56.8 in			Wheel siz	e/type:	~		
Interior Volu	ime:				Tire mak	18" x	8" steel, Goo	5 spoke odyear	
Front:	54.8 cu	ı-ft.			Tire mod Tire size:	el:	Eagle 245/	e RS-A 55R18	
Rear:	48.1 cu	-ft.			Speed rat	ing:		103V	
Comb:	103.0 c	u-ft.			BRAKES				
Trunk:	16.6 cu	-ft.			Type: Pov front, sing 4 circuit a	wer– dua le piston nd ABS	al piston c calipers	alıpers rear,	
	<b>ENGINE</b>		DRIVETE	RAIN					
Natar	- 11	11/	T	1 (1755 (	Front Disc: 13.9 in, vented disc				
Natura Fuel delivery	ally aspirate system: M	a v-o PFI	electronic automatic w	vith lockup	Rear Disc: 13.6 in, vented disc				
Displacemen	t:	3.7 liters 226 cid	torque converter.						
Compression Horse Power	<b>Ratio:</b> : 305 bhp (	10.5:1	Axle Ratio: 3.39:1 w	vith all-wheel					
Torque (SAE	279 ft-1b	@4000 rpm	drive						
Alternator: Battery:	279 10 10	220 amp							
Duttery		100 0 011							
			TEST DES						
	TION		<u>IESI KES</u>		22		CH SDE	FD	
ACCELENA		268 000		<u>and</u>	<u>52</u>		Time 1	<u>ED</u> 25.10	
0-60mph-		2.00 sec 7.60 sec	144.0 II. @ 0	oo mpn	Aver	age Lap rage Spe	$r_{\rm inte} - 13$ ed - 61.83	5 mph	
30-60mph-	1	5.40 sec				<u>CITY (</u>	COURSE		
1/4 mile-	15.80 sec @	90.40 mph			Aver	age Lap	Time-4:	24.55	
					Avei	age spec	ea - 33.4	o mpn	

#### MAKE: FORD MODEL: 2018 P.I. UTILITY 3.7L AWD

SALES CODE: K8A, 99R

Vehicle Type:	Full size for	ir door sport u	utility, all-wheel drive, 3	3.7 liter V-6 engine,	e, EPA TESTED			STED
o speed automa					CITY	HWY	CITY	HWY
					15	20		
Ī	NTERIOR		DIMENS	SIONS		CHA	SSIS	
<u>SEATS</u>								
Front: Heavy	duty cloth	bucket,	Fuel Capacity:	18.6 Gallons	<u>STEERI</u>	<u>NG</u>		
headrest.	010, <del>4</del> -way a	iajustaole	GVWR:	6,300 lbs.	<b>Type:</b> Eleand pinio	ectric po n	wer assis	st rack
Rear: Vinyl b	ench, 60/4	0 split.	wneelbase:	112.6 in	Curb-to-	curb:		38.8 ft.
MEASUREM	<u>1ENTS</u>		Ground Clearance:	0.3 III 197 1 in	SUSPEN	SION		
	Front	Rear	Overall Height:	69.2 in	<b>Front:</b> Independent N			herson
Headroom:	41.4 in	40.1 in	Over an meight.	(w/o roof rack)	coil over	strut.		1101 3011
Legroom:	40.6 in	41.6 in			Rear: Mu suspensio	ılti-link f n	ully inde	pendent
Shoulder:	61.3 in	60.9 in			WHEEL	+ TIRES	5	
Hip Room:	57.3 in	56.8 in			Wheel siz	ze/type:	-	
Interior Volu	me:				Tire mak	<sup>°</sup> 18" x ae:	x 8" steel Go	, 5-spoke odvear
Front:	59.7 cu	-ft.			Tire mod Tire size:	el:	Eagl 245	e RŚ-A 5/55R18
Rear:	58.7 cu	-ft.			Speed ra	ting:	210	103V
Comb:	118.4 c	u-ft.			BRAKES	<u>5</u>		
Max Cargo	<b>:</b> 85.1 cu	-ft.			<b>Type:</b> Po front, sing	wer—du gle piston	al piston calipers	calipers rear, 4-
	<b>ENGINE</b>		DRIVET	RAIN	Encorte	u ADS.	12.0 :	
Natura	ally aspirate	d V6			Front:		13.9 in,	ventea.
Fuel delivery Displacement	system: t:	MPFI 3.7 Liters 226 cid	<b>Transmission:</b> Mod electronic automatic torque converter.	el 6F55, 6-speed with lockup	Wheel size/type: 		vented.	
Compression Horse Power Torque (SAE	<b>Ratio:</b> : 304 bhp ( <i>d</i> : net):	10.5:1 0 6500 rpm	Axle Ratio: 3.65:1 w	with all-wheel				
Alternator: Battery:	279 ft-lb @	220 amps 750 CCA						
ACCELERA	TION		<u>TEST RE</u>	<u>SULTS</u> INC	<u>32</u>	LAP HI	<u>GH SPE</u>	<u>ED</u>
0-30mph- 0-60mph- 0-100-mph-	2	2.86 sec 8.50 sec	144.9 ft. @	60 mph	Avera Avera	ge Lap Ti ge Speed	ime- – 59.5	1:28.50 2 mph
30-60mph-	1	5.50 sec				<u>CITY C</u>	OURSE	
1/4 mile–	16.40 sec @	86.40 mph			Avera Avera	age Lap T ge Speed	Time – – 33	4:36.10 .90 mph

#### MAKE: FORD MODEL: 2018 P.I. 2.0 L EcoBoost Sedan FWD

SALES CODE: P2L, 999

Vehicle Type:	hicle Type: Full Size four door sedan; front wheel drive, 2.0 liter, turbocharg				FI	ΡA	TESTED		
engine, direct in	jection, 6 sp	beed electronic	automatic transmission v	vith overdrive and		HWV		HWV	
a 5.07.1 axie rai					19	28	CIII		
I	NTERIOR	2	DIMENSI	ONS	17	CHA	SSIS		
<u>SEATS</u>			Fuel Capacity:	19.0 Gallons	STEER	ING			
<b>Front:</b> Heavy 6-way power	v duty clotl adjustable:	n bucket, 4-way ad-	GVWR:	5,460 lbs.	Type: E rack and	lectric po pinion.	ower assi	isted	
justable headr	est.	j in ing in in	Wheelbase:	112.9 in	Curb_to	-curb.		38 4 ft	
Rear: Vinyl bench.	oench, Opt	ional cloth	Ground Clearance: Overall Length:	6.0 in 202.9 in	SUSPEN	NSION		J0.4 II.	
MEASUREM	1ENTS		Overall Height:	61.3 in	Front: I	Front: Independent MacPhers			
	Front	Rear			strut wit				
Headroom:	39.0 in	36.7 in			Rear: M	ulti-Link	t full inde	ependent	
Legroom	41 9 in	41 6 in			<u>WHEEI</u>	L+TIRES	5		
Shouldor	57.0 in	60.0 in			Wheel si	ize/type:	v 8" staal	5 spoke	
Hip Room:	56.3 in	56.8 in			Tire ma Tire mo	ke: del:	Go Steel	odyear RS-A	
Interior Volu	me:				Tire size Speed ra	Tire size:245/55R18Speed rating:103V			
Front:	54.8 cu	ı-ft.			BRAKE	<u>BRAKES</u>			
Rear:	48.1 cu	ı-ft.			Type: P	ower - du	al piston	calipers	
Comb:	103.0 c	cu-ft.			4 circuit	and ABS	n canpers	s rear,	
Trunk:	16.6 cu	-ft.			Front:	13.9	inch ven	ted disc	
	ENGINE		DRIVETE	<b>DRIVETRAIN</b> Rear: 13.6 in			inch ven	ted disc	
Turbocl	harged 1-4		Transmission: Mode	1 6F55 omatic with					
Fuel Type Fuel delivery Displacement	system: t:	Gas SDI 2.0 Liters	lockup torque convert Axle Ratio:	3.07:1					
Compression Horse Power	Ratio:	10.0:1							
Torque (SAE 270 lb1 Alternator:	340 bhp @ 2 <b>net):</b> ft. @ 3,000	) 5,500 rpm rpm 200 amp							
Battery:		750 CCA							
ACCELERA	TION		TEST RES	ULTS	32	<b>LAP HI</b>	GH SPF	ED	
0-30mph- 0-60mph- 0-100-mph-		3.23 sec 8.50 sec 21.10 sec	BRAKI 132.6 ft. @	Average Lap Time – 1:29.90 Average Speed – 58.59 mph					
30-60mph- 60-100mph-		5.30 sec 13.14 sec				<u>CITY C</u>	OURSE		
1/4 mile–	16.60 sec @	88.70 mph			Aver Aver	rage Lap age Spee	Time – 4 d – 33	:41.10 30 mph	

#### MAKE: FORD MODEL: 2018 P.I. UTILITY 3.5 EcoBoost AWD

SALES CODE: K8A, 99T

Vehicle Type: 1 Twin Turbocharg	Full size fou red V-6 engi	r door sport u ne. 6 speed a	utility, all-wheel drive, 3.5 liter EcoBoost automatic transmission with overdrive and a			EPA		TESTED	
3.16:1 axle ratio.		) - I			CITY	HWY	CITY	HWY	
					15	20			
IN	<b>TERIOR</b>		DIMENS	<u>SIONS</u>		CHA	<u>SSIS</u>		
<u>SEATS</u>			Fuel Capacity:	18.6 Gallons	STEERI	NG			
Front: Heavy	duty cloth	bucket, 6-	GVWR:	6,300 lbs.	Type: Ele	ectric po	wer assis	st	
way power adju able headrest	ustable; 4-v	vay adjust-	Wheelbase:	112.6 in	rack and p	pinion <sup>-</sup>			
Rear: Vinyl be	ench, 60/40	split	Ground Clearance	<b>:</b> 6.4 in	Curb-to-	curb:		38.8 ft.	
MEASUREM	ENTS		Overall Length:	197.1 in	<u>SUSPEN</u>	<u>SUSPENSION</u>			
	Front	Rear	Overall Height:	69.2 in	<b>Front:</b> In strut with	Front: Independent MacPherson strut with coil over shocks			
Headroom:	41.4 in	40.1 in		(w/o roof rack)	Rear: Mu	ulti-link f	full indep	endent	
Legroom:	40.6 in	41.6 in	* The vehicle was tested with						
Shoulder:	61.3 in	60.9 in	the"Enhance Power Transfer (PTU)" cooler option.						
Hip Room:	57.3 in	56.8 in			18" x 8" steel, 5-spo				
Interior Volume:					Tire mak	ie: lel:	GG 245	bodyear 55R18	
Front:	59.7 cu-	ft			Tire size: Speed rat	ting:		RS-A 103 V	
Rear:	58.7 cu-	ft			BRAKES	<u>5</u>			
Comb:	118.4 cu	ı-ft			Type: Po	wer with	dual pie	ston	
Rear Cargo	: 85.1 cu-	ft			rear, 4 circuit and ABS			campers	
<u> </u>	NGINE		DRIVET	Front:	13.9	inch ven	ted disc		
					Rear:	13.6	inch ven	ted disc	
Twin Tu	rbocharged	l V-6	Transmission: Mod	lel 6F55.					
Fuel delivery s Displacement:	system:	SDI 3.5 Liters	6 speed electronic at lockup torque conve	erter					
<b>Compression</b>	Ratio:	214 cid 10.0:1							
Horse Power: Torque (SAE)	365 bhp ( <i>a</i> net):	, 5550 rpm	Axle Ratio: 3.16:1 v drive.	with all-wheel					
Alternator: 3	50 lb. ft. @	220 amp							
Battery:		750 CCA							
ACCELERAT	<b>TION</b>		<u>TEST RE</u>	<u>SULIS</u>	32	LAP HIC	GH SPE	ED	
0-30mph-	2	63 sec	BRAK		Avera	ge Lap T	ime - 1	:24.80	
0-00mph- 0-100-mph-	6. 17	.70 sec .50 sec	14/.3 ft. (a	y oumph	Avera	ige Speed	1 - 62.18	s mph	
50-60mph- 60-100mph-	30	40 sec 91 sec						07.10	
1/4 m1e– 15.	$30 \sec(a) 9$	3.60 mph			Avera Avera	age Lap T ge Speed	-32.6	27.10 0 mph	

## MAKE: CHEV MODEL: 2018 TAHOE 4WD (9C1)

SALES CODE: CK15706

Vehicle Type: 6 speed automat	<b>hicle Type:</b> Full size four door sport utility, 4 wheel drive, 5.3 liter V-8 engineed automatic transmission with overdrive and a 3.08:1 axle ratio.				E	PA	TES	TED		
o speca automa					CITY	HWY	CITY	HWY		
			1		16	23				
<u> </u>	<b>NTERIOR</b>		DIMENSI	<u>ONS</u>		<u>CH</u> A	ASSIS			
<u>SEATS</u>			Fuel Capacity:	26 Gallons 98.0 Liters	<u>STEERIN</u>	NG				
Front: Cloth manual lumbe	bucket, 6-v er and reclin	vay power, e.	GVWR:	7,100 lbs.	<b>Type:</b> Ele pinion	etric pov	ver assist	t rack and		
<b>Rear:</b> Vinyl s bench. (standa	plit folding ard)	g 60/40	Payload: Wheelbase:	1,624 lbs. 116 in	Curb-to-c	curb:		39 ft.		
MEASUREM	<u>1ENTS</u>		Ground Clearance:	8.5 in	<u>SUSPENS</u>	<u>sion</u>	. • 1	.1		
	Front	Rear	Overall Length:	204 in	shock with	F <b>ront:</b> Independent single coil ove shock with stabilizer bar.				
Headroom:	42.8 in	38.7 in	<b>Overall Height:</b>	72.4 in	Rear: Mu	lti-link w	vith coil s	prings.		
Legroom:	45.3 in	39.0 in			WHEEL	+ TIRES	<u>}</u>			
Shoulder:	64.8 in	65.1 in			Wheel siz	e/type:	17" x	8"steel		
Hip Room:	60.8 in	60.3 in			Tire make: Goodyear Tire model: RS-A					
Interior Volu	me:				Speed rat	ing: L	oad ratir	ig '108'		
Front:	63.8 ci	ı-ft.			V-rated					
Rear:	56.9 cu	ı-ft.			DRAKES	1	411	4. 1 1-		
Comb:	120.7 c	cu-ft.			front & rea	avy duty ar disc w	4 wheel ith vacuu	m boast.		
Max. Carg	o: 112.1 c	cu-ft.			Front:	13.0 ii	nch vente	ed disc		
]	ENGINE		DRIVETRAIN Rear: 13.5 inch					ed disc		
Natura	lly aspirated	l V8								
Naturally aspirated V8Fuel delivery system:SPFICubic Inches:325Displacement5.3 LitersCompression Ratio:11.0:1Horse Power:355bhp @ 5600rpmTorque (SAE net):383 ft-lb@ 4100 rpmAlter170 ampBattery:720 CCA Primary730 CCA Auxiliary			Transmission: Model 6-speed automatic with converter. Axle Ratio: 3.08: Drive with H/D Lockin	l 6L80E, h lockup torque 1 (Rear Wheel ng Differential)						
ACCELERA 0-30mph- 0-60mph- 0-100-mph- 30-60mph- 60-100mph- 1/4 mile- 1	<u>TION</u> 2 6.70 sec @	3.32 sec 8.60 sec 3.10 sec 6.20 sec 4.52 sec 85.20 mph	<u>TEST RESU</u> <u>BRAKIN</u> 152.1 ft. @ 6	ULTS NG 50mph	<u>32</u> Aver Aver Aver	LAP HI rage Lap age Speed CITY C rage Lap age Speed	<u>GH SPE</u> Time – 1 d – 60.1 COURSE Time - 4: d – 32.7	ED :27.70 13 mph 46.30 70 mph 15		

#### MAKE: DODGE MODEL: 2018 CHARGER V8 3.08 AWD SALES CODE: 29A, 590

Vehicle Type speed automation	: Full size f	our door sec	dan, all-wheel drive, 5.7 rerdrive and a 3.08:1 axle	liter V-8 engine, 5 ratio.		EPA TESTE			STED		
1						CITY	HWY	CITY	HWY		
						15	23				
IN	<b>TERIOR</b>		<u>DIMENSI</u>	<u>ONS</u>			CHAS	<u>SSIS</u>			
<u>SEATS</u>			Fuel Capacity:	18.5 Gallons	<u>S'</u>	TEERING					
Front: Heavy	y duty clot	th bucket	GVWR:	5,500 lbs.	T	ype: Electr	ic power	· assist ra	ick and		
Rear: Vinyl	bench		Wheelbase:	120.2 in		unon web to over	h.		20 7 ft		
MEASUREN	MENTS		Ground Clearance:	5.1 in	C		U.		<i>30.7</i> II.		
	Front	Rear	Overall Length:	198.4 in	<u>)</u> D	<u>USPENSIC</u>					
Headroom:	38.6 in	36.6 in	Overall Height:	58.4 in	r uj	pper "A" ar	m, coil sp	oring over	sla with		
Legroom:	41.8 in	40.1 in			ci st	apilizer bar	o-tube sh . Lateral	and diago	nal lower		
Shoulder:	59.5 in	57.9 in			lı pi	iece lower c	al ball joi	int knuck ms.	les. One		
Hip Room:	56.2 in	56.1 in			R	ear: Five-l	ink indep	endent w	ith coil		
Interior Volu	ume:				M M	IAT rear sh	ocks, stat	bilizer bai	and isolat-		
Front:	55.6 c	cu-ft.									
Rear:	49.2 c	u-ft.					<u>IIKES</u>	1022 -			
Comb:	104.7	cu-ft.			T T	ire make:	ype:		odyear		
Trunk:	16.5 c	u-ft.			Tire size: 245/55R18 Speed rating: V-rated				6/55R18		
Ē	NGINE		DRIVETR	AIN	B	DAKES	•		v -lateu		
Naturall	y aspirated	l V-8				<b>Type:</b> Power with dual niston front cali-					
Fuel delivery	system:	SPFI	<b>Transmission:</b> Mode automatic with overdr	l A580, 5-speed ive and lockup	pers, single piston rear calipers, anti-lock.						
Cubic Inches Displacemen	s: it: 5	345 cid .7 Liters	torque converter.	-	F	<b>ront:</b> 388 s	q. in. swo	ept area v	vented disc		
Compression Horse Power	n Ratio:	10.5:1	Axle Ratio:	3.08:1	R	ear: 300 sq	l. in. swe	pt area v	vented disc		
Torque (SAI	3/0 @ 5 E net):	250 rpm	*The standard tire s	ize for this ve-							
Alternator:	5 ft. lb. @	4200 rpm 220 amp	tested with tire optio	nis venicie was n 245/55R18.							
Battery:	80	00 CCA									
ACCELERA	TION		TEST RES	ULTS		32	LAP HIC	GH SPEE			
0-30mph-		2.57 sec	<u>BRAKI</u>	<u>NG</u>		Avera	ge Lap T	ime– 1:	23.20		
0-60mph- 0-100-mph-	1	6.60 sec 6.60 sec	141.2 ft. @ 0	60mph		Avera	age Speed	d = 63.3	l mph		
30-60mph- 60-100mph-	10 0 0	4.50 sec 9.28 sec					<u>CITY C</u>	<u>UUKSE</u>	24.25		
1/4 mile– 15.	10 sec $(a)$ 9	95.10 mph				Avera Avera	ige Lap T ge Speed	1me - 4: - 35.4	24.25 0 mph		

#### MAKE: FORD MODEL: 2018 F150 Police Responder

#### **SALES CODE: W1P**

hicle Type: Front engine, 3.5L EcoBoost Engine with 10 speed sele		) speed select	FPΔ		TEST	TESTED	
shift automatic transmission, front-whe	eel drive, 5 passenger, 4	door sedan,					
Police packaged vehicle					CITY	HWY	
INTEDIOD	DIMENCI	ONG	IBD	IBD	COLO		
INTERIOR	DIMENSI	<u>ONS</u>		<u>CH</u> A	<u>ASSIS</u>		
<u>SEATS</u>	Fuel Capacity:	26.0 Gallons	<u>STEERI</u>	NG			
<b>Front:</b> Heavy duty cloth bucket; 8-way adjustable: Power optional	GVWR:	7,000 lbs.	<b>Type:</b> El and pinio	ectric po n	ower assis	t rack	
passenger seat; 4-way adjustable headrest.	Wheelbase:	145.0 in	Curb-to-	-curb:	4	7.1 ft.	
<b>Rear:</b> Vinvl bench standard: cloth	Ground Clearance:	9.3 in	SUSPEN	ISION			
optional.	Overall Length:	231.9 in	Front. In	ndonon de	ont doubl	2	
MEASUREMENTS	Overall Height:	77.2 in	wishbone stamped	with coil	ll-over sho	ock and	
<b>Front</b> Rear Headroom: 40.8 in 40.4 in			<b>Rear:</b> Leaf spring/solid axle			le	
<b>Legroom:</b> 43.9 in 43.6 in <b>Shoulder:</b> 66.7 in 65.9 in <b>Uin Boom:</b> 62.5 in 64.7 in			WHEEL	+ TIRE	S		
HIP KOOM: 02.3 III 04.7III			Wheel si	Wheel size/type: 18" x 7.5", Alum, 6-			
			spoke	10 X	7.5 , Alun	. 1	
<b>Front:</b> 79.9 cu-ft. <b>Rear:</b> 51.9 cu-ft.			Tire mai	ke: del:	Goo Wr	angler	
<b>Comb:</b> 131.8 cu-ft. <b>Trunk:</b> 52.8 cu-ft			Tire size Sneed ra	: ting:	275/65	5R18C S	
<b>11 unk.</b> 52.0 cu 10.			DDAVE	6 6		5	
ENGINE	DRIVETR	AIN	DRAKES				
3.5L– V6 GTDI EcoBoost	Transmission: 10– sp automatic transmissio	beed selectshift n configured	<b>Type:</b> Power—dual piston calipers front, single piston calipers rear, 4 circuit and ABS.				
Fuel delivery system:SDIDisplacement:3.5 Liters213 cid	with progressive range lectable drive models.	e select and se-	Front Di	sc:	13.7 in,	vented	
Compression Ratio: 10.5:1 Horse Power: 357 bhp @ 5000 rpm	Axle Ratio: (3.55:1 w wheel drive)	ith Four-	Rear Dis	sc:	13.2 in, y	vented	
Torque (SAE net):							
Alternator: 220 amp Battery: 800 CCA							
	<u>1E51 KE5</u>						
ACCELERATION	<u>BRAKI</u>	NG	<u>32</u>	LAP HI	IGH SPE	<u>ED</u>	
0-30mph- 2.65 sec 0-60mph- 6.50 sec	155.7ft. @ 6	0 mph	Aver Aver	age Lap T rage Spee	Time— 1 ed – 57.76	:31.30 mph	
17.50  sec 30-60 mph- 4.40  sec 60-100 mph- 11.46  sec				<u>CITY (</u>	COURSE		
1/4 mile – 15.00 sec @ 95.50 mph			Ave Ave	erage Lap rage Spec	Time – 4 ed – 32.	4:48.00 50 mph	

#### MAKE: CHEV MODEL: 2018 TAHOE 2WD (9C1)

#### SALES CODE: CC15706

Vehicle Type	: Full size fo	our door sport u	5.3 liter V-8		E	PA	TESTED		
engine, o speed				and futio.		CITY	HWY	CITY	HWY
						16	23		
Ī	NTERIOR	<u>R</u>	DIMENSIC	DNS			CHA	SSIS	
<u>SEATS</u>			Fuel Capacity:	26 Gallons 98.0 Liters	<u>ST</u>	EERIN	<u>G</u>		
Front: Cloth power, manua	bucket, Dı al lumber ar	river6-way nd recline.	GVWR:	6,800 lbs.	<b>Ty</b> and	pe: Elec	etric pow	er assist	ed rack
Rear: Vinyl s bench.	split folding	g 60/40	Wheelbase:	116 in 8 5 in	Cu	rb-to-cu	urb:		39 ft.
MEASUREN	<u>MENTS</u>		Overall Length	0.3 III 204 in	<u>SU:</u>	<u>SPENS</u>	<u>ION</u>		
	Front	Rear	Overall Height:	72.4 in	Fro sho	ont: Ind ock with	ependen stabilize	t single o r bar.	coil over
Headroom:	42.8 in	38.7 in	8		Rea	Rear: Multi-link with coil springs			
Legroom:	45.3 in	39.0 in			WI	HEEL +	- TIRES		
Shoulder:	64.8 in	65.1 in			Wh Tir	neel size e make	/type:	17"x8' Goo	' steel odyear
Hip Room: Interior Volu	60.8 in 1 <b>me:</b>	60.3 in			Tir Tir Spe	e mode e size: eed rati	ng:	P265/	60R17 108V
Front:	63.8 c	u-ft.			<u>BRAKES</u>				
Rear:	56.9 c	u-ft.				pe: Hea	avy duty	4 wheel	anti-lock
Comb:	120.7	cu-ft.			Fro	nt. œrca		nch vent	ed disc
MAX Car	<b>go:</b> 112.1	cu-ft.			Ree	ar.	13.0 II	nch vent	ed disc
	ENGINE		DRIVETRAIN		INC.	41.	15.5 11		
Natura	ally aspirate	ed V8							
Fuel delivery Displacemen	system: t:	SPFI 5.3 Liters	<b>Transmission:</b> Model 6L 80E, 6 speed automatic with lockup torque converter.						
Compression Horse Power	<b>Ratio:</b> : 355 bhp	11:1 @ 5600	Axle Ratio: 3.08:1 (Red Drive with H/D Lockin	ear Wheel g Differential)					
Torque (SAF	E <b>net):</b> 382 ft-lb (	$\widehat{a}$ 4100 mm							
Alternator: Battery:	720 CC 730 CC	170 amp CA Primary CA Auxiliary							
ACCELERA	TION		TEST RESU	LTS C	1	<u>32</u>	LAP HI	GH SPE	ED
0-30mph-		2.96 sec	вкакім 1575 ft @ 6	U Omph		Avera	ige Lap T	$\lim_{d \to 50} \frac{1}{74}$	:28.20
0-100-mph- 30-60mph-	2	1.30 sec	1 <i>5 i</i> . <i>5</i> 11. <i>W</i> 0	ombu		AVU		OURSE	, mhu
60-100mph- 1/4 mile- 10	$6.50 \sec a$	2.72 sec 88.00 mph				Aver Avera	age Lap '	Гіте – 4 1 – 32.2	:50.65 0 mph
									•

#### MAKE: DODGE **MODEL: 2018 CHARGER V8 2.62** SALES CODE: 29A, 5ZV Vehicle Type: Full size four door sedan, rear wheel drive, 5.7 liter V-8 engine, 5 EPA TESTED speed automatic transmission with overdrive and a 2.62:1 axle ratio. CITY HWY HWY CITY 16 25 **INTERIOR** DIMENSIONS CHASSIS SEATS **Fuel Capacity:** 18.5 Gallons **STEER**ING Front: Heavy duty cloth bucket Rear: Vinyl bench GVWR: 5.450 lbs. **Type:** Electric power assist rack Wheelbase: 120.2 in and pinion **MEASUREMENTS** 37.7 ft. Curb-to-curb: **Ground Clearance:** 5.1 in Front Rear 198.4 in **Overall Length: SUSPENSION** Headroom: 38.6 in 36.6 in **Overall Height:** 58.4 in **Front:** Independent SLA with high upper "A" arm, coil spring over gas-charged mono-tube shock absorbers and stabilizer bar. Lateral and diagonal lower links with dual 40.1 in Legroom: 41.8 in Shoulder: 59.5 in 57.9 in Hip Room: 56.2 in 56.1 in ball joint knuckles. **Rear:** Five-link independent with **Interior Volume:** coil springs, gas-charged load-leveling NIVOMAT rear shocks, stabilizer bar and isolated suspen-Front: 55.6 cu-ft. sion cradle. 49.2 cu-ft. Rear: 104.7 cu-ft. WHEEL + TIRES Comb: 16.5 cu-ft. Trunk: Wheel size/type: 18" x 7.5" steel **ENGINE DRIVETRAIN** Tire make: Goodyear Tire model: Eagle **RS**-A Naturally aspirated V-8 245/55R18 Tire size: Transmission: Model A580, 5-speed **Speed rating:** V-rated **Fuel delivery system:** SPFI automatic with overdrive and lockup 345 cid **Cubic Inches:** torque converter. BRAKES **Displacement:** 5.7 Liters **Axle Ratio:** 2.62:1 **Compression Ratio:** 10.5:1 **Type:** Power dual piston front calipers, single piston rear calipers. **Horse Power:** \*The standard tire size for this veanti-lock hicle is 225/60R18. This vehicle was 370 bhp @ 5250 rpm tested with tire option 245/55R18 Front: 388 sq. in. swept area **Torque (SAE net):** vented disc Rear: 300 sq. in. swept area vent-395 ft-lb @ 4200 rpm ed disc Alternator: 220 amp 800 CCA **Battery: TEST RESULTS** ACCELERATION **<u>32 LAP HIGH SPEED</u>** BRAKING 0-30mph-3.41 sec Average Lap Time – 1:24.90 137.6 ft. @ 60 mph 0-60mph-7.60 sec Average Speed – 62.05 mph 0-100-mph-18.00 sec 30-60mph-4.20 sec **CITY COURSE** 60-100mph-10.08 sec 1/4 mile<sup>-1</sup> 15.90 sec (a) 93.50 mph 4:31.95 Average Lap Time – 34.40 mph Average Speed –

#### MAKE: FORD MODEL:2018 P.I. Responder Hybrid Sedan

SALES CODE: P0A

Vehicle Type: Full Size four door seda		EPA	TES	TED		
Atkinson cycle engine & electric A/C	motor managed by por	wer-split hybrid	CIT	Y HWY	CITY	HWY
technology), automatic electronically	controlled continuous	y variable trans-	40	38		
INTEDIOD			COIC			
INTERIOR	<u>DIMENS</u>	IONS		<u>CH</u> A	15515	
	Fuel Capacity:	14.0 Gallons	OTEEI			
<u>SEATS</u>		4080 lbs	SIEEI	ang		
<b>Front:</b> Heavy duty cloth bucket, 6	<b>GV WK.</b>	4980 108.	<b>T</b>	<b>[</b> 1	••••	
justable headrest <b>Bear:</b> Vinyl bench Optional cloth	Wheelbase:	112.2 in	pinion	Electric pov	ver assist	rack and
bench	Ground Clearance:	6.3 in	Curb-t	o-curb:	3	7.6 ft.
<b>MEASUREMENTS</b>	<b>Overall Length:</b>	191.8 in	SUSPE	NSION		
Front Rear	<b>Overall Height:</b>	58.5 in	<u>50511</u>			
<b>Headroom:</b> 39.2 in 37.8 in <b>Legroom:</b> 44.3 in 38.3 in			Front: struts	Independer	nt MacPh	ier son
<b>Shoulder:</b> 57.8in 56.9 in <b>Hip Room:</b> 55.0 in 54.4 in			Rear:	Multi-link, f	ully indep	pendent
Front: 55.2 cu-ft.			WHEE	<u>CL + TIRES</u>		
<b>Comb:</b> 102.8 cu-ft. <b>Trunk:</b> 12.0 cu ft			Wheel	size/tyne•	17" x 7	5" steel
110nk. 12.0 cu-n.			Tire m	ake:	Go	odyear
			Tire m	odel: ze:	Eagle 235/	55R17
			Speed	rating:	,	W
ENGINE	DRIVET	RAIN	<b>BRAK</b>	ES		
2.0 Intake Variable Cam Timing (iVCT). Atkinson-Cycle 1-4 Engine and 88 kW Electric Motor	<b>Transmission:</b> Automatic electronically controlled continuously variable transmission (eCVT).		<b>Type:</b> dual fro tive bra	4 wheel disk ont piston ca king.	brakes lipers and	with ABS, l regenera-
Fuel delivery system: SMPEFI			<b>T</b> (	10.4	•	1 1.
Cubic Inches: 122	Axle Ratio: 2.57:1 w	ith front-wheel	Front: Rear:	12.4 sq. 12.4 s	in. vente a. in. sol	d disc
<b>Displacement:</b> 2.0 Liters	uiive				1	
<b>Compression Ratio:</b> 12.3:1						
Horse Power: 188 HP gas, electric combined(141 bhp @ 6000 rrm + 88 kW electric motor)						
Torque (SAE net).						
129 ft-1h @ 4000 rnm						
Alternator: 165 amp						
Batterv: 8590 CCA						
ACCELEDATION	TEST RES	SULTS		22 T 4 D TT	OIL OPE	ED
ACCELERATION	BRAKI	NG		<u> 52 LAP HI</u>	<u>GH SPE</u>	ED
0-30mph- 3.57 sec 0-60mph- 7.60 sec 0.100 mmh 18.00 sec	137.6 ft. @	60 mph	A	verage Lap Average Spe	Time – 1 ed – 62.0	1:24.90 5 mph
$\begin{array}{cccc} 100 - 100 - 100 - 100 & \text{sec} \\ 30 - 60 - 100 & \text{mph}- & 10.08 & \text{sec} \\ 60 - 100 & \text{mph}- & 10.08 & \text{sec} \end{array}$				<u>CITY C</u>	COURSE	
1/4 mile- 15.90 sec @ 93.50 mph			A A	verage Lap verage Speed	Time – 4: d – 34.4	:31.95 0 mph

#### MAKE:FORD MODEL: 2018 PI SEDAN AWD 3.5L Eco

SALES CODE: P2M, 99T

<b>Vehicle Type:</b> Full size four door sedan, twin turbo, all-wheel drive, 3.5 liter V-6						PA	TEST	ED	
engine, o speed	automatic tr	ansmission wi	in a 3.10:1 axie railo.		СІТҮ	HWY	CITY	HWY	
					15	22			
I	NTERIOR		DIMENSI	DIMENSIONS CHASS			SSIS		
<u>SEATS</u>			Fuel Capacity:	19.0 Gallons	<u>STEERI</u>	NG			
Front: Heavy	duty cloth	bucket;	GVWR:	5,700 lbs.	Type: El	Type: Electric power assist rack			
headrest.	on chatan	aujustable	Wheelbase:	112.9 in	Curb to	)]]	2	016	
optional.	Selicit Stand		Ground Clearance:	5.3 in		-curb:	3	0.4 11.	
MEASUREM	<u>IENTS</u>		Overall Length:	202.9 in	<u>SUSFER</u>	nden en d	ont MaaDl	hangan	
Headroom:	<b>Front</b> 39.0 in	<b>Rear</b> 36.7 in	Overall Height:	61.3 in	coil over	strut.		nerson	
Legroom:	41.9 in	41.6 in			Rear: M suspensio	ulti-link on.	fully indep	pendent	
Shoulder:	57.9 in	60.9 in			WHEEI	- + TIRE	<u>S</u>		
Hip Room:	56.3 in	56.8 in			Wheel si	ze/type:	9" staal 5	analta	
Interior Volu	me:				Tire ma	ke:	o, steel, 2 Goo Eaglo	dyear	
Front:	54.8 c	eu-ft.			Tire size	ting:	245/5	57818 103V	
Rear:	48.1 c	u-ft.			BRAKE	S.		105 (	
Comb:	103.0	cu-ft.			Type: Po	<u>≃</u> ower—dı	ual piston o	caliners	
Trunk:	16.6 c	u-ft.			front, sin circuit ar	gle pistor id ABS.	n calipers i	rear, 4	
	ENGINE		DRIVETR	RAIN	Front Di	isc:	13.9 in,	vented	
Twin t	urbo charge	ed V6	<b>Transmission:</b> Mode	el 6F55; 6 speed	Rear Dis	sc:	13.6 in, v	vented	
Fuel delivery	system:	SDI 35 Liters	torque converter.	viui ioekup					
Compression Horse Power Torque (SAE	Ratio: : 288 bhp ( . net):	214 cid 10.8:1 a) 6500 rpm	<b>Axle Ratio:</b> 3.16:1 w drive.	vith all-wheel					
Alternator: Battery:	245 п-16 (а	220 amp 750 CCA							
			<u> </u>	ULTS					
ACCELERA	TION		BRAKI	NG	<u>32</u>	LAP HI	<u>GH SPEE</u>	<u>D</u>	
0-30mph- 0-60mph- 0-100-mph- 30-60mph- 3.50 sec			148.7 ft. @ 60 mph		Average Lap Time- 1:24.40 Average Speed - 64.02 mph			24.40 mph	
60-100mph- 1/4 mile - 14	7 30 sec @ 9	.85 sec 99.80 mph			Ave Ave	erage Lap brage Spe	Time – 4: ed – 36.	15.85 60 mph	

## **32 LAP HIGH-SPEED VEHICLE DYNAMICS EVALUATION RESULTS**

This test is conducted on a high-speed driving course. It is designed to evaluate, identify and eliminate the obviously unacceptable vehicles (i.e., those vehicles that are demonstrably unstable or otherwise exhibit unsafe characteristics).

There are four Emergency Vehicle Operations Center (EVOC) training instructor drivers. They are equally from the LASD and LAPD and share the driving and evaluation of the vehicles. All four drivers will evaluate each vehicle. For this test, each driver completes eight laps around our 1.46 mile test track at the AutoClub Speedway in Fontana, for a total of 32 timed laps. Lap timing is via a GPS based RaceLogic "DriftBox02" datalogger mounted in the vehicle. Lap times are immediately recorded via RF telemetry signal produced by the data logger. Secondary lap timing is recorded utilizing a "Video VBOX Datalogger" mounted in the vehicle. All timing is backed up on SD cards in each unit. The fastest and the slowest lap times are eliminated, the remaining six lap times are averaged. The average time and speed are recorded next to the driver's name.

At the conclusion of the preliminary handling portion of the test, each driver completes a "Driver's Subjective Evaluation" form. If the test vehicle is judged unacceptable in this preliminary review, it is rejected and not subject to further testing and evaluation.

### FORD P.I. SEDAN FWD 3.5 L

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
R. Juarez - LASD	11:30 am	90° F / 101° F
A. Penrith - LAPD	11:50 am	89° F / 106° F
R. Joe - LASD	12:10 am	91° F / 108° F
B Douglas- LAPD	12:21 am	91° F / 110° F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
R. Juarez - LASD	84.99	83.84	84.84	84.46	84.69	84.25	85.20	85.25	84.74	62.1
A. Penrith - LAPD	85.98	85.36	85.44	85.27	85.28	85.50	85.65	84.98	85.42	61.7
R. Joe - LASD	88.91	86.67	85.88	85.97	85.90	86.49	86.14	99.42	86.68	60.8
B. Douglas - LAPD	85.82	84.89	84.73	84.92	84.79	85.46	84.42	85.20	85.00	62.0

## 32 LAP HIGH-SPEED COURSE VEHICLE DYNAMICS EVALUATION FORD P.I. SEDAN FWD 3.5 L

\*\* 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering	8.8
Body Lean	8.7
Bounce	9.2
Brake Fade	7.7
Brake Pull	8.8
<b>ABS</b> Operation	9.3

#### **DRIVER COMMENTS**

**Brakes** – The brakes worked well. Pedal feel started good and strong but felt about 15 % drop off towards the end of the laps. There was no fade or pull or ABS activation.

**Cornering/Handling** – Mild understeer, responded well to corrective inputs, very flat, minimal body roll, smooth weight transitions all around, very predictable and good balance.

**Transmission (Shift Points)** – The transmission worked well keeping the engine in its power-band at all times. No issues with transmission or shift points.

**Engine** – Good power-plant. Consistent; no hesitations. Power was smooth and pulls good to redline. Always in the power range. Throttle way easy to modulate.

Other- Well balanced car between engine and chassis. Responded well to corrective inputs.

### **DODGE CHARGER V6 2.62**

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
R. Juarez - LASD	12.10 pm	91° F/ 108° F
A. Penrith - LAPD	12:35 pm	91° F/ 110°F
R. Joe - LASD	12:57 pm	98° F/ 112° F
B. Douglas - LAPD	01:17 pm	101° F/ 113°F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
R. Juarez - LASD	85.45	85.05	84.35	84.89	84.68	84.96	84.38	84.82	84.80	62.0
A. Penrith - LAPD	85.12	85.21	84.64	85.01	85.56	84.82	84.94	85.29	85.07	61.9
R. Joe - LASD	87.75	86.17	86.07	85.93	86.06	85.90	85.95	86.05	86.04	61.3
B. Douglas- LAPD	86.24	85.34	85.28	85.80	85.14	85.67	85.20	85.47	85.46	61.6

## 32 LAP HIGH-SPEED COURSE VEHICLE DYNAMICS EVALUATION DODGE CHARGER V6 2.62

\*\* 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering	8.3
Body Lean	8.5
Bounce	7.0
Brake Fade	8.0
Brake Pull	8.5
<b>ABS</b> Operation	8.2

#### **DRIVER COMMENTS**

**Brakes** –Brake felt green, no burnishing on the first 3-4 laps but felt better and more assuring as the test progressed. Strong steering input (i.e. trail braking) made decel less predictable. No significant fade. Pedal feel and travel stayed fairly consistent.

**Cornering/Handling**—Tends to have slight oversteer on turn-in and under braking. A little bouncy over curbs.

**Transmission (Shift Points)** – Consistent and predictable. Great on straightaways. Few more downshifts while exiting turns would be great.

**Engine** – The engine made good power on all laps but sometimes felt a slight delay between pedal input and motor response.

Other – ECS felt a bit intrusive, sometimes at the extreme ends of traction, otherwise, it was fine.

## FORD P.I. SEDAN 3.7L

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
R. Juarez - LASD	1:00 pm	98° F/ 112° F
A. Penrith - LAPD	1:17 pm	101° F/ 113° F
R. Joe - LASD	1:37 pm	105° F/ 115° F
B Douglas- LAPD	1:57 pm	105° F/ 114° F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
R. Juarez - LASD	84.65	83.42	84.27	83.74	84.34	84.62	84.43	84.60	84.33	62.4
A. Penrith - LAPD	84.46	85.24	84.97	86.13	86.00	84.99	84.90	84.81	84.15	61.8
R. Joe - LASD	86.97	85.55	85.79	85.52	85.51	86.14	86.11	85.94	85.84	61.4
B. Douglas- LAPD	86.34	84.73	85.45	84.91	85.25	85.16	85.29	84.52	85.13	61.9

## 32 LAP HIGH-SPEED COURSE VEHICLE DYNAMICS EVALUATION FORD P.I. SEDAN 3.7L

\*\* 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering	9.0
Body Lean	9.0
Bounce	9.3
Brake Fade	8.7
Brake Pull	9.0
<b>ABS</b> Operation	8.3

#### **DRIVER COMMENTS**

**Brakes** –Overall brake rating was great though pedal travel increased and felt soft. Harder to modulate and stopping distance increased towards the end of 32 laps.

**Cornering/Handling** – Well balanced chassis, predictable, consistent and smooth transition. Easy to control with no surprises. Mild understeer on entry and really good at putting power down on exit. Handled curbs very well. Slight rotation on turn in and on trailing. Excellent throttle.

Transmission (Shift Points) - Transmission was always in the correct gear. Shift point is spot on.

Engine – Good power plant. Smooth power delivery and throttle response. Pulls very well to redline.

Other – Easy car to drive. Engine compliments the chassis.

## FORD PI UTILITY 3.7L AWD

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
R. Juarez - LASD	1:37 pm	105° F/ 115° F
A. Penrith - LAPD	1:57 pm	105° F/ 114° F
R. Joe - LASD	2:19 pm	100° F/ 115° F
B. Douglas - LAPD	2:39 pm	107° F/ 114° F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
R. Juarez - LASD	88.39	87.05	87.48	87.63	87.73	87.91	87.82	88.27	87.81	59.9
A. Penrith - LAPD	89.52	88.38	88.47	88.75	88.15	87.81	88.45	87.94	88.36	59.7
R. Joe - LASD	89.59	88.72	89.49	89.61	88.49	88.90	89.13	89.02	89.14	59.1
B. Douglas- LAPD	89.59	88.33	87.99	88.98	88.66	89.44	88.10	88.93	88.74	59.4

#### FORD PI UTILITY 3.7L AWD

\*\* 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering	8.3
Body Lean	8.3
Bounce	9.0
Brake Fade	8.7
Brake Pull	9.0
<b>ABS</b> Operation	9.3

#### **DRIVER COMMENTS**

**Brakes** – Brakes worked well on all laps. But a longer brake pedal detected as the test progressed with a slight loss of rate of deceleration.

**Cornering/Handling** –Chassis works well. The higher center of gravity is apparent but still feels more like a sedan. Holds driving line tighter with less understeer. Responds well to inputs and stable.

**Transmission (Shift Points)** – Consistent and excellent gearing. Correct gear at all times. Good throttle control through turns. Slight throttle lift is noticeable on pursuit mode.

Engine – Good power plant, matched well to vehicle.

Other - ESC/TRAC very well dialed in, not transparent, but smooth and progressive.

## FORD PI SEDAN FWD 2.0L ECOBOOST

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
R. Juarez - LASD	2:19 pm	100° F/ 113°F
A. Penrith - LAPD	2:40 pm	<b>107° F/ 114°</b> F
R. Joe - LASD	3:02 pm	106° F/ 112°F
Douglas- LAPD	3:20 pm	99° F/ 111°F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
R. Juarez - LASD	87.73	86.68	87.37	89.59	87.79	88.90	90.42	89.99	90.42	60.7
A. Penrith - LAPD	86.74	88.65	89.29	90.54	90.67	90.42	90.22	90.31	90.67	60.7
R. Joe - LASD	89.33	87.44	91.27	90.06	92.63	91.37	91.77	91.50	92.63	60.3
B. Douglas- LAPD	88.03	88.35	91.02	90.04	91.67	90.63	92.19	89.78	92.19	59.9

#### FORD PI SEDAN FWD 2.0L ECOBOOST

\*\* 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering	9.0
Body Lean	9.0
Bounce	9.2
Brake Fade	9.3
Brake Pull	9.3
<b>ABS</b> Operation	9.3

#### **DRIVER COMMENTS**

Brakes - Great feel, very responsive, strong all the way through. No sign of fade, pull, or ABS activation.

**Cornering/Handling** – Predictable on turns; excellent controlled chassis, no understeer. The vehicle is capable of much more power.

**Transmission (Shift Points)** – The transmission started well until switched into protection mode keeping the engine within 3200 rpm.

Engine – Worked well until it went into "preservation" mode. Heat caused severe power reduction.

**Other**— Great brake feel in spite of slow overall speeds. Power reduction was apparent due to heat in the engine compartment.

## FORD PI UTILITY AWD 3.5L ECOBOOST

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
R. Juarez - LASD	9:00 am	63° F/ 71°F
A. Penrith - LAPD	9:20 am	67° F/ 73°F
R. Joe - LASD	9:38 am	65° F/ 72°F
B. Douglas- LAPD	9:59 am	67° F/ 75°F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
R. Juarez - LASD	84.42	83.39	83.94	83.68	84.12	84.13	84.33	84.11	84.05	62.07
A. Penrith - LAPD	84.65	84.51	84.26	84.03	84.11	83.99	84.57	84.66	84.36	62.6
R. Joe - LASD	86.34	85.23	86.18	85.65	84.86	84.95	84.44	84.40	85.39	61.8
B. Douglas - LAPD	86.15	85.26	85.70	84.79	84.98	85.25	85.68	86.33	85.50	61.7

#### FORD PI UTILITY AWD 3.5L ECOBOOST

\*\* 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering	8.8
Body Lean	8.8
Bounce	9.3
Brake Fade	7.2
Brake Pull	8.7
<b>ABS</b> Operation	9.3

#### **DRIVER COMMENTS**

**Brakes** – Very hard pedal and long travel as the test progressed. Big adjustment on braking zones to compensate for diminished rate of deceleration. Decel was approximately 70% max but remained consistent. No pull or ABS activation detected.

**Cornering/Handling** – Excellent chassis, very well dampened, predictable and stable. Slight understeer on acceleration out of turns that responded quickly to trailing throttle corrections.

Transmission (Shift Points) – Good, consistent, worked well. Stayed in correct gear throughout the test.

Engine – Good power plant; builds speed effortlessly. Pulls good to redline.

**Other**– Well tuned ECS system. Performance trans mode (pursuit mode) made for a very touchy throttle which was controllable but requires the driver to stay alert. A small incremental vibration began about lap 4, upon return to the pits, left/front tire was heavily corded.

## **CHEVEROLET TAHOE PPV 4WD**

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
R. Juarez - LASD	9:38 am	65° F/ 72° F
A. Penrith - LAPD	9:59 am	67° F/ 75° F
R. Joe - LASD	10:19 am	72° F/ 83° F
B. Douglas - LAPD	10:38 am	70° F/ 87° F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
R. Juarez - LASD	88.23	86.40	85.93	86.19	86.54	86.82	86.96	86.76	86.61	60.8
A. Penrith - LAPD	88.55	87.12	87.18	87.54	87.17	87.88	87.75	88.30	87.64	60.2
R. Joe - LASD	90.86	88.82	88.53	88.57	88.94	88.77	88.44	88.66	88.72	59.5
B. Douglas - LAPD	8945	88.05	87.57	88.07	87.77	88.09	87.67	87.83	87.91	60.0

#### **CHEVEROLET TAHOE PPV 4WD**

\*\* 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering	7.7
Body Lean	7.5
Bounce	6.8
Brake Fade	8.3
Brake Pull	8.0
<b>ABS</b> Operation	8.3

#### **DRIVER COMMENTS**

**Brakes** – Brakes worked well with good rate of deceleration. Noticed a brake pull to the right under sudden and hard brake application. Activated brake assist several times slowing the vehicle down, but reduces pedal feel and modulation.

**Cornering/Handling** – Taut chassis that tends to rebound quite stiffly when bummed. Detected slight oscillation under hard demand acceleration and exiting tight turns. Steering lacks precise feel under power on exits, which is not always easy to discover exactly where optimal grip is located.

Transmission (Shift Points) – Great power delivery; smooth and consistent. Always in correct gear.

Engine – Good power throughout. Pulls well to redline, No issues

**Other** – ESC/TRAC/ABS well calibrated. Vehicle rotated better when in partial ECS mode. Brake assist program makes smooth trail braking more difficult than it needs to be.
### **DODGE CHARGER V8 3.08 AWD**

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
R. Juarez - LASD	10:19 am	72° F/ 83° F
A. Penrith - LAPD	10:38 am	71° F/ 87°F
R. Joe - LASD	10:59 am	72° F/ 90°F
B. Douglas - LAPD	11:20 am	74° F/ 93° F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
R. Juarez - LASD	82.72	81.93	82.18	82.60	82.04	82.02	82.48	82.00	82.22	63.9
A. Penrith - LAPD	83.45	83.00	83.61	83.50	83.46	83.69	83.53	83.41	83.49	63.2
R. Joe - LASD	84.40	84.21	84.16	84.27	83.86	83.46	84.13	84.02	84.11	62.6
B. Douglas - LAPD	83.78	82.46	82.62	82.86	82.73	83.07	82.97	83.04	82.88	63.6

### **DODGE CHARGER V8 3.08 AWD**

\*\* 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering	8.7
Body Lean	9.2
Bounce	9.0
Brake Fade	9.3
Brake Pull	9.2
<b>ABS</b> Operation	9.3

#### **DRIVER COMMENTS**

**Brakes** –The brakes worked well and remained consistent. Minor brake fade experienced during last laps. Great rate of deceleration throughout. Lots of confidence though chassis shudder under very hard brake application. Good pedal feel throughout the laps.

**Cornering/Handling** – Chassis is very taut to the point of being a little bouncy off of a berm. Front very well controlled. Steering feel excellent, always aware of front tire efficiency-grip level. Slightly too much rear body roll.

**Transmission (Shift Points)** – The transmission kept the engine in its power-band at all times. Consistent, smooth shifts. Good balance front-to-rear power distribution.

Engine - Good powerplant. Pulls very strong to redline.

Other - ESC/TRAC/ABS very well programmed, gives driver enough room before taken over.

### FORD F150 4WD 3.5L ECOBOOST

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
R. Juarez - LASD	10:59 am	72° F/ 90° F
A. Penrith - LAPD	11:19 am	74° F/ 93°F
R. Joe - LASD	11:39 am	77° F/ 97° F
B. Douglas - LAPD	12:00 noon	79° F/ 101° F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
R. Juarez - LASD	89.48	89.20	89.05	89.05	89.72	90.37	90.22	90.59	89.67	58.8
A. Penrith - LAPD	92.09	91.81	90.82	91.04	90.75	91.89	91.30	92.49	91.49	57.7
R. Joe - LASD	93.78	92.52	91.79	91.48	91.39	91.50	91.88	91.01	91.76	57.5
B. Douglas - LAPD	93.30	93.85	92.62	91.76	91.30	92.33	92.09	91.72	92.30	57.2

### FORD F150 4WD 3.5L ECOBOOST

\*\* 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering	8.0
Body Lean	7.7
Bounce	8.2
Brake Fade	8.3
Brake Pull	9.3
<b>ABS</b> Operation	9.3

#### **DRIVER COMMENTS**

**Brakes** – The truck performed well throughout the laps. Pedal travel is a tad on the long side but expected for a large vehicle of this type. Lose about 15-20% rate of decel on the last few laps. No brake pull or ABS activation detected.

**Cornering/Handling** – Planted and stable. Performed well for a full size truck of this type. Lots of ESC activation. ESC/TRAC is very aggressive but not bad for the size of vehicle. Turn-in response is slow as are mid corner adjustments. Steering feel is a little numb. No power delivery when at or near straight-away.

Transmission (Shift Points) – Busy shifting; shifting between 4200 and 5000 rpm in a straight line.

Engine – The engine pulls well to redline, only hampered by ESC activation.

**Other** – ESC may be over-cautious. Steering wheel position is key to feting power. This may be a good thing overall but impacted lap times as did the 100 mph governed speed.

### **CHEVROLET TAHOE PPV 2WD**

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
R. Juarez - LASD	11:40 am	77° F/ 97°F
A. Penrith - LAPD	12:00 noon	79° F/ 101°F
R. Joe - LASD	12:22 pm	80° F/ 100° F
B. Douglas- LAPD	12:45 pm	88° F/ 104° F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
R. Juarez - LASD	87.61	85.85	86.58	86.65	86.60	86.99	86.93	86.75	86.75	60.6
A. Penrith - LAPD	88.93	87.37	86.85	87.34	87.84	87.38	87.36	88.90	87.70	60.1
R. Joe - LASD	90.6	90.18	90.34	89.44	89.81	89.49	89.66	89.90	89.85	58.7
B. Douglas- LAPD	90.37	87.54	87.96	88.11	87.73	88.52	88.63	89.05	88.33	59.6

### **CHEVROLET TAHOE PPV 2WD**

\*\* 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering	8.3
Body Lean	8.3
Bounce	7.5
Brake Fade	8.5
Brake Pull	8.8
<b>ABS Operation</b>	9.3

#### **DRIVER COMMENTS**

**Brakes** – Good, very consistent and strong throughout the laps. Brake assist works well at bringing the speed down but impacts release modulation; little aggressive and sometimes hard to predict.

**Cornering/Handling** – Chassis is well matched to power-plant. Experienced oscillation when exiting a tight turn and power demand. Rear end will rotate but very predictable and manageable with throttle control.

**Transmission (Shift Points)** – Great, smooth, downshifts well. Always in correct gear. Good in turns and straightaways.

Engine - Good power plant, easy to modulate, pulls strong to redline

Other – Very comfortable to drive hard. Responds well to driver inputs.

### **DODGE CHARGER V8 2.62**

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
R. Juarez - LASD	12:22pm	80° F/ 100° F
A. Penrith - LAPD	12:45 pm	88°F / 104°F
R. Joe - LASD	1:07 pm	89° F/ 106° F
B. Douglas - LAPD	1:29 pm	88° F/ 107° F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
R. Juarez - LASD	83.93	83.55	84.26	83.38	83.91	83.59	84.06	84.34	83.88	62.7
A. Penrith - LAPD	84.79	83.99	84.39	84.53	84.73	85.12	85.13	84.97	84.76	62.2
R. Joe - LASD	85.94	85.53	86.16	85.99	86.95	86.23	86.33	86.31	86.16	61.1
B. Douglas - LAPD	85.07	84.23	84.65	84.43	84.76	86.29	84.08	84.76	84.65	62.2

### **DODGE CHARGER V8 2.62**

\*\* 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering	9.0
Body Lean	9.0
Bounce	8.7
Brake Fade	9.3
Brake Pull	9.3
<b>ABS</b> Operation	9.3

#### **DRIVER COMMENTS**

**Brakes** – The brakes performed well on all laps. Great rate of deceleration. Very good and confident. There was no brake fade or pull detected.

**Cornering/Handling** – Very predictable. Perfect steering with throttle. Beautiful response with long acceleration to throttle adjustments. Leans towards overseer but ESC responds quickly and the vehicle responds well to driver corrections. Handles curbing well.

**Transmission (Shift Points)** – The transmission kept the engine in its power-band at all times. Great control of vehicle in turns with throttle.

Engine – Strong power plant and plenty of torque to the rear end but kept in compliance with ESC.

Other - ESC/TRAC/ABS perfect tuning and very consistent.

### FORD RESPONDER HYBRID SEDAN

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
R. Juarez - LASD	1:07 pm	89°F / 106° F
A. Penrith - LAPD	1:29 pm	88° F/ 107°F
R. Joe - LASD	1:49 pm	91° F/ 108° F
B. Douglas - LAPD	2:09 pm	93° F/ 108° F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
R. Juarez - LASD	91.04	90.14	90.22	90.90	91.32	91.68	92.03	91.77	91.16	57.7
A. Penrith - LAPD	94.11	89.91	90.02	90.04	90.41	90.56	90.92	90.68	90.44	58.2
R. Joe - LASD	91.70	92.80	93.32	93.76	93.34	93.24	92.93	92.75	93.06	56.6
B. Douglas- LAPD	89.49	90.61	91.85	91.88	91.82	92.37	91.69	91.47	91.55	57.5

### FORD RESPONDER HYBRID SEDAN

\*\* 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering	9.3
Body Lean	9.0
Bounce	9.2
Brake Fade	9.7
Brake Pull	9.7
<b>ABS</b> Operation	9.7

#### **DRIVER COMMENTS**

Brakes – Outstanding brake performance; dependable and responsive. No brake fade or pull detected.

**Cornering/Handling** – Chassis is well balanced and stable with slight understeer matched to power-plant. Taut yet compliant, especially if being rough with vehicle.

**Transmission (Shift Points)** – Good transmission performance, never had to search for a gear. Always in correct gear.

**Engine** – Relatively poor performance once battery is drained, which adversely affects the lap time. Gas motor had smooth power delivery.

**Other** – The vehicle is easy to drive. It responds well to driver's inputs. The ESC/TRAC was badly noticeable.

### FORD PI SEDAN AWD 3.5L ECOBOOST

DRIVER	TIME TEST STARTED	AIR TEMP / TRACK TEMP (Deg. F)
R. Juarez - LASD	1:49 pm	91° F/ 108° F
A. Penrith - LAPD	2:09 pm	93° F/ 108° F
R. Joe - LASD	2:28 pm	90° F/ 108° F
Doug - LAPD	2:48 pm	90°F/ 107° F

DRIVER	LAP 1	LAP 2	LAP 3	LAP 4	LAP 5	LAP 6	LAP 7	LAP 8	AVG TIME	AVG SPEED
R. Juarez - LASD	82.20	80.60	80.94	81.12	81.24	81.92	81.87	81.61	81.45	64.6
A. Penrith - LAPD	81.67	80.64	81.36	82.11	82.04	82.29	81.10	81.79	81.79	64.6
R. Joe - LASD	83.59	83.32	83.59	83.35	83.76	83.49	83.95	83.50	83.55	63.2
Doug - LAPD	83.09	82.59	82.35	82.44	83.12	82.61	82.77	82.36	82.64	63.7

### FORD PI SEDAN AWD 3.5L ECOBOOST

\*\* 1 – Poor 5 – Average 10 – Outstanding

ITEM	RATING **
Steering	8.8
Body Lean	9.3
Bounce	9.3
Brake Fade	8.2
Brake Pull	9.0
<b>ABS</b> Operation	9.3

#### **DRIVER COMMENTS**

**Brakes** – The brakes performed well. The rate of deceleration is lacking for the momentum. Had to stay on brake a bit longer prior to turn but improved after a few laps.

**Cornering/Handling** – Very well balanced vehicle. Compliant and predictable but no longer able to rotate mid turn with throttle lifts.

**Transmission (Shift Points)** – The transmission performed very well at all times. Keeping the engine in its powerband. Shift points were spot on.

Engine – The engine made good power throughout the test. Plenty of power through turns and straightaways.

**Other** – ESC is set at a very good level for law enforcement driving. Slightly lacking on this vehicle is an added 40% rate of decel.

# CITY COURSE EVALUATION RESULTS

This test is for those vehicles equipped with a factory installed POLICE PACKAGE and identified by the manufacturer as police packaged vehicles. This evaluation is conducted on a closed 2.6 mile city street course which closely represents the environment most urban law enforcement agencies must contend with. The course has several straight-a-ways and consists of many right and left turns and obstacles in the roadway.

This is the final test during our road certification and the manufacturers, if they so choose, are allowed to rebuild the vehicle's brake system and replace tires prior to this test.

For this test, two drivers are used for each vehicle. Each driver completes two laps around the city course. Lap timing is via a GPS based Race Logic "DriftBox02" mounted in the car. The combined times of the two laps are recorded next to the driver's name.

If the test vehicle is unable to complete the course in less than 5 minutes, it is judged unacceptable for high speed law enforcement use.

#### FORD PI SEDAN FWD 3.5L

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
B Douglas - LAPD	04:28.70	79°F/85°F	34.8
R. Joe - LASD	04:33.20	94°F/85°F	34.3
Average Time	04:30.95	Average Speed	34.5

ITEM	RATING **
Steering	7
Body Lean	7
Bounce	8
Brake Fade	8
Brake Pull	8
ABS Operation	8

\*\* 1 - Poor 5 - Average 10 - Outstanding

#### **DRIVER COMMENTS**

Brakes - Good, consistent and good pedal feel.

**Cornering/Handling** – Mild lean; leaned toward under-steer but controllable.

**Transmission (Shift Points)** – The transmission shifts were spot-on on all laps. Good throughout turns. No issues observed.

**Engine** – The engine pull was strong, good and smooth power delivery but could use more power coming out of turn.

Other: The vehicle responded well to driver's inputs. Well balanced overall.

#### **DODGE CHARGER V6 2.62**

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
R. Joe- LASD	04:33.20	79°F/94°F	34.3
B. Douglas - LAPD	04:34.50	77°F/95°F	34.1
Average Time	04:33.85	Average Speed	34.2

ITEM	RATING **
Steering	7
Body Lean	8
Bounce	8
Brake Fade	8
Brake Pull	8
ABS Operation	8

\*\* 1 – Poor 5 – Average 10 – Outstanding

#### **DRIVER COMMENTS**

Brakes - Good, responsive and consistent with fair bite but stayed strong.

**Cornering/Handling** – Great and stable. Held driving line very nicely with mild oversteer characteristic but predictable.

**Transmission (Shift Points)** – Smooth and excellent. Very manageable exiting turns. Always in proper gear with the exception of a short up-shift delay experienced only once during the laps.

Engine – Good power delivery but could use a little bit more power exiting turns.

Other: Well balanced overall. ESC not so restrictive.

#### FORD PI SEDAN AWD 3.7L

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
A. Penrith- LAPD	04:23.90	77°F/90°F	35.4
R. Juarez - LASD	04:25.20	76°F/93°F	35.5
Average Time	04:24.55	Average Speed	35.4

ITEM	RATING **
Steering	10
Body Lean	10
Bounce	10
Brake Fade	10
Brake Pull	10
ABS Operation	10

\*\* 1 – Poor 5 – Average 10 – Outstanding

#### **DRIVER COMMENTS**

Brakes – Excellent, consistent, strong stopping power. Worked well on all laps.

**Cornering/Handling** – Chassis handles course extremely well. The steering is spot-on in turn-in and adjustments handled with ease. AWD shines on this course.

**Transmission (Shift Points)** – The transmission worked well throughout the course. Always in correct gear. No issues to report.

**Engine** – Good strong pull on all laps,

**Others:** Extremely well suited for this city pursuit course. ESC/TRAC well calibrated; worked very well.

#### FORD PI UTILITY AWD 3.7L

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
R. Juarez—LASD	04:32.80	77°F/90°F	34.3
A. Penrith - LAPD	04:39.40	76°F/93°F	33.5
Average Time	04:36.10	Average Speed	33.9

ITEM	RATING **
Steering	10
Body Lean	9.7
Bounce	10
Brake Fade	9.5
Brake Pull	10
ABS Operation	10

\*\* 1 – Poor 5 – Average 10 – Outstanding

#### **DRIVER COMMENTS**

**Brakes** – Pedal feel started good but got softer and travel increased as the test progressed. But overall, the brake is very good with very good rate of decel.

**Cornering/Handling** – The chassis handles the course well but could still feel the entire weight which was still quite nimble in Slaloms with a noticeable high roll center. The steering is spot on and stays planted the entire time.

Transmission (Shift Points) – Good and no issues detected.

**Engine** – The engine pulls strong throughout the laps.

Other : The vehicle handles the "City course" extremely well.

#### FORD PI SEDAN FWD 2.0L ECOBOOST

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
R. Joe - LASD	04:37.90	76°F/88°F	33.7
B. Douglas - LAPD	04:44.30	79°F/90°F	33.0
Average Time	04:41.10	Average Speed	33.3

ITEM	RATING **
Steering	7
Body Lean	8
Bounce	8
Brake Fade	8
Brake Pull	6
ABS Operation	7

\*\* 1 – Poor 5 – Average 10 – Outstanding

#### **DRIVER COMMENTS**

**Brakes** – Pedal feed started strong but got softer with longer pedal travel but firm at the bottom as the test progressed. Soft initial bite reduced confidence in the brakes

Cornering/Handling –Little understeer but overall, handles very well.

**Transmission (Shift Points)** – The transmission handled well. Sometimes seems to be a delay in throttle slowing down the vehicle during exiting.

**Engine** –The engine performed well at the beginning but changes when turbo kicks in causing long delay in power delivery which impacted the drivers ability to get off corners. This was observed on corner exit and straights.

**Other-** The ESC may have had some impact on power delivery but not as much as the turbo lag.

#### FORD PI UTILITY AWD 3.5L ECOBOOST

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
R. Juarez - LASD	04:23.30	77°F/84°F	35.5
A. Penrith - LAPD	04:30.90	74°F/85°F	34.5
Average Time	04:27.10	Average Speed	35.0

ITEM	RATING **
Steering	9.7
Body Lean	9.5
Bounce	9.7
Brake Fade	8.5
Brake Pull	9.5
ABS Operation	9.7

\*\* 1 – Poor 5 – Average 10 – Outstanding

#### **DRIVER COMMENTS**

Brakes – Brake pedal travel was long from the beginning. Lacking 40% rate of deceleration.

**Cornering/Handling** – Impressive/excellent pull out of corners. Almost always on boost understeer but reasonable on the way out.

**Transmission (Shift Points)** – The transmission kept the engine in boost range and usable of AWD

Engine – Excellent; no issues.

Other. The vehicle did very good job on the city course (representative of patrol duties)

#### **CHEVROLET TAHOE PPV 4WD**

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
R. Juarez- LASD	04:43.40	75°F/75°F	33.0
A. Penrith - LAPD	04:49.20	76°F/80°F	32.4
Average Time	04:46.30	Average Speed	32.7

ITEM	RATING **
Steering	7.5
Body Lean	8.5
Bounce	9.0
Brake Fade	8.2
Brake Pull	9.7
ABS Operation	9.5

\*\* 1 – Poor 5 – Average 10 – Outstanding

#### **DRIVER COMMENTS**

**Brakes** – The brakes felt fine for the most part. They were smoking heavily after switch off and at the end of runs.

**Cornering/Handling** – The weight of vehicle was apparent for this tight course. Steering response was slow.

Transmission (Shift Points) – No issues .

**Engine** – No issues.

Other- This course more represents field patrol operations.

#### **DODGE CHARGER V8 3.08 AWD**

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
R. Joe - LASD	04:20.10	75°F/82°F	36.0
B. Douglas - LAPD	04:28.40	75°F/83°F	34.1
Average Time	04:24.24	Average Speed	35.4

ITEM	RATING **
Steering	7.5
Body Lean	8.0
Bounce	8.0
Brake Fade	8.0
Brake Pull	8.0
ABS Operation	8.0

\*\* 1 - Poor 5 - Average 10 - Outstanding

#### **DRIVER COMMENTS**

Brakes – Excellent; very responsive and consistent.

**Cornering/Handling** – Turn in was great. Great putting power down on exit and able to control through turns.

Transmission (Shift Points) – Great! Always in the right gear without any issues.

Engine – The engine pull is strong and made outstanding power both in turns and straightaways.

Other: Nice car! Very manageable.

#### FORD F150 4WD 3.5L ECOBOOST

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
A. Penrith - LAPD	04:48.00	77°F/84°F	32.5
R. Juarez - LASD	04:48.00	74°F/85°F	32.5
Average Time	04:48.00	Average Speed	32.5

ITEM	RATING **
Steering	7.7
Body Lean	8.5
Bounce	8.5
Brake Fade	8.5
Brake Pull	9.2
ABS Operation	9.5

\*\* 1 – Poor 5 – Average 10 – Outstanding

#### **DRIVER COMMENTS**

**Brakes** – Brake pedal was long from the onset. Rate of deceleration was there but lacking in confidence.

**Cornering/Handling** – Long wheelbase but reasonable even through tight sections. Lot of steering angle to get through tight corners

Transmission (Shift Points) – No issues

Engine – No issues.

Others: City course -representative of true patrol duties.

#### **CHEVROLET TAHOE PPV 2WD**

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
A. Penrith - LASD	04:55.80	75°F/75°F	31.6
R. Juarez - LAPD	04:45.50	76°F/80°F	32.8
Average Time	04:50.65	Average Speed	32.2

#### DRIVER COMMENTS

**Brakes** – Remained consistent and effective throughout the laps, but smoking heavily after completion of the course.

**Cornering/Handling** – Impressive but the weight of vehicle was apparent for this tight course. Steering ratio doesn't work well for this tight course.

**Transmission (Shift Points)** – The transmission worked well on all laps. Always in correct gear at all times.

Engine – Good pull everywhere as long as ESC/TRAC wasn't operating.

Other – City pursuit course is a more type representation of patrol duties.

#### **DODGE CHARGER V8 2.62**

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
B. Douglas—LAPD	04:32.60	75°F/82°F	34.3
R. Joe — LASD	04:31.30	75°F/83°F	34.5
Average Time	04:31.95	Average Speed	34.4

ITEM	RATING **
Steering	8
Body Lean	8
Bounce	8
Brake Fade	8
Brake Pull	8
ABS Operation	8

\*\* 1 – Poor 5 – Average 10 – Outstanding

#### DRIVER COMMENTS

Brakes – Great and very consistent.

**Cornering/Handling** – Some oversteer coming out of turn.

Transmission (Shift Points) – No throttle coming out of turns.

**Engine** – Good on turns and straightaways.

#### FORD RESPONDER HYBRID SEDAN

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
B. Douglas—LAPD	04:41.40	76°F/88°F	33.3
R. Joe — LASD	04:50.30	79°F/90°F	33.3
Average Time	04:45.85	Average Speed	33.3

ITEM	RATING **
Steering	8
Body Lean	7
Bounce	7
Brake Fade	8
Brake Pull	9
ABS Operation	9

\*\* 1 - Poor 5 - Average 10 - Outstanding

#### **DRIVER COMMENTS**

**Brakes** – Great throughout the laps.

**Cornering/Handling** – A bit of lean but it's controllable and manageable.

**Transmission (Shift Points)** – Good though little slow. Responsive on exits.

Engine – Good but combined with the trans, felt a bit under-powered once battery was drained.

**Other:** Battery level of charge makes a huge difference in acceleration and performance.

#### FORD PI SEDAN AWD 3.5L ECOBOOST

DRIVERS	TOTAL TIME	AIR /TRACK	SPEED
R. Juarez — LASD	04:15.70	76°F/95°F	36.6
A. Penrith—LAPD	04:16.00	78°F/98°F	36.6
Average Time	04:15.85	Average Speed	36.6

ITEM	RATING **
Steering	9.7
Body Lean	9.7
Bounce	10
Brake Fade	10
Brake Pull	10
ABS Operation	10

\*\* 1 – Poor 5 – Average 10 – Outstanding

#### **DRIVER COMMENTS**

**Brakes** – The brakes performed very well with good rate of deceleration. Minor fade experienced otherwise excellent.

**Cornering/Handling** – Flat and predictable. Handles tight course extremely well. Power out of turns with only slight push.

**Transmission (Shift Points)** – Always kept motor in boost.

**Engine** – Perfect. No issues.

**Other-** This course is truly representative of a patrol type environment. This car handles it very well. Great for law enforcement duties!

# BRAKE EVALUATION RESULTS

This test procedure measures the braking response and efficiency of the vehicle.

The test is conducted immediately following the preliminary handling test (32 laps). This ensures that the brakes are tested after being driven at high speeds, thus simulating the actual operating conditions experienced by the officer in the field.

The test is conducted by first accelerating the vehicle to 80 MPH, then decelerating to a stop, maintaining an average deceleration rate of 22 feet per second. This procedure is repeated three additional times. At this point, a five minute stationary cool down period occurs. The vehicle is then accelerated to a speed of 60 MPH and decelerated at the maximum deceleration rate attainable before the onset of ABS. After a two minute stop, the 60 MPH procedure is repeated again. As soon as the vehicle has stopped, it is immediately accelerated to 60 MPH and then stopped as quickly as possible, simulating a panic stop. That stopping distance is measured and recorded, utilizing a "VBOX Datalogger". The "Datalogger" is a GPS based measuring device. If a brake malfunction is experienced (i.e., severe fading or inability to stop in a straight line,) an effort is made to detect the cause of the brake failure. If it is decided that the failure is inherent in the engineering of the brake system of the vehicle, the test is discontinued and the vehicle is disqualified from further testing. If the failure is associated with a correctable situation, it is corrected and the test is rerun. The defect and any remedial action taken are noted in the test results.

### **BRAKE EVALUATION RESULTS**

#### PANIC STOP FROM 60 MPH TO ZERO

VEHICLE	STOPPING DISTANCE IN FEET COR- RECTED TO 60 MPH
Ford PI Sedan FWD 3.51	149.5 ft. @ 60 MPH
Dodge Charger V6 2.62	145.3 ft. @ 60 MPH
Ford PI Sedan AWD3.7L	144.6 ft. @ 60 MPH
Ford PI Utility AWD 3.7L	144.9 ft. @ 60 MPH
Ford PI Sedan FWD 3.0L EcoBoost	132.6 ft. @ 60 MPH
Ford PI Utility AWD 3.5L EcoBoost	147.3 ft. @ 60 MPH
Chevrolet Tahoe PPV 4WD	152.1 ft. @ 60 MPH
Dodge Charger V8 3.08 AWD	141.2 ft. @ 60 MPH
Ford F150 4WD 3.5L EcoBoost	155.7 ft. @ 60 MPH
Chevrolet Tahoe PPV 2WD	157.2 ft. @ 60 MPH
Dodge Charger V8 2.62	137.6 ft. @ 60 MPH
Ford Responder Hybrid Sedan	137.6 ft. @ 60 MPH
Ford PI Sedan AWD 3.5L EcoBoost	148.7 ft. @ 60 MPH

\*No brake parts were changed during the test.

The brake test was performed with procedure listed on the protocol after the completion of the 32 high speed laps.

### **ACCELERATION EVALUATION RESULTS**

This test is designed to measure vehicle performance in terms of acceleration, including speed and time elapsed at the quarter mile. Although the top speed is not recorded, a minimum of 100 MPH is generally obtained to satisfy the requirements for high speed law enforcement patrol.

To get the information on the 30 - 60 MPH and 60 - 100 MPH two separate runs were driven. In each run, the vehicle was accelerated to just under the target mileage. The vehicle's speed was allowed to level off, and then the vehicle was accelerated through the target mileage. This allowed for an actual time between the target mileages.

All of the information gathered during the acceleration and subsequent brake test is gathered using a Race Logic "Drift Box 02". The data logger is a GPS based measuring device.

### **ACCELERATION EVALUATION RESULTS**

SPEED	Ford PI Sedan FWD 3.5L	Dodge Charger V6 2.62	Ford PI Sedan AWD 3.7L	Ford PI Utility AWD 3.7L
0 – 20 MPH	1.83 sec.	1.91 sec	1.69 sec	1.82 sec
0 – 30 MPH	2.80 sec	3.29 sec	2.68 sec	2.86 sec
0 – 40 MPH	4.02 sec	4.67 sec	3.99 sec	4.30 sec
0 – 50 MPH	5.51 sec	6.08 sec	5.42 sec	5.98 sec
0 – 60 MPH	7.45 sec	8.03 sec	7.63 sec	8.49 sec
0 – 70 MPH	9.87 sec	10.43 sec	9.94 sec	10.95 sec
0 – 80 MPH	12.51 sec	13.08 sec	12.47 sec	13.95 sec
0 – 90 MPH	15.40 sec	15.94 sec	15.64 sec	17.91 sec
0 – 100 MPH	19.43 sec	21.21 sec	19.62 sec	23.01 sec
30 – 60 MPH	4.70 sec	5.25 sec	5.44 sec	5.49 sec
60 – 100 MPH	11.43 sec	13.36 sec	11.28 sec	13.79 sec
*SS – ¼ Mile	15.80 @ 91.3 mph	16.23 @ 9 0.08 mph	15.77@ 90.4 mph	15.98 @ 87.3 mph

\*Standing Start

\*Standing Start

SPEED	Ford PI Sedan FWD 2.0L EcoBoost	Ford PI Utility AWD 3.5L EcoBoost	Chevrolet Tahoe PPV 4WD	Dodge Charger V8 3.08 AWD
0 – 20 MPH	2.23 sec	1.79 sec	1.99 sec	1.53 sec
0 – 30 MPH	3.23 sec	2.63 sec	3.32 sec	2.57 sec
0 – 40 MPH	4.64 sec	3.67 sec	4.95 sec	3.62 sec
0 – 50 MPH	6.25 sec	4.93 sec	6.99 sec	5.10 sec
0 – 60 MPH	8.51 sec	6.74 sec	9.19 sec	6.63 sec
0 – 70 MPH	10.85 sec	8.77 sec	12.38 sec	8.50 sec
0 – 80 MPH	13.59 sec	11.17 sec	15.92 sec	11.15 sec
0 – 90 MPH	17.04 sec	14.18 sec	19.79 sec	13.73 sec
0 – 100 MPH	21.05 sec	17.47 sec	24.45 sec	16.56 sec
30 – 60 MPH	5.26 sec	4.36 sec	6.38 sec	4.49 sec
60 – 100 MPH	13.14 sec	9.91 sec	14.34 sec	9.28 sec
*SS – ¼ Mile	16.55 @ 88.07 mph	15.27 @ 93.06 mph	17.13 @ 88.3 mph	15.11 @ 95.1 mph

## **ACCELERATION EVALUATION RESULTS**

SPEED	Ford F150 4WD 3.5L EcoBoost	Chevrolet Tahoe PPV 2WD
0 – 20 MPH	1.73 sec	1.71 sec
0 – 30 MPH	2.65 sec	2.96 sec
0 – 40 MPH	3.66 sec	4.55 sec
0 – 50 MPH	4.95 sec	6.47 sec
0 – 60 MPH	6.51 sec	8.57 sec
0 – 70 MPH	8.30 sec	11.60 sec
0 – 80 MPH	10.51 sec	15.00 sec
0 – 90 MPH	13.29 sec	18.63 sec
0 – 100 MPH	17.50 sec	22.97 sec
30 – 60 MPH	4.37 sec	5.96 sec
60 – 100 MPH	11.46 sec	13.66 sec
*SS – ¼ Mile	15.01 @ 95.5mph	16.66 @ 84.8 mph

\*Standing Start

SPEED	Dodge Charger V8 2.62	Ford Responder Hybrid Sedan	Ford PI Sedan AWD 3.5L Eco- Boost
0 – 20 MPH	2.19 sec	2.34 sec	1.55 sec
0 – 30 MPH	3.41 sec	3.57 sec	2.23 sec
0 – 40 MPH	4.52 sec	5.09 sec	3.12 sec
0 – 50 MPH	5.87 sec	6.96 sec	4.21 sec
0 – 60 MPH	7.59 sec	9.21 sec	5.68 sec
0 – 70 MPH	9.45 sec	11.85 sec	7.27 sec
0 – 80 MPH	11.54 sec	15.10 sec	9.15 sec
0 – 90 MPH	14.73 sec	19.00 sec	11.61 sec
0 – 100 MPH	17.98 sec	24.03 sec	14.32 sec
30 – 60 MPH	4.17 sec	5.80 sec	3.50 sec
60 – 100 MPH	10.08 sec	14.60 sec	7.85 sec
*SS – ¼ Mile	15.85 @ 93.5 mph	17.12 @ 85.4 mph	14.25 @ 99.8 mph

\*Standing

### **HEAT EVALUATION RESULTS**

Today's modern exhaust emission and computer monitored automobile is designed to operate at much higher temperatures than vehicles from the 1970's and 1980's. Scientific breakthroughs in metallurgy and lubrication compositions allow the modern engine to operate at temperatures formerly thought to be detrimental. A vehicle from the 1970 era usually exceeded 180 degrees under normal driving conditions and generally overheated at 212 degrees. Today, modern engines operate safely between 200 to 260 degrees. Our heat testing is a "PASS-FAIL" scenario and is based on manufacturer's allowable operating temperatures.

Heat from each engine component is measured by a diagnostic tool via the vehicles data link connector. Components not electronically monitored by the onboard computers are measured by means of a digital thermometer.

Measurements are taken at the conclusion of the 32 high speed laps. This process is accomplished in the following manner:

1.	Transmission Fluid	Measurement taken via DLC (data link connector).
2.	Engine Oil	Measurement taken via DLC (data link connector).
3.	Power Steering	The probe is inserted into the pump reservoir fluid.
4.	Radiator Coolant	Measurement taken via DLC (data link connector)
5.	Outside Air	Temperature is measured away from the vehicle and in direct sunlight.

### **VEHICLE HEAT EVALUATION**

#### FORD PI SEDAN FWD 3.5L

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	320° F	275° F	N/A-Elec.	262° F
TESTED AT	218°F	226°F	N/A°	194° F

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	320° F	275° F	N/A-Elec.	262° F
TESTED AT	218°F	226°F	N/A°	194° F

#### **DODGE CHARGER V6 2.62**

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	320° F	275° F	N/A-Elec.	262° F
TESTED AT	221°F	212°F	N/A°	213°F

#### FORD PI SEDAN AWD 3.7L

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	320° F	275° F	N/A-Elec.	262° F
TESTED AT	208° F	218° F	N/A°	193° F

#### FORD PI UTILITY AWD 3.7L

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	320° F	275° F	N/A-Elec.	262° F
TESTED AT	219° F	224° F	N/A°	193° F

### **VEHICLE HEAT EVALUATION**

#### FORD PI SEDAN FWD 2.0L ECOBOOST

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	320° F	275° F	N/A-Elec.	262° F
TESTED AT	241°F	242°F	N/A°	204°F

#### FORD PI UTILITY AWD 3.5L ECOBOOST

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	320° F	275° F	N/A-Elec.	262° F
TESTED AT	212°F	204°F	N/A°	189°F

#### **CHEVROLET TAHOE PPV 4WD**

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	320° F	298° F	N/A-Elec.	262° F
TESTED AT	122° F	118° F	N/A°	96° F

#### **DODGE CHARGER V8 3.08 AWD**

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	310° F	284° F	N/A-Elec.	260° F
TESTED AT	228° F	195° F	N/A°	213° F

#### FORD F150 4WD 3.5L ECOBOOST

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	320° F	275° F	N/A-Elec.	262° F
TESTED AT	103° F	110° F	NA	101° F

#### **CHEVROLET TAHOE PPV 2WD**

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	302° F	248° F	N/A-Elec.	262° F
TESTED AT	120° F	121° F	NA	98° F

### **VEHICLE HEAT EVALUATION**

#### **DODGE CHARGER V8 2.62**

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	320° F	275° F	N/A-Elec.	262° F
TESTED AT	230° F	197° F	NA°	213° F

#### FORD RESPONDER HYBRID SEDAN

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	310° F	284° F	N/A-Elec.	260° F
TESTED AT	205° F	192° F	N/A	198° F

#### FORD PI SEDAN AWD 3.5L ECOBOOST

	ENGINE OIL	TRANSMISSION OIL	POWER STEERING	RADIATOR
MANUFACTURER'S MAXIMUM RECOMMENDED TEMPERATURE	310° F	284° F	N/A-Elec.	260° F
TESTED AT	237° F	222° F	N/A°	191° F

# COMMUNICATIONS EVALUATION RESULTS

The communications evaluation of each vehicle is conducted by technicians assigned to the Los Angeles County Sheriff's Department's Communications and Fleet Management Bureau. This evaluation concerns itself with the radio installation, the effect of radio operation on vehicle performance and the effect of the vehicle on radio performance.

The Electromagnetic Interference Susceptibility test is intended for use in the presence of electromagnetic fields resulting from use of public safety two-way radios.

Vehicle performance must not be affected in any way by transmissions from a radio and antenna installed in the vehicle and operating in any of the frequency ranges of 450 to 512 MHz, and having a radio frequency output no more than 50 watts. Vehicle performance shall not be affected by the presence of another vehicle equipped with the above described radio and operated next to the subject vehicle.

Radiated and conducted electromagnetic interference vehicle systems and accessories shall be designed to reduce interference with the use of public safety radio receivers or electronic sirens or sound amplifiers. The effective sensitivity of a receiver installed in the vehicle shall not be reduced by more than the amount tabulated below for each frequency band:

#### FREQUENCY BAND

#### ALLOWABLE DEGRADATION

450 to 512 MHz

#### $3 \, dB$

Degradation is the difference in effective receiver sensitivity measured with the vehicle engine and accessories turned off as compared to that measured with the engine and accessories turned on.

Sensitivity is measured in terms of the 12 dB Sinad signal as defined in EIA Standard RS-204. To determine effective sensitivity, the receiver is connected to the antenna through an isolating the connector which allows introduction of the signal generator through the isolated port. Comparative signal strength readings are then taken with and without the interference present.
#### 2018 FORD PI SEDAN FWD 3.5L

RADIO MAKE	MODEL NO.	ANTENNA TYPE	LOCATION
Motorola XTL-5000	M20SSS9PW1AN	5dB Gain Whip	Roof

FREQUENCY: 483.0875 MHz Rating Scale: 1-10 (1-Poor/ 5 -Average / 10 –Outstanding) \*\*

WITH ANTENNA	12 dB SINAD	20 dB QUIETING	DESENS dB
Engine Off	-94dB	-97dB	2dB
Engine Idle (No Acc.)	-93dB	-87dB	2dB
Engine High RPM (No Acc.)	-93dB	-87dB	2dB
Engine Idle W/Air	-93dB	-87dB	2dB
Engine Idle W/ Lights	-93dB	-87dB	2dB
Engine Idle W/Heater	-93dB	-87dB	2dB
Engine Idle W/All Acc.	-93dB	-87dB	2dB
Engine High RPM W/All Acc.	-93dB	-87dB	2dB

Also Tested: Interference detected at 470.6875 and 484.0125 MHz on XTS5000 Portable.

Glove Compartment Accessibility – (Undercover Use)	Rating **
Control Head	5
Microphone	5
Electronic Siren	5
Dashboard Accessibility	
Radio Control Head	6
Siren Console	6
Mobile Digital Terminal/Computer	6
Speakers	6
Microphones	5
Trunk Accessibility	
Factory Power Terminal in Trunk	1
One Radio Installation	5
Two Radio Installation	5
Antenna Installation	5
Computer Installation	5
Engine Accessibility	
Battery Terminal Connection	5
Accommodation for Cables	5
Hidden Siren Installation	6
Ignition Fuse Terminal Block	
Clip – on Connections for Accessories	5

#### 2018 DODGE CHARGER V6 2.62

RADIO MAKE	MODEL NO.	ANTENNA TYPE	LOCATION
Motorola XTL-5000	M20SSS9PW1AN	5dB Gain Whip	Roof

FREQUENCY: 483.0875 MHz

Rating Scale: 1-10 (1-Poor/ 5 -Average / 10 –Outstanding) \*\*

WITH ANTENNA	12 dB SINAD	20 dB QUIETING	DESENS dB
Engine Off	-94dB	-97dB	2dB
Engine Idle (No Acc.)	-94dB	-97dB	3dB
Engine High RPM (No Acc.)	-94dB	-97dB	3dB
Engine Idle W/Air	-94dB	-97dB	3dB
Engine Idle W/ Lights	-94dB	-97dB	3dB
Engine Idle W/Heater	-94dB	-97dB	3dB
Engine Idle W/All Acc.	-94dB	-97dB	3dB
Engine High RPM W/All Acc.	-94dB	-97dB	3dB

Also Tested: No spurious signal detected on XTS5000 Portable.

Glove Compartment Accessibility – (Undercover Use)	Rating **
Control Head	4
Microphone	5
Electronic Siren	5
Dashboard Accessibility	
Radio Control Head	5
Siren Console	5
Mobile Digital Terminal/Computer	5
Speakers	6
Microphones	5
Trunk Accessibility	
Factory Power Terminal in Trunk	8
One Radio Installation	7
Two Radio Installation	6
Antenna Installation	5
Computer Installation	5
Engine Accessibility	
Battery Terminal Connection	9
Accommodation for Cables	7
Hidden Siren Installation	3
Ignition Fuse Terminal Block	
Clip – on Connections for Accessories	6

#### 2018 FORD PI SEDAN AWD 3.7L

RADIO MAKE	MODEL NO.	ANTENNA TYPE	LOCATION
Motorola XTL-5000	M20SSS9PW1AN	5dB Gain Whip	Roof

FREQUENCY: 483.0875 MHz

Rating Scale: 1-10 (1-Poor/ 5 -Average / 10 –Outstanding) \*\*

WITH ANTENNA	12 dB SINAD	20 dB QUIETING	DESENS dB
Engine Off	-94dB	-97dB	2dB
Engine Idle (No Acc.)	-94dB	-97dB	2dB
Engine High RPM (No Acc.)	-94dB	-97dB	2dB
Engine Idle W/Air	-94dB	-97dB	2dB
Engine Idle W/ Lights	-94dB	-97dB	2dB
Engine Idle W/Heater	-94dB	-97dB	2dB
Engine Idle W/All Acc.	-94dB	-97dB	2dB
Engine High RPM W/All Acc.	-94dB	-97dB	2dB

Also Tested: Interference detected at 483.3375 and 470.6875 MHz on XTS5000 Portable.

Glove Compartment Accessibility – (Undercover Use)	Rating **
Control Head	5
Microphone	5
Electronic Siren	5
Dashboard Accessibility	
Radio Control Head	6
Siren Console	6
Mobile Digital Terminal/Computer	6
Speakers	6
Microphones	5
Trunk Accessibility	
Factory Power Terminal in Trunk	1
One Radio Installation	5
Two Radio Installation	5
Antenna Installation	5
Computer Installation	5
Engine Accessibility	
Battery Terminal Connection	5
Accommodation for Cables	5
Hidden Siren Installation	6
Ignition Fuse Terminal Block	
Clip – on Connections for Accessories	5

#### 2018 FORD PI UTILITY AWD 3.7L

RADIO MAKE	MODEL NO.	ANTENNA TYPE	LOCATION
Motorola XTL-5000	M20SSS9PW1AN	5dB Gain Whip	Roof

FREQUENCY: 483.0875 MHz

Rating Scale: 1-10 (1-Poor/ 5 -Average / 10 –Outstanding) \*\*

WITH ANTENNA	12 dB SINAD	20 dB QUIETING	DESENS dB
Engine Off	-94dB	-97dB	3dB
Engine Idle (No Acc.)	-94dB	-97dB	3dB
Engine High RPM (No Acc.)	-94dB	-97dB	3dB
Engine Idle W/Air	-94dB	-97dB	3dB
Engine Idle W/ Lights	-94dB	-97dB	3dB
Engine Idle W/Heater	-94dB	-97dB	3dB
Engine Idle W/All Acc.	-94dB	-97dB	3dB
Engine High RPM W/All Acc.	-94dB	-97dB	3dB

Also Tested: No spurious signal detected on XTS5000 Portable.

Glove Compartment Accessibility – (Undercover Use)	Rating **
Control Head	5
Microphone	5
Electronic Siren	5
Dashboard Accessibility	
Radio Control Head	6
Siren Console	6
Mobile Digital Terminal/Computer	6
Speakers	6
Microphones	5
Trunk Accessibility	
Factory Power Terminal in Trunk	1
One Radio Installation	5
Two Radio Installation	5
Antenna Installation	5
Computer Installation	5
Engine Accessibility	
Battery Terminal Connection	5
Accommodation for Cables	5
Hidden Siren Installation	6
Ignition Fuse Terminal Block	
Clip – on Connections for Accessories	5

#### 2018 FORD PI SEDAN FWD 2.0L TURBO

RADIO MAKE	MODEL NO.	ANTENNA TYPE	LOCATION
Motorola XTL-5000	M20SSS9PW1AN	5dB Gain Whip	Roof

FREQUENCY: 483.0875 MHz

Rating Scale: 1-10 (1-Poor/ 5 -Average / 10 –Outstanding) \*\*

WITH ANTENNA	12 dB SINAD	20 dB QUIETING	DESENS dB
Engine Off	-91dB	-96dB	2dB
Engine Idle (No Acc.)	-91dB	-96dB	2dB
Engine High RPM (No Acc.)	-91dB	-96dB	2dB
Engine Idle W/Air	-91dB	-96dB	2dB
Engine Idle W/ Lights	-91dB	-96dB	2dB
Engine Idle W/Heater	-91dB	-96dB	2dB
Engine Idle W/All Acc.	-91dB	-96dB	2dB
Engine High RPM W/All Acc.	-91dB	-96dB	2dB

Also Tested: Interference detected at 483.1375,483,3500,470.7375,484.5875,470.6875 MHz on XTL5000 Portable

Glove Compartment Accessibility – (Undercover Use)	Rating **
Control Head	7
Microphone	7
Electronic Siren	7
Dashboard Accessibility	
Radio Control Head	5
Siren Console	7
Mobile Digital Terminal/Computer	5
Speakers	5
Microphones	5
Trunk Accessibility	
Factory Power Terminal in Trunk	1
One Radio Installation	7
Two Radio Installation	7
Antenna Installation	7
Computer Installation	7
Engine Accessibility	
Battery Terminal Connection	5
Accommodation for Cables	5
Hidden Siren Installation	4
Ignition Fuse Terminal Block	5
Clip – on Connections for Accessories	5

#### 2018 FORD PI UTILITY AWD 3.5L ECOBOOST

RADIO MAKE	MODEL NO.	ANTENNA TYPE	LOCATION
Motorola XTL-5000	M20SSS9PW1AN	.5dB Gain Whip	Roof

FREQUENCY: 483.0875 MHz Rating Scale: 1-10 (1-Poor/ 5 -Average / 10 –Outstanding) \*\*

WITH ANTENNA	12 dB SINAD	20 dB QUIETING	DESENS dB
Engine Off	-93dB	-96dB	0dB
Engine Idle (No Acc.)	-93dB	-96dB	0dB
Engine High RPM (No Acc.)	-93dB	-96dB	0dB
Engine Idle W/Air	-93dB	-96dB	0dB
Engine Idle W/ Lights	-93dB	-96dB	0dB
Engine Idle W/Heater	-93dB	-96dB	0dB
Engine Idle W/All Acc.	-93dB	-96dB	0dB
Engine High RPM W/All Acc.	-93dB	-96dB	0dB

Also Tested: Interference detected at 470.6875 MHz on XTS5000 Portable.

Glove Compartment Accessibility – (Undercover Use)	Rating **
Control Head	5
Microphone	5
Electronic Siren	5
Dashboard Accessibility	
Radio Control Head	6
Siren Console	6
Mobile Digital Terminal/Computer	6
Speakers	6
Microphones	5
Trunk Accessibility	
Factory Power Terminal in Trunk	1
One Radio Installation	5
Two Radio Installation	5
Antenna Installation	5
Computer Installation	5
Engine Accessibility	
Battery Terminal Connection	5
Accommodation for Cables	5
Hidden Siren Installation	6
Ignition Fuse Terminal Block	
Clip – on Connections for Accessories	5

#### **2018 CHEVROLET TAHOE PPV 4WD**

RADIO MAKE	MODEL NO.	ANTENNA TYPE	LOCATION
Motorola XTL-5000	M20SSS9PW1AN	5dB Gain Whip	Roof

FREQUENCY: 483.0875 MHz

Rating Scale: 1-10 (1-Poor/ 5 -Average / 10 –Outstanding) \*\*

WITH ANTENNA	12 dB SINAD	20 dB QUIETING	DESENS dB
Engine Off	-93dB	-97dB	3dB
Engine Idle (No Acc.)	-93dB	-97dB	3dB
Engine High RPM (No Acc.)	-93dB	-97dB	3dB
Engine Idle W/Air	-93dB	-97dB	3dB
Engine Idle W/ Lights	-93dB	-97dB	3dB
Engine Idle W/Heater	-93dB	-97dB	3dB
Engine Idle W/All Acc.	-93dB	-97dB	3dB
Engine High RPM W/All Acc.	-93dB	-97dB	3dB

Also Tested: No spurious signal detected on XTS5000 Portable.

Glove Compartment Accessibility – (Undercover Use)	Rating **
Control Head	5
Microphone	5
Electronic Siren	5
Dashboard Accessibility	
Radio Control Head	6
Siren Console	6
Mobile Digital Terminal/Computer	6
Speakers	6
Microphones	6
Trunk Accessibility	
Factory Power Terminal in Trunk	5
One Radio Installation	9
Two Radio Installation	9
Antenna Installation	5
Computer Installation	7
Engine Accessibility	
Battery Terminal Connection	5
Accommodation for Cables	5
Hidden Siren Installation	5
Ignition Fuse Terminal Block	
Clip – on Connections for Accessories	5

#### 2018 DODGE CHARGER V8 3.08 AWD

RADIO MAKE	MODEL NO.	ANTENNA TYPE	LOCATION
Motorola XTL-5000	M20SSS9PW1AN	5dB Gain Whip	Roof

FREQUENCY: 483.0875 MHz

Rating Scale: 1-10 (1-Poor/ 5 -Average / 10 –Outstanding) \*\*

WITH ANTENNA	12 dB SINAD	20 dB QUIETING	DESENS dB
Engine Off	-94dB	-98dB	3dB
Engine Idle (No Acc.)	-94dB	-98dB	3dB
Engine High RPM (No Acc.)	-94dB	-98dB	3dB
Engine Idle W/Air	-94dB	-98dB	3dB
Engine Idle W/ Lights	-94dB	-98dB	3dB
Engine Idle W/Heater	-94dB	-98dB	3dB
Engine Idle W/All Acc.	-94dB	-98dB	3dB
Engine High RPM W/All Acc.	-94dB	-98dB	3dB

Also Tested: No spurious signal detected on XTS5000 Portable..

Glove Compartment Accessibility – (Undercover Use)	Rating **
Control Head	4
Microphone	5
Electronic Siren	5
Dashboard Accessibility	
Radio Control Head	5
Siren Console	5
Mobile Digital Terminal/Computer	5
Speakers	6
Microphones	5
Trunk Accessibility	
Factory Power Terminal in Trunk	8
One Radio Installation	7
Two Radio Installation	6
Antenna Installation	5
Computer Installation	5
Engine Accessibility	
Battery Terminal Connection	9
Accommodation for Cables	6
Hidden Siren Installation	3
Ignition Fuse Terminal Block	
Clip – on Connections for Accessories	6

#### 2018 FORD F150 4WD 3.5L ECOBOOST

RADIO MAKE	MODEL NO.	ANTENNA TYPE	LOCATION
Motorola XTL-5000	M20SSS9PW1AN	5dB Gain Whip	Roof

FREQUENCY: 483.0875 MHz Rating Scale: 1-10 (1-Poor/ 5

Rating Scale: 1-10 (1-Poor/ 5 -Average / 10 –Outstanding) \*\*

WITH ANTENNA	12 dB SINAD	20 dB QUIETING	DESENS dB
Engine Off	-91dB	-97dB	1dB
Engine Idle (No Acc.)	-91dB	-97dB	1dB
Engine High RPM (No Acc.)	-91dB	-97dB	1dB
Engine Idle W/Air	-91dB	-97dB	1dB
Engine Idle W/ Lights	-91dB	-97dB	1dB
Engine Idle W/Heater	-91dB	-97dB	1dB
Engine Idle W/All Acc.	-91dB	-97dB	1dB
Engine High RPM W/All Acc.	-91dB	-97dB	1dB

Also tested: Interference detected at 483.1500,482.1250 and 483.5000 MHz on XTL5000 Portable.

Glove Compartment Accessibility – (Undercover Use)	Rating **
Control Head	4
Microphone	4
Electronic Siren	4
Dashboard Accessibility	
Radio Control Head	5
Siren Console	5
Mobile Digital Terminal/Computer	6
Speakers	6
Microphones	5
Trunk Accessibility	
Factory Power Terminal in Trunk	N/A
One Radio Installation	N/A
Two Radio Installation	N/A
Antenna Installation	N/A
Computer Installation	N/A
Engine Accessibility	
Battery Terminal Connection	6
Accommodation for Cables	6
Hidden Siren Installation	6
Ignition Fuse Terminal Block	5
Clip – on Connections for Accessories	5

#### **2018 CHEVROLET TAHOE PPV 2WD**

RADIO MAKE	MODEL NO.	ANTENNA TYPE	LOCATION
Motorola XTL-5000	M20SSS9PW1AN	5dB Gain Whip	Roof

FREQUENCY: 483.0875 MHz

Rating Scale: 1-10 (1-Poor/ 5 -Average / 10 –Outstanding) \*\*

WITH ANTENNA	12 dB SINAD	20 dB QUIETING	DESENS dB
Engine Off	-94dB	-98dB	3dB
Engine Idle (No Acc.)	-94dB	-98dB	3dB
Engine High RPM (No Acc.)	-94dB	-98dB	3dB
Engine Idle W/Air	-94dB	-98dB	3dB
Engine Idle W/ Lights	-94dB	-98dB	3dB
Engine Idle W/Heater	-94dB	-98dB	3dB
Engine Idle W/All Acc.	-94dB	-98dB	3dB
Engine High RPM W/All Acc.	-94dB	-98dB	3dB

Also Tested: Interference detected at 484.2125 and 483.4125 MHz onXTS5000 Portable.

Glove Compartment Accessibility – (Undercover Use)	Rating **
Control Head	5
Microphone	5
Electronic Siren	5
Dashboard Accessibility	
Radio Control Head	6
Siren Console	6
Mobile Digital Terminal/Computer	6
Speakers	6
Microphones	6
Trunk Accessibility	
Factory Power Terminal in Trunk	5
One Radio Installation	9
Two Radio Installation	9
Antenna Installation	5
Computer Installation	7
Engine Accessibility	
Battery Terminal Connection	5
Accommodation for Cables	5
Hidden Siren Installation	5
Ignition Fuse Terminal Block	
Clip – on Connections for Accessories	5

#### 2018 DODGE CHARGER V8 2.62

RADIO MAKE	MODEL NO.	ANTENNA TYPE	LOCATION
Motorola XTL-5000	M20SSS9PW1AN	5dB Gain Whip	Roof

FREQUENCY: 483.0875 MHz

Rating Scale: 1-10 (1-Poor/ 5 -Average / 10 –Outstanding) \*\*

WITH ANTENNA	12 dB SINAD	20 dB QUIETING	DESENS dB
Engine Off	-94dB	-97dB	1dB
Engine Idle (No Acc.)	-94dB	-97dB	1dB
Engine High RPM (No Acc.)	-94dB	-97dB	1dB
Engine Idle W/Air	-94dB	-97dB	1dB
Engine Idle W/ Lights	-94dB	-97dB	1dB
Engine Idle W/Heater	-94dB	-97dB	1dB
Engine Idle W/All Acc.	-94dB	-97dB	1dB
Engine High RPM W/All Acc.	-94dB	-97dB	1dB

Also Tested: Interference detected at 473.7875 and 483.3500 MHz on XTS5000 Portable.

Glove Compartment Accessibility – (Undercover Use)	Rating **
Control Head	4
Microphone	5
Electronic Siren	5
Dashboard Accessibility	
Radio Control Head	5
Siren Console	5
Mobile Digital Terminal/Computer	5
Speakers	6
Microphones	5
Trunk Accessibility	
Factory Power Terminal in Trunk	8
One Radio Installation	7
Two Radio Installation	6
Antenna Installation	5
Computer Installation	5
Engine Accessibility	
Battery Terminal Connection	9
Accommodation for Cables	6
Hidden Siren Installation	3
Ignition Fuse Terminal Block	
Clip – on Connections for Accessories	6

#### **2018 FORD RESPONDER HYBRID SEDAN**

RADIO MAKE	MODEL NO.	ANTENNA TYPE	LOCATION
Motorola XTL-5000	M20SSS9PW1AN	5dB Gain Whip	Roof

FREQUENCY: 483.0875 MHz

Rating Scale: 1-10 (1-Poor/ 5 -Average / 10 –Outstanding) \*\*

WITH ANTENNA	12 dB SINAD	20 dB QUIETING	DESENS dB
Engine Off	-91dB	-93dB	3dB
Engine Idle (No Acc.)	-91dB	-93dB	3dB
Engine High RPM (No Acc.)	-91dB	-93dB	3dB
Engine Idle W/Air	-91dB	-93dB	3dB
Engine Idle W/ Lights	-91dB	-93dB	3dB
Engine Idle W/Heater	-91dB	-93dB	3dB
Engine Idle W/All Acc.	-91dB	-93dB	3dB
Engine High RPM W/All Acc.	-91dB	-93dB	3dB

Also Tested: Interference detected at 482,8625,483.3875,483.3500 MHz on XTS5000 Portable.

Glove Compartment Accessibility – (Undercover Use)	Rating **
Control Head	5
Microphone	5
Electronic Siren	5
Dashboard Accessibility	
Radio Control Head	5
Siren Console	5
Mobile Digital Terminal/Computer	4
Speakers	5
Microphones	5
Trunk Accessibility	
Factory Power Terminal in Trunk	10
One Radio Installation	6
Two Radio Installation	6
Antenna Installation	7
Computer Installation	5
Engine Accessibility	
Battery Terminal Connection	5
Accommodation for Cables	5
Hidden Siren Installation	4
Ignition Fuse Terminal Block	5
Clip – on Connections for Accessories	5

#### 2018 FORD PI SEDAN AWD 3.5L ECOBOOST

RADIO MAKE	MODEL NO.	ANTENNA TYPE	LOCATION
Motorola XTL-5000	M20SSS9PW1AN	5dB Gain Whip	Roof

FREQUENCY: 483.0875 MHz

Rating Scale: 1-10 (1-Poor/ 5 -Average / 10 –Outstanding) \*\*

WITH ANTENNA	12 dB SINAD	20 dB QUIETING	DESENS dB
Engine Off	-95dB	-98dB	3dB
Engine Idle (No Acc.)	-95dB	-98dB	3dB
Engine High RPM (No Acc.)	-95dB	-98dB	3dB
Engine Idle W/Air	-95dB	-98dB	3dB
Engine Idle W/ Lights	-95dB	-98dB	3dB
Engine Idle W/Heater	-95dB	-98dB	3dB
Engine Idle W/All Acc.	-95dB	-98dB	3dB
Engine High RPM W/All Acc.	-95dB	-98dB	3dB

Also Tested: Interference detected at 470.6875 MHz on XTS5000 Portable.

Glove Compartment Accessibility – (Undercover Use)	Rating **
Control Head	5
Microphone	5
Electronic Siren	5
Dashboard Accessibility	
Radio Control Head	6
Siren Console	6
Mobile Digital Terminal/Computer	6
Speakers	6
Microphones	5
Trunk Accessibility	
Factory Power Terminal in Trunk	1
One Radio Installation	5
Two Radio Installation	5
Antenna Installation	5
Computer Installation	5
Engine Accessibility	
Battery Terminal Connection	5
Accommodation for Cables	5
Hidden Siren Installation	6
Ignition Fuse Terminal Block	
Clip – on Connections for Accessories	5

## **ERGONOMICS**

This subjective evaluation is a rating of human factors and space utilization done individually and independently by four patrol trained Deputy Sheriffs from the Los Angeles County Sheriff's Department. Each vehicle is driven through a 100 mile loop four times, each time by a different driver. The loop is divided equally into urban, suburban, and freeway driving conditions. The vehicle is operated with the air conditioner and headlights "turned on" and with the transmission selector in the overdrive position. No attempt is made to "baby" the vehicle through the loop, but hard acceleration starts are avoided. The ratings are averaged to minimize personal prejudices that individuals may have for, or against, any given vehicle.

Statements in the "drivers comment" section of the evaluation reflect a consensus of their individual comments.

Additionally, during the Ergonomics evaluation, fuel efficiency is also recorded. While EPA mileage estimates may be helpful for comparative purposes, they are based on simulated driving conditions. The fuel efficiency evaluation is an attempt to estimate MPG (miles per gallon) based on actual driving conditions.

The test results are averaged between the four drivers and recorded.

\*\* 3 – Poor 5 – Average / Fair 6- Good 7-Very Good 8-Excellent

\*\*\*\*

Decision was made not to conduct an Ergonomics Evaluation for 2017 models simply due to no distinctive changes observed from the previous year model in regards to their operation. Following pages are evaluations from last year models.

#### FORD F150 4WD 3.5L ECOBOOST

VISIBILITY	CONSIDERATIONS	RATING	
Overall Forward Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6.3	
DRIVERS COMMENTS			

VISIBILITY	RATING USING MIRRORS	RATING NOT USING MIRRORS	
3 o'clock Position	7.7	7.7	
4 o'clock Position	7.7	7.7	
5 o'clock Position	7.3	7.3	
6 o'clock Position	7.3	7.3	
7 o'clock Position	7.3	5.7	
8 o'clock Position	7.3	5.7	
9 o'clock Position	7.7	7.3	
DRIVERS COMMENTS			

FRONT SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	6.7
Seat Position	Range of Adjustment	5.7
Seat Compatibility to Sam Brown	Comfort, Seatbelt Interference	6.7
Seat to Controls	Steering Wheel, Pedals, Dashboard	6.0
Headrest Position: With Hat/Helmet	Adequate	6.7
Headrest Position: Without Hat/Helmet	Adequate	7.3
Headroom	Adequate	8.0
Legroom	Adequate	8.0
Seatbelt	Ease of Hook-Up/Release	7.3
Shoulder Strap	Interference with duty gear	7.0
	DRIVERS COMMENTS	1

INSTRUMENT PANEL	CONSIDERATIONS	RATING	
Instrument Placement	Ease of Viewing, Are They Obstructed by the Steering Wheel or Other Components	7.7	
Instrument Visibility	Can You See Them	7.7	
Instrument Legibility	Can You Read Them	7.7	
DRIVERS COMMENTS			

CONTROLS	CONSIDERATIONS	RATING
Steering Wheel	Size, Position	7.3
Shift Lever	Accessibility, Indicator Visibility	7.7
Knobs & Switches	Location, Visibility, Markings, Arrangement	7.3
Pedals	Location	7.3
Pedals	Size	7.3
Pedals	Spacing (Do you hit more than one pedal with boots on?)	7.3
Parking Brake	Location	7.3
Parking Brake	Method of Release.	6.3
DRIVERS COMMENTS		

MIRRORS	CONSIDERATIONS	RATING
Rearview Mirror	Placement	7.3
Rearview Mirror	Size	7.3
Rearview Mirror	Ease of Adjustment	7.3
Rearview Mirror	Distortion	7.3
Driver Side Mirror	Placement	7.3
Driver Side Mirror	Size	7.3
Driver Side Mirror	Ease of Adjustment	7.3
Driver Side Mirror	Distortion	7.3
Passenger Side Mirror	Placement	7.3
Passenger Side Mirror	Size	7.3
Passenger Side Mirror	Ease of Adjustment	7.3
Passenger Side Mirror	Distortion	7.3
	DRIVERS COMMENTS	

DOORS	CONSIDERATIONS	RATING
Front Door	Ease of Ingress/Egress	7.3
Rear Door	Ease of Ingress/Egress	7.3
Window & Door Handles	Accessibility, Ease of Operation	7.3
DRIVERS COMMENTS		

REAR SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	6.7
Headroom	Adequacy	7.7
Legroom	Adequacy	7.7
Seatbelt	Ease of Hook-Up/Release	7.3
	DRIVERS COMMENTS	

TRUNK	CONSIDERATIONS	RATING
Lid	Ease of Opening	N/A
Lid	Size of Opening	N/A
Compartment	Ease of Loading/Unloading	N/A
	DRIVERS COMMENTS	
Opening little too small		

SLALOM	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	7.0
DRIVER COMMENTS		
Limited visibility di	e to large pillars	

PARRALLEL PARK - LEVEL	CONSIDERATIONS	RATING	
Overall Backing	Ceiling Height, Dash Height, Pillar Placement,	47	
Visibility	Windshield size & Distortion	4./	
DRIVER COMMENTS			

PARRALLEL PARK - LEVEL	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	7.0
DRIVER COMMENTS		

PARRALLEL PARK – INCLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	7.3
DRIVER COMMENTS		

REAR 3-POINT TURN	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	7.3
DRIVER COMMENTS		

PARRALLEL PARK- DECLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	7.3
DRIVER COMMENTS		

#### **CHEVROLET TAHOE PPV**

VISIBILITY	CONSIDERATIONS	RATING
Overall Forward Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	8.0
DRIVERS COMMENTS		
Great visibility		

VISIBILITY	RATING USING MIRRORS	RATING NOT US- ING MIRRORS	
3 o'clock Position		7.5	
4 o'clock Position	7.5	6.0	
5 o'clock Position	7.5	6.0	
6 o'clock Position	7.5	7.5	
7 o'clock Position	7.5	7.5	
8 o'clock Position	7.5	7.5	
9 o'clock Position		7.5	
DRIVERS COMMENTS			
Duinou's side visus minuou is well placed But there is a blind anot on passance side due to			

Driver's side view mirror is well placed. But there is a blind spot on passenger side due to the height of the head rest and pillars

FRONT SEAT	CONSIDERATIONS	RATING	
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	7.0	
Seat Position	Range of Adjustment	7.0	
Seat Compatibility to Sam Brown	Comfort, Seatbelt Interference	5.2	
Seat to Controls	Steering Wheel, Pedals, Dashboard	7.0	
Headrest Position: With Hat/Helmet	Adequate	8.0	
Headrest Position: Without Hat/Helmet	Adequate	8.0	
Headroom	Adequate	9.0	
Legroom	Adequate	8.0	
Seatbelt	Ease of Hook-Up/Release	5.0	
Shoulder Strap	Interference with duty gear	6.5	
DRIVERS COMMENTS			

*Excellent leg room. However, seat area is too tight. It's difficult to latch seat belt with holster. Seat belt extension might help.* 

INSTRUMENT PANEL	CONSIDERATIONS	RATING	
Instrument Placement	Ease of Viewing, Are They Obstructed by the Steering Wheel or Other Components	7.0	
Instrument Visibility	Can You See Them	7.0	
Instrument Legibility	Can You Read Them	7.0	
DRIVERS COMMENTS			

CONTROLS	CONSIDERATIONS	RATING
Steering Wheel	Size, Position	7.0
Shift Lever	Accessibility, Indicator Visibility	7.0
Knobs & Switches	Location, Visibility, Markings, Arrangement	7.0
Pedals	Location	7.0
Pedals	Size	7.0
Pedals	Spacing (Do you hit more than one pedal with boots on?)	7.0
Parking Brake	Location	7.0
Parking Brake	Method of Release.	7.0
DRIVERS COMMENTS		

MIRRORS	CONSIDERATIONS	RATING	
Rearview Mirror	Placement	7.0	
Rearview Mirror	Size	7.0	
Rearview Mirror	Ease of Adjustment	7.0	
Rearview Mirror	Distortion	7.0	
Driver Side Mirror	Placement	7.0	
Driver Side Mirror	Size	7.0	
Driver Side Mirror	Ease of Adjustment	7.0	
Driver Side Mirror	Distortion	7.0	
Passenger Side Mirror	Placement	7.0	
Passenger Side Mirror	Size	7.0	
Passenger Side Mirror	Ease of Adjustment	7.0	
Passenger Side Mirror	Distortion	7.0	
DRIVERS COMMENTS			

DOORS	CONSIDERATIONS	RATING
Front Door	Ease of Ingress/Egress	6.7
Rear Door	Ease of Ingress/Egress	6.5
Window & Door Handles	Accessibility, Ease of Operation	6.7
DRIVERS COMMENTS		

REAR SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	6.0
Headroom	Adequacy	6.0
Legroom	Adequacy	6.0
Seatbelt	Ease of Hook-Up/Release	6.0
DRIVERS COMMENTS		

TRUNK	CONSIDERATIONS	RATING
Lid	Ease of Opening	8.0
Lid	Size of Opening	8.0
Compartment	Ease of Loading/Unloading	8.0
DRIVERS COMMENTS		

SLALOM	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6.0
DRIVER COMMENTS		

PARRALLEL PARK - LEVEL	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6.0
DRIVER COMMENTS		

PARRALLEL PARK - INCLINE	CONSIDERATIONS	RATING	
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6.7	
DRIVER COMMENTS			

PARRALLEL PARK – DECLINE	CONSIDERATIONS	RATING	
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6.7	
DRIVER COMMENTS			

REAR 3-POINT TURN	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6.7
DRIVER COMMENTS		

#### **DODGE CHARGER**

VISIBILITY	CONSIDERATIONS	RATING
Overall Forward Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	7.0
DRIVERS COMMENTS		
Forward view is g	reat	

VISIBILITY	RATING USING MIRRORS	RATING NOT US- ING MIRRORS	
3 o'clock Position		7.0	
4 o'clock Position	6.2	5.7	
5 o'clock Position	6.2	5.0	
6 o'clock Position	6.0	6.0	
7 o'clock Position	6.2	5.0	
8 o'clock Position	6.2	5.7	
9 o'clock Position		7.0	
DRIVERS COMMENTS			
Blind spots to rear without use of mirrors			

FRONT SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	6.0
Seat Position	Range of Adjustment	6.0
Seat Compatibility to Sam Brown	Comfort, Seatbelt Interference	5.5
Seat to Controls	Steering Wheel, Pedals, Dashboard	5.7
Headrest Position: With Hat/Helmet	Adequacy	6.4
Headrest Position: Without Hat/Helmet	Adequacy	6.4
Headroom	Adequacy	6.2
Legroom	Adequacy	6.2
Seatbelt	Ease of Hook-Up/Release	6.0
Shoulder Strap	Interference with duty gear	5.7
DRIVERS COMMENTS		

INSTRUMENT PANEL	CONSIDERATIONS	RATING	
Instrument Placement	Ease of Viewing, Are They Obstructed by the Steering Wheel or Other Components	6.5	
Instrument Visibility	Can You See Them	6.7	
Instrument Legibility	Can You Read Them	6.7	
DRIVERS COMMENTS			

CONTROLS	CONSIDERATIONS	RATING
Steering Wheel	Size, Position	6.2
Shift Lever	Accessibility, Indicator Visibility	5.7
Knobs & Switches	Location, Visibility, Markings, Arrangement	5.7
Pedals	Location	5.7
Pedals	Size	5.7
Pedals	Spacing (Do you hit more than one pedal with boots on?)	7.0
Parking Brake	Location	5.7
Parking Brake	Method of Release.	5.7
DRIVERS COMMENTS		

MIRRORS	CONSIDERATIONS	RATING
Rearview Mirror	Placement	6.0
Rearview Mirror	Size	6.0
Rearview Mirror	Ease of Adjustment	6.0
Rearview Mirror	Distortion	6.0
Driver Side Mirror	Placement	6.5
Driver Side Mirror	Size	6.0
Driver Side Mirror	Ease of Adjustment	6.5
Driver Side Mirror	Distortion	6.7
Passenger Side Mirror	Placement	6.5
Passenger Side Mirror	Size	6.0
Passenger Side Mirror	Ease of Adjustment	6.5
Passenger Side Mirror	Distortion	6.7
DRIVERS COMMENTS		
Larger/wider side view mirrors to cover blind spot ?		

DOORS	CONSIDERATIONS	RATING
Front Door	Ease of Ingress/Egress	6.0
Rear Door	Ease of Ingress/Egress	6.0
Window & Door Handles	Accessibility, Ease of Operation	6.5
DRIVERS COMMENTS		

REAR SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	6.0
Headroom	Adequacy	6.0
Legroom	Adequacy	6.0
Seatbelt	Ease of Hook-Up/Release	6.0
DRIVERS COMMENTS		

TRUNK	CONSIDERATIONS	RATING
Lid	Ease of Opening	5.5
Lid	Size of Opening	6.0
Compartment	Ease of Loading/Unloading	5.5
DRIVERS COMMENTS		

SLALOM	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	5.7
DRIVER COMMENTS		
Rear visibility is limited, rear view camera would help		

PARRALLEL PARK - LEVEL	CONSIDERATIONS	RATING
Overall Backing	Ceiling Height, Dash Height, Pillar Placement,	7 5
Visibility	Windshield Size & Distortion	7.5
DRIVER COMMENTS		

PARRALLEL PARK - LEVEL	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6.0
	DRIVER COMMENTS	

CONSIDERATIONS	RATING
Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6.0
DRIVER COMMENTS	
	CONSIDERATIONS Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion DRIVER COMMENTS

REAR 3-POINT TURN	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	4.5
DRIVER COMMENTS		

PARRALLEL PARK- DECLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6.0
	DRIVER COMMENTS	

#### FORD PI SEDAN

VISIBILITY	CONSIDERATIONS	RATING
Overall Forward Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	7.0
DRIVERS COMMENTS		
Visibility is great.		

VISIBILITY	RATING USING MIRRORS	RATING NOT US- ING MIRRORS	
3 o'clock Position		6.5	
4 o'clock Position	6.2	5.5	
5 o'clock Position	6.2	4.5	
6 o'clock Position	6.2	4.5	
7 o'clock Position	6.2	4.5	
8 o'clock Position	6.2	5.5	
9 o'clock Position		6.5	
DRIVERS COMMENTS			
Limited view without mirrors due to smal mirrors helps but confusing.	l windows and high rear d	ash area. Blind spot	

FRONT SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	6.5
Seat Position	Range of Adjustment	8.0
Seat Compatibility to Sam Brown	Comfort, Seatbelt Interference	7.0
Seat to Controls	Steering Wheel, Pedals, Dashboard	7.0
Headrest Position: With Hat/Helmet	Adequate	7.0
Headrest Position: Without Hat/Helmet	Adequate	7.0
Headroom	Adequate	7.0
Legroom	Adequate	7.0
Seatbelt	Ease of Hook-Up/Release	7.0
Shoulder Strap	Interference with duty gear	7.0
	DRIVERS COMMENTS	
Overall seat comfort is great. N	No interference between center console and Sam Brown	

INSTRUMENT PANEL	CONSIDERATIONS	RATING
Instrument Placement	Ease of Viewing, Are They Obstructed by the Steering Wheel or Other Components	6.0
Instrument Visibility	Can You See Them	6.0
Instrument Legibility	Can You Read Them	6.0
DRIVERS COMMENTS		
Instrument panel controls were easy to view and access.		

CONTROLS	CONSIDERATIONS	RATING
Steering Wheel	Size, Position	7.0
Shift Lever	Accessibility, Indicator Visibility	6.5
Knobs & Switches	Location, Visibility, Markings, Arrangement	7.0
Pedals	Location	7.0
Pedals	Size	7.0
Pedals	Spacing (Do you hit more than one pedal with boots on?)	7.0
Parking Brake	Location	7.0
Parking Brake	Method of Release.	7.0
	DRIVERS COMMENTS	
Could use little more spacing b	etween pedals.	

MIRRORS	CONSIDERATIONS	RATING
Rearview Mirror	Placement	6.7
Rearview Mirror	Size	6.7
Rearview Mirror	Ease of Adjustment	6.7
Rearview Mirror	Distortion	6.7
Driver Side Mirror	Placement	6.7
Driver Side Mirror	Size	6.7
Driver Side Mirror	Ease of Adjustment	6.7
Driver Side Mirror	Distortion	6.7
Passenger Side Mirror	Placement	6.7
Passenger Side Mirror	Size	6.7
Passenger Side Mirror	Ease of Adjustment	6.7
Passenger Side Mirror	Distortion	6.7
	DRIVERS COMMENTS	
Good placement of mirrors.		

DOORS	CONSIDERATIONS	RATING
Front Door	Ease of Ingress/Egress	5.7
Rear Door	Ease of Ingress/Egress	4.5
Window & Door Handles	Accessibility, Ease of Operation	6.7
DRIVERS COMMENTS		
Rear door frame too low, uncomfortable getting in the vehicle.		

REAR SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	6.0
Headroom	Adequate	5.0
Legroom	Adequate	6.0
Seatbelt	Ease of Hook-Up/Release	6.0
	DRIVERS COMMENTS	

TRUNK	CONSIDERATIONS	RATING
Lid	Ease of Opening	6.7
Lid	Size of Opening	6.7
Compartment	Ease of Loading/Unloading	5.3
	DRIVERS COMMENTS	•
Trunk too small for gear for 2 d	leputies	

SLALOM	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	4.0
	DRIVER COMMENTS	•
Limited rear visibil	ity due to high rear dash	

PARRALLEL PARK - LEVEL	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	5.5
	DRIVER COMMENTS	
Poor rear window v	visibility. Rear view camera would help	

PARRALLEL PARK – INCLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	5.5
DRIVER COMMENTS		
Rear view camera	would help	

REAR 3-POINT TURN	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	5.5
	DRIVER COMMENTS	
Blind spots		

PARRALLEL PARK- DECLINE	CONSIDERATIONS	RATING	
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	5.5	
DRIVER COMMENTS			
Blind spots			

### FORD PI UTILITY

VISIBILITY	CONSIDERATIONS	RATING
Overall Forward Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	7.3
DRIVERS COMMENTS		

Forward visibility is very good

VISIBILITY	RATING USING MIRRORS	RATING NOT US- ING MIRRORS	
3 o'clock Position		6.5	
4 o'clock Position	6.7	5.7	
5 o'clock Position	6.3	5.2	
6 o'clock Position	5.7	5.5	
7 o'clock Position	6.3	5.2	
8 o'clock Position	6.7	6.0	
9 o'clock Position		6.7	
DRIVERS COMMENTS			

FRONT SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	6
Seat Position	Range of Adjustment	7
Seat Compatibility to Sam Brown	Comfort, Seatbelt Interference	6
Seat to Controls	Steering Wheel, Pedals, Dashboard	6.5
Headrest Position: With Hat/Helmet	Adequate	6.5
Headrest Position: Without Hat/Helmet	Adequate	6.5
Headroom	Adequate	6.5
Legroom	Adequate	7
Seatbelt	Ease of Hook-Up/Release	7
Shoulder Strap	Interference with duty gear	6.5
DRIVERS COMMENTS		
Shoulder room is an issue with	the door pillar placement.	

INSTRUMENT PANEL	CONSIDERATIONS	RATING
Instrument Placement	Ease of Viewing, Are They Obstructed by the Steering Wheel or Other Components	7.5
Instrument Visibility	Can You See Them	7.5
Instrument Legibility	Can You Read Them	7.0
DRIVERS COMMENTS		

CONTROLS	CONSIDERATIONS	RATING
Steering Wheel	Size, Position	7.2
Shift Lever	Accessibility, Indicator Visibility	6.7
Knobs & Switches	Location, Visibility, Markings, Arrangement	7.0
Pedals	Location	7.0
Pedals	Size	7.0
Pedals	Spacing (Do you hit more than one pedal with boots on?)	7.0
Parking Brake	Location	7.2
Parking Brake	Method of Release.	7.2
	DRIVERS COMMENTS	•
<i>Reverse/ back up camera monit into rear-view mirror. Stereo / 2</i>	or is hardly useful in current position. Needs to be inco AC control knobs slightly out of reach.	orporated

MIRRORS	CONSIDERATIONS	RATING
Rearview Mirror	Placement	7.2
Rearview Mirror	Size	7.2
Rearview Mirror	Ease of Adjustment	7.2
Rearview Mirror	Distortion	7.2
Driver Side Mirror	Placement	7.2
Driver Side Mirror	Size	6.7
Driver Side Mirror	Ease of Adjustment	7.2
Driver Side Mirror	Distortion	7.2
Passenger Side Mirror	Placement	7.2
Passenger Side Mirror	Size	6.7
Passenger Side Mirror	Ease of Adjustment	7.2
Passenger Side Mirror	Distortion	7.2
DRIVERS COMMENTS		
Larger mirrors would be benej	ficial.	

DOORS	CONSIDERATIONS	RATING
Front Door	Ease of Ingress/Egress	7.0
Rear Door	Ease of Ingress/Egress	7.0
Window & Door Handles	Accessibility, Ease of Operation	7.5
DRIVERS COMMENTS		

REAR SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	7.5
Headroom	Adequate	7.5
Legroom	Adequate	7.5
Seatbelt	Ease of Hook-Up/Release	6.0
	DRIVERS COMMENTS	
Seat belt is extremely difficult t	o buckle with Sam Brown on.	

TRUNK	CONSIDERATIONS	RATING
Lid	Ease of Opening	7.0
Lid	Size of Opening	7.7
Compartment	Ease of Loading/Unloading	7.3
DRIVERS COMMENTS		

SLALOM	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6.2
DRIVER COMMENTS		

PARRALLEL PARK - LEVEL	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6.5
DRIVER COMMENTS		

PARRALLEL PARK – INCLINE	CONSIDERATIONS	RATING	
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	7.5	
DRIVER COMMENTS			

PARRALLEL PARK- DECLINE	CONSIDERATIONS	RATING	
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6.5	
DRIVER COMMENTS			

REAR 3-POINT TURN	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	7.0
	DRIVER COMMENTS	

#### FORD RESPONDER HYBRID SEDAN

VISIBILITY	CONSIDERATIONS	RATING
Overall Forward Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	6.7
DRIVERS COMMENTS		

"Good overall forward visibility "

VISIBILITY	RATING USING MIRRORS	RATING NOT US- ING MIRRORS	
3 o'clock Position	7.3	7.3	
4 o'clock Position	7.3	7.0	
5 o'clock Position	7.0	6.7	
6 o'clock Position	7.3	7.3	
7 o'clock Position	7.0	7.0	
8 o'clock Position	6.7	6.7	
9 o'clock Position	7.0	7.0	
DRIVERS COMMENTS			
"Good visibility in all positions"			

FRONT SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	7.0
Seat Position	Range of Adjustment	5.0
Seat Compatibility to Sam Brown	Comfort, Seatbelt Interference	6.5
Seat to Controls	Steering Wheel, Pedals, Dashboard	6.3
Headrest Position: With Hat/Helmet	Adequacy	6.0
Headrest Position: Without Hat/Helmet	Adequacy	6.7
Headroom	Adequacy	7.3
Legroom	Adequacy	7.3
Seatbelt	Ease of Hook-Up/Release	6.7
Shoulder Strap	Interference with duty gear	6.0
DRIVERS COMMENTS		
"Chances of duty gear interference with front seats/belts is apparent".		

INSTRUMENT PANEL	CONSIDERATIONS	RATING
Instrument Placement	Ease of Viewing, Are They Obstructed by the Steering Wheel or Other Components	7.3
Instrument Visibility	Can You See Them	7.3
Instrument Legibility	Can You Read Them	7.3
DRIVERS COMMENTS		
"Good instrument cluster placement and visibility"		

CONTROLS	CONSIDERATIONS	RATING
Steering Wheel	Size, Position	8.0
Shift Lever	Accessibility, Indicator Visibility	6.3
Knobs & Switches	Location, Visibility, Markings, Arrangement	6.7
Pedals	Location	7.3
Pedals	Size	7.3
Pedals	Spacing (Do you hit more than one pedal with boots on?)	7.3
Parking Brake	Location	5.3
Parking Brake	Method of Release.	5.3
DRIVERS COMMENTS		
"Parking brake location and method of release is awkward but it's a hybrid. Used to parking break at left foot or center. But it's function and configuration is ok".		

MIRRORS	CONSIDERATIONS	RATING
Rearview Mirror	Placement	8.0
Rearview Mirror	Size	8.0
Rearview Mirror	Ease of Adjustment	8.0
Rearview Mirror	Distortion	8.0
Driver Side Mirror	Placement	8.0
Driver Side Mirror	Size	6.7
Driver Side Mirror	Ease of Adjustment	7.3
Driver Side Mirror	Distortion	7.3
Passenger Side Mirror	Placement	7.3
Passenger Side Mirror	Size	6.7
Passenger Side Mirror	Ease of Adjustment	7.3
Passenger Side Mirror	Distortion	6.3
DRIVERS COMMENTS		
"Side mirrors location is appropriate. However, the size could be bigger".		
DOORS	CONSIDERATIONS	RATING
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Front Door	Ease of Ingress/Egress	7.3
Rear Door	Ease of Ingress/Egress	7.3
Window & Door Handles	Accessibility, Ease of Operation	7.3
DRIVERS COMMENTS		

REAR SEAT	CONSIDERATIONS	RATING
Seat Comfort	Overall Seat Comfort, Hip/Shoulder Room	6.7
Headroom	Adequacy	7.0
Legroom	Adequacy	7.3
Seatbelt	Ease of Hook-Up/Release	6.7
	DRIVERS COMMENTS	

TRUNK	CONSIDERATIONS	RATING
Lid	Ease of Opening	8.0
Lid	Size of Opening	8.0
Compartment	Ease of Loading/Unloading	8.0
DRIVERS COMMENTS		

SLALOM	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	7.5
DRIVER COMMENTS		
"View slightly blocked with headrest/pillars		

PARRALLEL PARK - LEVEL	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	7.5
DRIVER COMMENTS		

PARRALLEL PARK – INCLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	7.5
DRIVER COMMENTS		

PARRALLEL PARK- DECLINE	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	7.5
DRIVER COMMENTS		

REAR 3-POINT TURN	CONSIDERATIONS	RATING
Overall Backing Visibility	Ceiling Height, Dash Height, Pillar Placement, Windshield Size & Distortion	7.5
DRIVER COMMENTS		

## FUEL EFFICIENCY RESULTS

## **Regular Fuel Vehicles**

VEHICLE	AVERAGE MPG
Ford PI Sedan FWD 3.5L	17 mpg
Dodge Charger V-6 2.62	18 mpg
Ford PI Sedan AWD 3.7L	16 mpg
Ford PI Utility AWD 3.7L	15 mpg
Ford PI Sedan FWD 2.0L EcoBoost	19 mpg
Ford PI Utility AWD 3.5L EcoBoost	15 mpg
Chevrolet Tahoe PPV 4WD	16 mpg
Dodge Charger V8 3.08 AWD	15 mpg
Ford F150 4WD 3.5L EcoBoost	TBD
Chevrolet Tahoe PPV 2WD	16 mpg
Dodge Charger V8 2.62	TBD
Ford Responder Hybrid Sedan	40 mpg
Ford PI Sedan AWD 3.5L EcoBoost	15 mpg

