

EA02-025

TEXAS INSTRUMENTS, INC.'S

9/10/03

REQUEST NO. 7

BOX 10

PART A - I

PART I

Return Analysis on 77PSL2-1
10/8/99

Background:

25 switches were reported to have failed during the change-out procedure currently being conducted by Ford Dealers. These returns were all built in 1999 and supplied to Ford as part of the *Brake Repair Kit* (XW7Z-9C652-AA).

Objective:

Find any functional deficiencies with the 25 switches returned.

Visual Inspection:

Upon receipt of the 25 switches, TI did a visual inspection. Twenty-three of the switches appeared to be in like new condition. However, 2 of the switches showed obvious signs of abuse. These 2 switches appeared to have been installed or removed with pliers by applying torque to the crimp ring and base, not the hex flax. The results of this inspection are summarized below:

Indications of proper installation	17
No signs of installation	4
Improper installation techniques used	2
Damaged threads	1

Only 2 switches were returned with caps and still had brake fluid retained in the pressure cavity of the switches. We were able to obtain 2 small samples of this fluid.

It should be noted that the switches were returned with yellow tags containing information about why the switch was replaced. The tags listed the following reasons for returns:

No Description	9
Brake Fluid Leak	6
Administrative Parts Return	4
Engagement Troubles	2
Disengagement Troubles	2
ABS Warning Light	1
Other Electrical Accessory Trouble	1

Calibration and Electrical Testing:

All 25 switches were checked for actuation and release as defined by the specification. All were within specified limits.

In addition to the normal electrical parameters defined in the product specification, TI also measured current leakage from the terminal to the housing. This test was done by applying a current limited 14 Vdc power supply to the terminals of the switch. While a voltage is applied to terminal and the housing is held at ground, the current flow into the switch is measured. All switches measured 0.0 mA.

During the calibration check the switch is pressurized to 200psi with air. All switches sealed properly during this test.

Dissection:

Since no leaks were discovered, it was determined that only a sub set would be dissected and internally inspected. Removing the crimp ring and the base would allow internal inspection and direct leak check of the sensor. Six switches were selected for dissection (2 from the brake Fluid Leak group, 1 from Administrative Parts, 1 from Disengagement Troubles, 1 from other Electrical Accessory Troubles, and 1 from Brake ABS Warning Light Troubles).

TI-NHTSA 015912

The internal inspections confirmed no fluid leakage into the connector cavity, no contamination, and good electrical contacts. Further leak testing of the sensor using refrigerant and a leak detector confirmed no leakage. It is possible that brake fluid leakage may occur on the vehicle due to insufficient installation torque, contaminated threads, contaminated sealing surface, or damaged components.

Summary:

- All switches were within specification.
- No current path to ground was detected.
- No leaks were discovered.
- 2 switches were mis-handled during the install/removal cycle.

End of Document.

TI-NHTSA 016913

Sheet1

DateCode	Bid date	Veh fine	miles	location	prefix	suffix
2055	11/18/91	tc	45859			
2160	11/20/91	tc	64866			aa
1275	11/21/91	tc	89000	morgan city		bb
1123	12/4/91	tc	127911			
9142	12/11/91	tc	71900			
1279	12/18/91	tc	49298			
2005	12/18/91	tc	86015			ab
2450	12/20/91	tc	84390			
1291	1/19/92	tc	68253			bb
2114	1/23/92	tc	36755			
1382	2/8/92	tc	92573			ab
1291	2/7/92	tc	122916			bb
1312	2/10/92	tc	89329			
1312	2/12/92	tc	78785			bb
1268	2/13/92	tc	96085	all, aureka		bb
nona	2/13/92	tc	118181			
2014	2/18/92	tc	110012			
1347	2/25/92	tc	105898			
1347	2/26/92	tc	80715			
1375	3/2/92	tc	254388	i, fl. pierce		bb
1347	3/2/92	tc	88876			
3308	3/2/92	tc	118331			
1291	3/8/92	tc	69459			
1369	3/8/92	tc	70741			ab
2153	3/11/92	tc	30210			
9141	3/11/92	tc	123084			
1348	3/12/92	tc	71888			
2068	3/12/92	tc	75000			
3088	3/13/92	tc	97488			
2147	3/17/92	tc	94091			
2030	4/2/92	tc	128851			
1331	4/7/92	tc	77722			
1290	4/10/92	tc	73227			
2154	4/13/92	tc	88998			
2008	4/21/92	tc	71882			ab
2031	4/27/92	tc	132874			
2038	4/28/92	tc	84372			
9142	4/29/92	tc	96882			
1884	5/8/92	tc	93348			
1291	5/28/92	tc	118084			
2084	6/29/92	tc	89900			
2082	6/29/92	tc	100000			
2079	6/4/92	tc	54818			
9133	6/8/92	tc	60675			
1338	7/14/92	tc	83907			ab
2080	7/18/92	tc	133345			
2137	7/21/92	tc	58236	springfle	flac	aa
2082	7/23/92	tc	104341			

Sheet1

2052	8/8/92	tc	104047		
1312	8/20/92	tc	52541		bb
2063	8/20/92	tc	48696		
2062	8/28/92	tc	77800	morgan city	ab
8128	8/27/92	tc	27282		
2868	8/28/92	ta	86164		
2042	8/3/92	tc	122230		
2067	9/4/92	tc	111008		
2078	9/8/92	tc	81648		
2083	9/10/92	tc	74600	morgan city	ab
1291	9/11/92	tc	44804		
2088	9/17/92	tc	89382	morgan city	ab
2067	9/18/92	ta	83488		
2058	9/24/92	tc	33402		
1140	9/25/92	tc	40009		
1338	9/28/92	tc	10728		ab
2065	9/28/92	tc	120111		
2942	9/30/92	tc	118483	, annandale	ab
2088	10/6/92	tc	140885		
7331	10/7/92	tc	90867		
2018	10/13/92	tc	81218		
2087	10/21/92	tc	114321		
9168	10/21/92	tc	126724		
2038	11/3/92	tc	101200	morgan city	ab
2031	11/8/92	tc	88482		
2108	11/17/92	tc	131003		
2267	11/17/92	tc	64307		
1364	11/18/92	tc	186226		
1364	11/24/92	tc	83188		ab
2079	11/24/92	tc	48847		
1312	11/30/92	tc	34238	a, anahelm	bb
2043	2/24/93	cv	88840		
2038	2/25/92	ov	48835		ab
1338	2/27/92	cv	172890		ab
2112	3/2/92	ov	87782		
1382	3/4/92	ov	61242		
1308	3/6/92	ov	34308		
2084	3/8/92	ov	68887		
3028	3/8/92	ov	63288		
1350	3/24/92	cv	128354		
2038	3/24/92	ov	73888		
2043	3/24/92	cv	78847		
2281	4/2/92	ov	80546	, woodriver	ab
1140	4/6/92	ov	23845		bb
8187	4/28/92	cv	80237		ca
8142	6/1/92	ov	91174		
2038	6/4/92	ov	78940		
2108	6/6/92	ov	78128		
2043	6/7/92	cv	88888		

2014	5/18/92	cv	87619		
1289	6/16/92	cv	128043		
1312	6/16/92	cv	69272		
2106	6/17/92	cv	40771		
2138	7/2/92	cv	116189		
2139	7/2/92	cv	114877		
2137	7/28/92	cv	78822		
2153	8/19/92	cv	81517		
2147	8/25/92	cv	78386	morgan cl	72ac
2071	8/26/92	cv	68807		
1280	8/27/92	cv	68224		
2058	8/21/92	cv	38068		
1384	9/22/92	cv	46773		
9133	9/23/92	cv	68046		
2027	10/2/92	cv	47341		
2088	10/21/92	cv	88778		
2114	10/22/92	cv	68184		
1347	10/23/92	cv	68161		ab
2042	10/30/92	cv	67971		
9142	11/10/92	cv	68378		
2038	11/17/92	cv	70417		
9168	2/24/92	gm	78828		
2089	2/22/92	gm	44316		
9135	2/28/92	gm	37788		
1912	3/3/92	gm	68886		
7317	3/13/92	gm	68787		
1348	3/17/92	gm	68883		
2142	3/17/92	gm	68800		
2021	3/18/92	gm	108488		
1289	3/20/92	gm	17310		
1308	3/24/92	gm	88848		
2066	3/24/92	gm	68871		
1347	3/27/92	gm	33701		ab
1348	4/1/92	gm	68201		ab
1358	4/16/92	gm	78831		ab
2119	4/16/92	gm	78448		
1375	6/1/92	gm	48783		
2106	6/4/92	gm	157888		
2082	8/5/92	gm	81888	t, billings	ab
9142	8/7/92	gm	68838		
2082	8/20/92	gm	47881	base gone	
1281	8/21/92	gm	37881		
2113	8/23/92	gm	108807		
2016	8/8/92	gm	81612		
2031	8/8/92	gm	18881		
2120	8/8/92	gm	118320		
1384	8/10/92	gm	48878		
2115	8/11/92	gm	78882		ab
2119	8/12/92	gm	73788		

2136	6/18/92	gm	87344		
2119	6/18/92	gm	29720		
1291	6/24/92	gm	94580		bb
2137	6/26/92	gm	57547		
2064	7/1/92	gm	90792		
2058	7/1/92	gm	70823		
2137	7/7/92	gm	36001		
2137	7/10/92	gm	61458		
2154	7/20/92	gm	51076		
2180	7/30/92	gm	87138		
2187	7/31/92	gm	86104		
2089	8/10/92	gm	94090		
2118	8/11/92	gm	93484		
1331	8/14/92	gm	86879		
2083	8/14/92	gm	86893		
2089	8/18/92	gm	31827		
2080	8/18/92	gm	148889	a, spokane	ab
8126	8/20/92	gm	81742		
2168	8/21/92	gm	81282	y, karimora	2ac ab
8142	8/21/92	gm	71210		
2078	8/25/92	gm	56109		
2043	8/28/92	gm	108811		
1345	8/28/92	gm	88887		
2071	8/31/92	gm	82238	morgan city	ab
2098	9/1/92	gm	87883		
2113	9/3/92	gm	88084		
1348	9/1/92	gm	80460		ab
2048	9/8/92	gm	78188	l, ypaliant	
2119	9/16/92	gm	49574		
2082	9/21/92	gm	43474	ariz, mesa	ab
2089	10/2/92	gm	71883	, port richie	ab
1280	10/12/92	gm	88285		bb
8132	10/16/92	gm	48180		
2288	10/28/92	gm	83488		aa
1343	10/22/92	gm	87488		
2120	10/23/92	gm	89141		
2088	11/8/92	gm	83161		
1289	11/20/92	gm	77082		bb
1338	11/23/92	gm	48821		ab
1140					
1289					
1289					
1289					
1278					
1278					
1280					
1291					
1291					
1308					

1308			
1312			
1331			
1338			
1338			
1345			
1345			
1348			
1382			
1382			
1384			
1384			
1384			
1384			
1882			
1948			
2006			
2008			
2008			
2008			
2009			
2009			
2013			
2014			
2018			
2019			
2027			
2028			
2028			
2028			
2030			
2030			
2034			
2042			
2042			
2042			
2043			
2048			
2082			
2082			
2082			
2082			
2084			
2085			
2088			
2088			

2055			
2056			
2056			
2057			
2057			
2059			
2062			
2064			
2054			
2068			
2071			
2078			
2079			
2089			
2101			
2101			
2106			
2107			
2112			
2113			
2114			
2114			
2119			
2120			
2128			
2128			
2138			
2137			
2137			
2138			
2143			
2147			
2147			
2150			
2150			
2161			
2205			
2208			
2224			
2248			
2255			
2262			
2266			
2278			
2276			
2281			
3308			
4157			
7082			

7111
7317
8131
8132
8133
8133
8133
8133
8134
8138
8138
8142
8142
8148
8148
8188
8188
no08

--	--	--

--	--	--

Sheet1

DateCode	Bid date	Veh line	miles	location	prefix	suffix
1289	2/13/92	tc	98068	ariz, aurelia		bb
2052	9/21/92	gm	43474	ariz, mess		ab
1312	11/30/92	tc	34238	a, anahelm		bb
2137	7/21/92	tc	58296	, springfl	f2ac	aa
2281	4/2/92	cv	90546	l, woodriver		ab
2080	5/18/92	gm	148886	a, spokane		ab
2082	5/8/92	gm	91398	mt, billings		ab
2155	5/21/92	gm	81262	y, karamora	f2ac	aa
2089	10/2/92	gm	71863	l, port richie		ab
2042	9/30/92	tc	116483	, annandale		ab
2083	9/10/92	tc	74000	, morgan city		ab
1275	11/21/91	tc	98000	, morgan city		bb
2147	8/25/92	cv	78285	, morgan ci	f2ac	aa
2036	11/3/92	tc	101200	, morgan city		ab
2082	8/26/92	tc	77300	, morgan city		ab
2086	9/17/92	tc	59392	, morgan city		ab
2071	8/31/92	gm	66328	, morgan city		ab

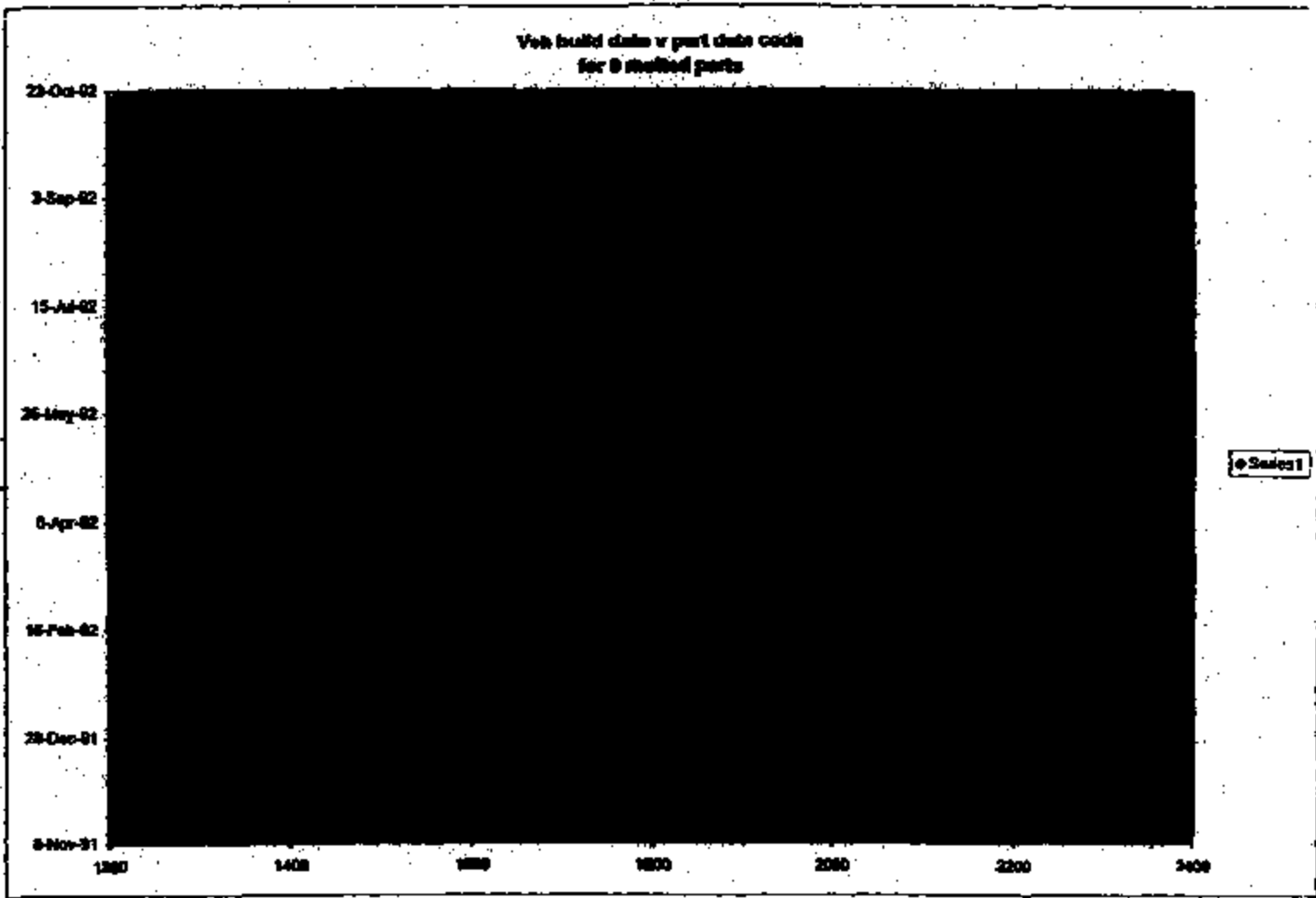
From Steve Powers at Ford

9/23/99

Show Chart 1

From Ford plot

Vol build date v part date code
for 8 studied parts



Label

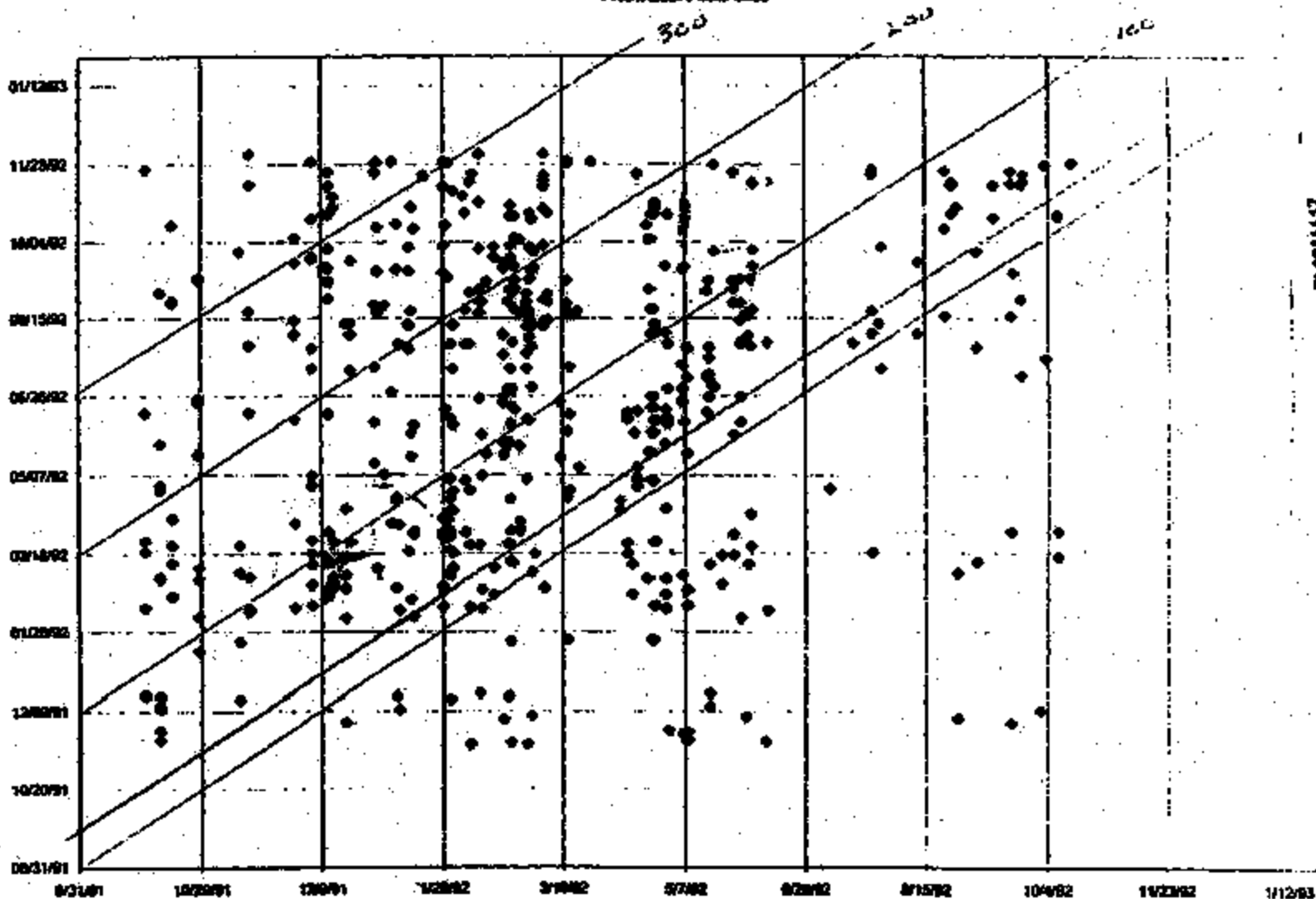
TJ001111E

TI-NHTSA 018922

Switch

From Steve Kinners
10/13/99

Prof'n Date v Date Code



TI 001117

TRANS SA 018923

Beringhaus, Steven

From: Steve Reiners [SMTP: sreiners@ford.com]
Sent: Friday, September 17, 1999 10:38 AM
To: sberinghaus@mail
Subject: Please forward to Beringhaus

This is the same email I sent to andy to forward to you.

Steve Reiners building 5 3E008
AVT Chassis E/E System Applications mail drop 5011
39-03286 SREINERS sreiners@ford.com fax 39-04148
*** Forwarding note from SREINERS--DRE007 09/17/99 08:18 ***
To: PIR43P4A--EXTERNAL A.McGuirk, a-mcgul
cc: SREINERS--DRE007 Reiners, S. J. TPORTER --DRE007 Porter, F.J.

FROM: Steve Reiners
Subject: Please forward to Beringhaus
Steve, this is a follow-up to my voice message of 9/17/99 AM. Did you get any -BB suffix parts from dealers? Analysis results on -BB parts? Were there any -BB parts in the 40 parts you gave me a preliminary report on? Have you completed any more testing on the 407 *** Of the 25 life tested parts... Do any show cracks in the terminal structure (fatigue, stress, etc) in particular the stationary terminal minimum cross-section at the thru hole? Any more testing done on the 25 parts? Your tear drop occurrence numbers show a radical drop after Feb 1992... why? Info... we have x-rayed a -BB part and are amazed by the radical design differences compared to -AB. have a good weekend, thanks.

Steve Reiners building 5 3E008
AVT Chassis E/E System Applications mail drop 5011
39-03286 SREINERS sreiners@ford.com fax 39-04148

9/22/99 - phone call with Steve Reiners - 390 parts

Cracks on two parts (knobs) one red dot parts in area
one Real part - crack -
3 BB parts off twin car
vehicle numbers 11/91 2/92 12/92
Real parts - 25 parts only
Bike date vs. date code
Speed by 102 days
now less than 56 days
4 between 100 + 50 days
120 days out to 150 days
- Did they ship calibration station back?

Based on this data the correlation to the switch change may be falling by the way side.

Phone call with Steve Remus + Steve Bronghese
9/28/99

~ 1500 parts received from field campaign

2000 in spreadsheet - no correlation between written date code
+ vehicle build date

200+ measured for terminal-terminal continuity of terminal to
case resistance

- 2 open circuit terminal to terminal

- 1 w/ 2752 resistance terminal to terminal

25 parts to be sent to TI for P/A

1999 date codes

- Ford dealers say leaks or do
not write right

- Tentative meeting set up for 10/13 to review results

TI-NHTSA 015925

Conversation with Steve Reiners 10/7/99
by Steve Berghouse

- Believes data on switch date codes + vehicle build dates is 80-90% correct.
- Agrees that there is no correlation between switch date codes + vehicle build dates.
- Switches from ^{used} fires date codes do not correlate to vehicle build date codes.
- 11 parts with melted bases found to date.
 - some have crd in the ~~base~~, some do not.
 - one part has the base fully consumed.
- up to 3000 parts in house to date.

248-305-5722
R3b
248-613-2782

Meeting at Ford 01/31/99
Steve Powers
Asst. Dir. (Environ)
Steve Beitzel

Component Drawings - BB + AB suffix
Requested by Steve late '91 - 92 drawings
each revision from '93

→ 11 called out of 1700 parts (visually inspected by hand from recall)

#8 - AA suffix - truck part - ~~came back w/ car recall~~
2030 F3TA - AA
No terminals in base - ~~XXXXXX~~

- Truck part connector keyed differently - why was this on a
- could result in poor connection - then car?
#4 - 1075B BB - suffix - lots of crud around Bay
Mating connector present + mated. 3/2/92 UM 1LWLM81
W7N7691926

#5 - 9133C Lots mated - dropped on sandy lot
3/13/92 (when cut open - inside clear)

#1 - 2263 F2AC - AA 93 pins - vic mated
9/14/92 veh. Bid date

#2 - 2262 F2AC - AA 12/2/91 ~~XXXX~~ - Bid date mated

#3 - 2052 F2AC - AB motorcycle plate covered 5/20/92 USD

#7 - F2AC - AB 2008 not mated 4/23/92 - work

#6 F2AC (2036) - AB 4/1/92 Bid date mated

#9 - BB (57B) - not mated 1280A - wet, no seal on
connector 2/20/92 USD

#10 - Semi F150 F3TA^{CA} 3298 Dealer saw smoke →
mated. Date - some SWR in bay
at bottom

148,000 miles on the vehicle 1994 Mercedes
VIN# KA 65363

#11 ~~XXXX~~ 2104 BID 3/18/92 - 1LWLM 81W1N7 699341

	<u>Sw Dk code</u>	<u>Vehicle build date</u>		<u>Resistor call</u>
①	2263	9/14/92	Melted	22
②	2262	12/2/91	Melted D&N tech	100R
③	2052	5/20/92	Melted	
④	1275	3/2/92	Melted	91R
⑤	9133	3/15/92	Melted - different?	OL
⑥	2036	4/1/92	Melted	OL
⑦	2008	4/23/92	conducting to lead?	3K
⑧	2030	12/16/91	Melted	
⑨	1280	2/20/92	conducting to lead?	90kR
⑩	3299	1994	Melted - F150	42 or OL!
⑪	2104	3/18/92	Melted	20R

7/1700^{both} melted with internal corrosion received from recall campaign.

Stk vs spring

- Spring on days passed - away from key per Ford

both melted w/ corrosion from F150
2 - Not melted w/ high conductivity to ground

~~#1 - 2400 stock - 200R to min~~

#2 - Spl. from foam seal - held pressure 500 psi for 1 min

#10 - Did not leak
#4

- All parts had fluid in the switch cavity except for #5 (looks like it was dropped on something hot).

- Fast hired Expert to help out with analysis (Rob Parick)

TI-NHTSA 018928

Phone call with
Steve Reiners 10/27/99 8:15 AM.

- Finished opening melted parts
 - chemical analysis not done yet
 - opened parts to top layer
 - all seem to have fluid between layers
- Did see on 4 or several washers
 - Top of chamber - on flat facing top part
 - discontinuity on edge - aligned with crack
 - will scan - pit or pin?
 - Single straight line in washer as identifier
 - one had two
- Sample from high mileage vehicle
 - No leakage - no moisture - good electrical function
- will send spreadsheet from melted parts
- Switch Datecodes from files:
2056, 2281, 2114, 2003, 2045, 2089,
2080,
- Seven parts for analysis from an array of datecodes
 - 2 - Feb 92, 2 - Nov 92, 2 - 1999:
 - 1 - BB's siltix
- About 6000 in house
 - 1100 logged - will send spreadsheet
- one more melted part - not in base - from 1900 (19064)

Phone call with Steve Peters 9:15 AM
11/24/99

- Central lab not yet completed chemical analysis
- Kaplan cracked on all parts with melted buses
- outside company - logging & binning parts

return of about 8000 parts back

- wishing to make sure first 1700 received is a representative population

→ Planning to run cycle life test

→ 100k miles - cycle life left
Comparing early to late dates
will TE run test?

→ Five for each group

Phone call with
Steve Rens 12/14/09

9 Ad

Pressure Cycling of Used Switches
Started 12/8/09

Look

Switch ID	Date Code	# of Cycles	
3	2015	56828	56.6k
11	2008	77837	76k
7	2014	254000	254k
8	2013	250000	240k
4	2011	294000	244k
10	2013	345000	345k
9	2008	350888	350k

Reviewed data

380k - still going - 4 at now.

Steve R's thoughts:

I don't know -

Big discrepancy 2008

Tech review meeting - Director of Quality

Present actions

- get switch out of car

- replaced switch on brake pedal

- relation to vehicle - getting mileage

- Do not have root cause yet

Agg about other platforms

- Still to be car shakes up

→ Lawrence Kim for an acid
Per Steve R. no evidence that exists that shows that switches do not meet spec
Only evidence is what TI provided that all switches meet spec

57P8L11-1	F5FF-3N824-AB	Ford	pass	575-725	200 min	180 min	black	10/27/2003	3/8-34 M	0716	Zelkner		2
57P8L12-1	88FF-3N824-BA	Ford Escape	pass	548-680	220 min	120 min	black/gray	10/27/2003	3/8-34 M	0716	Zelkner		2
57P8F3-3	87BC-3N824-AA	Ford Focus	drive	398-428	120 min	90 min	white	10/27/2003	3/8-34 M	0716	Zelkner	o-dag	3 (21)
57P8F3-6	880C-2C823-CA	Ford	drive	388-408	120 min	90 min	black	10/27/2003	3/8-34 M	0716	Zelkner	o-dag	3
57P8F3-6	F1LC-3N824-AA	Ford Focus	drive	788-808	120 min	90 min	white	10/27/2003	3/8-34 M	0716	Zelkner		3
57P8F3-7	NSK 100870	Lamborghini	drive	288-308	40 min		black	10/27/2003	3/8-34 M	0716	Zelkner	o-dag	3
57P8F6-1	8NAB-3N824-AB	Ford Escape	pass	478-625	200 min	180 min	red	10/27/2003	3/8-34 M	0716	Zelkner		3
57P8F6-3	LMA 1088AA	Jaguar	pass	478-625	200 min	180 min	red	10/27/2003	3/8-34 M	0716	Zelkner		3
57P8F6-3	40240130	Toyota Prius	pass	588-725	200 min	180 min	red	10/27/2003	3/8-34 M	0716	Zelkner		3
57P8F6-1	82AB-3N824-BA	Ford Escape	pass	578-708	200 min	180 min	purple	10/27/2003	3/8-34 M	0716	Zelkner		3
58P8F3-1	103138	Cadillac	sed	61-65	7-13		black/gray	10/27/2003	3/8-34 F	08	Zelkner	R12	3
58P8F3-2	103988	Cadillac	sed	15-25	9-15		black/gray	10/27/2003	3/8-34 F	08	Zelkner	R12	3
58P8F3-1	1084288	CPC	sed	49-67	17 min		black/gray	10/27/2003	3/8-34 F	08	Zelkner	R12	3
58P8F3-1	822888	Ford Focus	sed	48-67	37 min	3 min	black/gray	10/27/2003	3/8-34 F	1000	Zelkner	R134	3
58P8F3-1	2103824	Saturn	sed	81 min	37 min	1.5 min	black/gray	10/27/2003	3/8-34 F	08	Zelkner	R12	3
			sed	**200-228	**288-380								
59P8F3-2	8248888	Honda	sed		7-11	33.9-43.2	black/gray	10/27/2003	3/8-34 F	08	white	R12	3
59P8F3-7	82457884	GM TMB	sed	43-48	23-25	20-24	black/gray	10/27/2003	3/8-34 F	08	white	R12/ yellow band	3
59P8F3-4	82451435	GM TMB	sed	43-48	24-26	18-23	black/gray	10/27/2003	3/8-34 F	08	white	R12/ white band	3
59P8F3-6	82481440	Honda	sed	43-48	23-24	21-26	black/gray	10/27/2003	3/8-34 F	08	white	R12/ green band	3
59P8F3-6	82487883	GM TMB	sed	43-48	25-27	18-22	black/gray	10/27/2003	3/8-34 F	08	white	R12	3
59P8F3-6A	720888 2084	Audi/Audi	sed	43-48	24-26	18-23	black/gray	10/27/2003	3/8-34 F	08	white	R12	3
59P8F3-2	82483885	U van	sed	38-44	20-22	18-22	black/gray	10/27/2003	3/8-34 F	08	white	R134/ purple band	3
59P8F3-2	82484885	U van	sed	38-44	20-22	18-22	black/gray	10/27/2003	3/8-34 F	1000	black	R134/ purple band	3
59P8F3-3	82484888	S/T truck	sed	38-46	21-23	18-22	black/gray	10/27/2003	3/8-34 F	1000	black	R134/ black band	3
59P8F3-4	82483402		sed	48-48	23-24	18-22	black/gray	10/27/2003	3/8-34 F	1000	black	R134/ green band	3
59P8F3-6	82483881	Honda	sed	41-47	23-25	18-22	black/gray	10/27/2003	3/8-34 F	1000	black	R134/ yellow band	3
59P8F3-6	388830	Chrysler	sed	38-43	23-24	14-18	black/gray	10/27/2003	3/8-34 F	1000	black	R134	3
59P8F3-7	18842378	CAR Truck	sed	22-32	2-4		black/gray	10/27/2003	3/8-34 F	1000	black	R134	3

TI-NHTSA 016933

CONFIDENTIAL

81P8F4	30843	Chrysler	ice	15-25	7-13		Black/MAC	3788-8	M12x1.5 F	18mm	green	R134	
81P8F5	5248238	CAR Wash	ch	38.5-45.5	28.5-33.5	15-25	Black/MAC	3788-7	M12x1.5 F	14mm	black	R134	P
81P8F3-BA	725828 3888	Adm/Print	ch	38.5-45.5	28.5-33.5	15-25	Black/MAC	3788-7	M12x1.5 F	18mm	black	R134	P
81P8F3-12	XL234.877	GM/Print	ch	44 days	28-32	15 min	Black/MAC	3788-7	M12x1.5 F	18mm	black	R134/Steel	P
81P8F5-1	8837	Wash/Print	ch	47.14-54.4	22.65-25.38	24.88-25.8	Black/MAC	1 pc/3788-1	7/16-20 F	5/8	Zalblue	R134	P
* = GM part shown different to refer to 24 page spec.													
78P8L3-3	48844	Valve Head	type	442-488	273-308		Black/MAC	1 pc/3788-2	7/16-20 F	5/8	Zalblue	R134	P
78P8L2-2	F384-18284-AA	F384/18284-AA	type	**388-428	**280-308	100 min	Black/MAC	3 pc/3788-3	3/8-24 F	3/8	Zalblue	R12	P
78P8L5-1	8848334	Valve (P88)	type	413-457	247-334	118 min	Black/MAC	1 pc/3788-1	M12x1.5 F	18mm	Zalblue	R134/Steel	vented
78P8F3-5	48843	Valve Head	type	278-328	218-247	58 min	Black/MAC	1 pc/3788-2	7/16-20 F	5/8	Zalblue	R134	P
78P8F2-8	884884	Valve (P88)	type	388-398	334-374	58 min	Black/MAC	1 pc/3788-2	7/16-20 F	5/8	Zalblue	R12	P
78P8F4-1	1343216	Valve (P88)	ch	42.8-47.1	21.8-24.6		Black/MAC	1 pc/3788-2	M12x1.5 F	18mm	Zalblue	R134/Steel	vented
78P8F4-2	1343216	Valve (P88)	ch	42.8-47.1	21.2-26.1		Black/MAC	1 pc/3788-1	M12x1.5 F	18mm	Zalblue	R134/Steel	vented
78P8F8-1	884832	Valve (P88)	to face	247-288	174-218	58 min	Black/MAC	1 pc/3788-1	M12x1.5 F	18mm	Zalblue	R134/Steel	vented
78P8F8-2	884833	Valve (P88)	to face	247-288	174-218	58 min	Black/MAC	1 pc/3788-1	M12x1.5 F	18mm	Zalblue	R134/Steel	vented
77P8L2-1	F2AC-8P84-AB	F2AC-8P84-AB	type	88-100	28 min		Black/MAC	1 pc/3788-1	M12x1.5 F	18mm	Zalblue	vented	P
77P8L2-3	F1AC-8P84-AA	F1AC-8P84-AA	type	288-308	48 min		Black/MAC	1 pc/3788-1	M12x1.5 F	18mm	Zalblue	vented	P
77P8L3-1	F2AC-8P84-AA	F2AC-8P84-AA	type	88-100	28 min		Black/MAC	1 pc/3788-1	M12x1.5 F	18mm	Zalblue	vented	P
77P8L3-2	F2BA-8P84-AA	F2BA-8P84-AA	type	88-100	28 min		Black/MAC	1 pc/3788-1	M12x1.5 F	18mm	Zalblue	vented	P
77P8L3-3	F31A-8P84-CA	F31A-8P84-CA	type	208-308	48 min		Black/MAC	1 pc/3788-1	M12x1.5 F	18mm	Zalblue	vented	P
77P8L3-4	888 18008	Long Runer	type	288-308	48 min		Black/MAC	1 pc/3788-1	M12x1.5 F	18mm	Zalblue	vented	P
77P8L4-1	W31A-8P84-AA	W31A-8P84-AA	type	88-100	28 min		Black/MAC	1 pc/3788-1	M12x1.5 F	18mm	Zalblue	vented	P
77P8L5-2	F3DC-8P84-AA	F3DC-8P84-AA	type	88-100	28 min		Black/MAC	1 pc/3788-1	M12x1.5 F	18mm	Zalblue	vented	P
77P8L5-1	888-8P84-AB	888-8P84-AB	type	88-100	28 min		Black/MAC	1 pc/3788-1	M12x1.5 F	18mm	Zalblue	vented	P
78P8L2-1	F384-18284-AA	F384-18284-AA	type	**428-468	**328-358		Black/MAC	1 pc/3788-1	M12x1.5 F	18mm	Zalblue	R134	P
78P8L2-2	F384-18284-BA	F384-18284-BA	type	**428-468	**328-358		Black/MAC	1 pc/3788-1	M12x1.5 F	18mm	Zalblue	R134	P
78P8L2-3	4428-18284-BA	4428-18284-BA	type	**418-458	**318-348		Black/MAC	1 pc/3788-1	M12x1.5 F	18mm	Zalblue	R134	P
78P8L2-4	F384-18284-CA	F384-18284-CA	type	**468-508	**368-398		Black/MAC	1 pc/3788-1	M12x1.5 F	18mm	Zalblue	R134	P
78P8L2-5	F371-18084-AA	F371-18084-AA	type	**438-478	**338-368		Black/MAC	1 pc/3788-1	M12x1.5 F	18mm	Zalblue	R134	P
78P8L2-1	114-833	Calculator	type	48-88	18.8-22.7	4 min	Black/MAC	1 pc/3788-1	7/16-20 F	5/8	Zalblue	R134	P
			type	388-428	221-278		Black/MAC	1 pc/3788-3					P

TJ-NHTBA 018934

CONFIDENTIAL

79P502-2	114-5334	Caterpillar	help/	48 min	16.0-32.7	4 min	red/black	1 pc/37228-1	7716-20 F	5/8	Zn/olive	R134	P
79P503-1	104R3688M	Manit	help/	288-428	221-278	1.5 min	red/black	1 pc/37138-1	M10x1.25 F	14mm	Zn/olive	R134	P
79P503-2	2-37928	Signal	help/	315-295	245-275	1.5 min	red/black	1 pc/37138-1	M10x1.25 F	14mm	Zn/olive	R134	P
79P504-1	K301-378	Manit	help/	315-295	215-275	1.5 min	red/black	1 pc/37138-1	M10x1.25 F	14mm	Zn/olive	R134	P
79P504-2	2-37281	Signal	help/	350-420	265-300	1.5 min	red/black	1 pc/37138-1	M10x1.25 F	14mm	Zn/olive	R134	P
79P505-1	GD4781503	Manit	help/	388-428	285-300	1.5 min	red/black	1 pc/37138-1	M10x1.25 F	14mm	Zn/olive	R134	P
79P505-2	GD4781503	Manit	help/	388-428	285-300	1.5 min	red/black	1 pc/37138-1	M10x1.25 F	14mm	Zn/olive	R134	P
79P506-1	BJCE81983	Manit	help/	388-428	285-300	1.5 min	red/black	1 pc/37138-1	M10x1.25 F	14mm	Zn/olive	R134	P
79P506-2	BJCE81983	Manit	help/	388-428	285-300	1.5 min	red/black	1 pc/37138-1	M10x1.25 F	14mm	Zn/olive	R134	P
79P507-1	10000484	GM Truck	help/	328-358	248 min	28 min	black/green	37088-7	M12x1.5 F	16mm	black	R134	P
79P507-2	P83CAA-3004-01	Signal	help/	328-358	248 min	28 min	black/green	37088-7	M12x1.5 F	16mm	black	R134	P
79P507-3	GD4781503	Manit	help/	328-358	248 min	28 min	black/green	37088-7	M12x1.5 F	16mm	black	R134	P
79P507-4	P83CAA-3004-01	Signal	help/	328-358	248 min	28 min	black/green	37088-7	M12x1.5 F	16mm	black	R134	P
79P508-1	39473833	Manit	help/	48-48	22-24	18-21	black/green	37088-7	M12x1.5 F	16mm	black	R134	P
79P508-2	GD7491804	Manit	help/	48-48	21.5-24.5	18-21	black/green	37088-7	M12x1.5 F	16mm	black	R134	P
79P508-3	F27-1882	Manit	help/	48-48	21-23	18-21	black/green	37088-7	M12x1.5 F	16mm	black	R134	P
79P508-4	32478833	Manit	help/	48-48	22-24	18-21	black/green	37088-7	M12x1.5 F	16mm	black	R134	P
79P508-5	62483885	Manit	help/	48-48	21-23	18-21	black/green	37088-7	M12x1.5 F	16mm	black	R134	P
79P508-6	15035884	GM Truck	help/	41-47	23-25	18-22	black/green	37088-7	M12x1.5 F	16mm	black	R134	P
79P509-1	62483885	Manit	help/	41-47	23-25	18-22	black/green	37088-7	M12x1.5 F	16mm	black	R134	P
79P509-2	62483885	Manit	help/	41-47	23-25	18-22	black/green	37088-7	M12x1.5 F	16mm	black	R134	P
79P509-3	P83CAA-3004-01	Signal	help/	41-47	23-25	18-22	black/green	37088-7	M12x1.5 F	16mm	black	R134	P
79P509-4	2-37928	Signal	help/	41-47	23-25	18-22	black/green	37088-7	M12x1.5 F	16mm	black	R134	P
79P509-5	GD7491804	Manit	help/	41-47	23-25	18-22	black/green	37088-7	M12x1.5 F	16mm	black	R134	P
79P509-6	F27-1882	Manit	help/	41-47	23-25	18-22	black/green	37088-7	M12x1.5 F	16mm	black	R134	P
79P509-7	F27-1882	Manit	help/	41-47	23-25	18-22	black/green	37088-7	M12x1.5 F	16mm	black	R134	P
79P509-8	32478833	Manit	help/	41-47	23-25	18-22	black/green	37088-7	M12x1.5 F	16mm	black	R134	P
79P509-9	62483885	Manit	help/	41-47	23-25	18-22	black/green	37088-7	M12x1.5 F	16mm	black	R134	P
79P509-10	15035884	GM Truck	help/	41-47	23-25	18-22	black/green	37088-7	M12x1.5 F	16mm	black	R134	P
82P501-1	82483885	Manit	help/	315-295	170 min	77 min	black/green	37088-7	M12x1.5 F	16mm	black	R134	P
82P501-2	82483885	Manit	help/	243-277	114 min	67 min	black/green	37088-7	M12x1.5 F	16mm	black	R134	P
82P502-1	300833	Chrysler	help/	15-25	7-12		black/green	37088-7	M12x1.5 F	16mm	black	R134	P

TI-NHTSA 018936

CONFIDENTIAL

82P8F2-3	309052	Chrys coach	etc	38-43	23-25	14-18	beige/LC	37080-6	M12x1.5F	10mm	neutral	R134	
82P8F2-3	309081	Chrys coach	etc	38-34	21.5-19.5		beige/LC	37080-7	M12x1.5F	10mm	neutral	R134	P
82P832-1	5E18390C	Chrys coach	hwy	23-37	20-33	1.5 min	grey/AC	1pc37120-1	M10x1.25F	14mm	black	R134	P
			hwy	**450-490	**270-330								
82P8L2-1	4773190	Chrys coach	hwy	**450-490	**270-330		black/LC	1pc38040-6	M10x1.25F	14mm	black	R134	P
84P8F2-1	D480712AA	Chrysler	etc	15-25	7-13		dk grey/LC	37080-6	M12 X 1.5 F	10mm	green	R134/acidic	MY98
84P8F2-2	D480713AA	Chrysler	etc	24-38	21-23		dk grey/LC	37080-7	M12 X 1.5 F	10mm	black	R134/acidic	MY98
84P8F2-3	D480714AA	Chrysler	etc	24-38	19.5-22		dk grey/LC	37080-7	M12 X 1.5 F	10mm	black	R134/acidic	MY98
84P8F2-4	D480715AA	Chrysler	etc	24-38	23-24		dk grey/LC	37080-7	M12 X 1.5 F	10mm	black	R134/acidic	MY98
84P8F2-5	D480773AA	Chrysler	etc	38-43	29-38		dk grey/LC	37080-7	M12 X 1.5 F	10mm	black	R134/acidic	MY98
84P8F2-6	D480774AA	Chrysler	etc	15-25	5-8.5		dk grey/LC	37080-6	M12 X 1.5 F	10mm	black	R134	MY98
84P8F3-1	D480710AA	Chrysler	etc	195-238	148 min		white/AC	38040-6	M10 X 1.25F	14mm	black	R134	P
84P8L2-1	D480717AA	Chrysler	hwy	450-490	270-330		black/LC	38040-6	M10 X 1.25F	14mm	black	R134	MY98
87P8L2-2	F37A-3M24-AA	ASPTD	per city	200-400	120 min	50 min	grey	27200-3	38-34 M	818	Zelclear	o-ring	P
87P8L2-3	F37A-3M24-AA	ASPTD	per city	200-400	120 min	50 min	grey	27200-3	38-34 M	818	Zelclear	o-ring	P
87P8L2-4	X4ND-3M24-AA	ASPTD	per city	200-400	120 min	50 min	black	27200-3	38-34 M	818	Zelclear	o-ring	sp7230
87P8L2-5	A0000	PTD	per city	200-400	120 min	50 min	white	27200-3	38-34 M	818	Zelclear	o-ring	P
87P8L11-2	94P-3M24-AA	Ford-Gump	per city	400-500	200 min	100 min	grey/ptd 1	o-ring/ptd/20017-1	38-34 M	818	Zelclear	o-ring	P
87P8L11-4	T8D	Ford	per city	200-300	120 min	50 min	grey	o-ring/ptd/20017-1	38-34 M	818	Zelclear	o-ring	P
89P8F2-1	L88761-6120	ZIA (S&W)	per city	200.0-400.7		112.0 min	grey	o-ring/37101	M14x1.0 8g M	17 mm	brass	33' clamp	P
89P8F2-2	L88761-6000	ZIA (S&W)	per city	200.0-327.3		112.0 min	grey	o-ring/37101	M14x1.0 8g M	17 mm	brass		P
89P8F2-3	75422-4A001	ITA (S&W)	per city	200.0-327.3		112.0 min	grey	o-ring/37101	M14x1.0 8g M	17 mm	brass		P
89P8F2-4	L88761-3070	ZIA (S&W)	per city	200.0-400.7		112.0 min	grey	o-ring/37101	M14x1.0 8g M	17 mm	brass		o (S&W)
89P8F2-5	L88761-6001	ZIA (S&W)	per city	200.7-38		112.0 min	grey	o-ring/37101	M14x1.0 8g M	17 mm	brass	short piece/ 33'	P
89P8F3-1	L88761-6C10	ZIA (S&W)	per city	312.0-811.0		112.0 min	black/white	o-ring/37101	M14x1.0 8g M	17 mm	brass	long interval	P
89P8F3-2	L88761-7501	ZIA (S&W)	per city	200.0-400.7		112.0 min	black/white	o-ring/37101	M14x1.0 8g M	17 mm	brass		o (S&W)
89P8F3-3	L88761-6F10	ZIA (S&W)	per city	312.0-811.0		112.0 min	grey	o-ring/37101	M14x1.0 8g M	17 mm	brass	33' clamp	P
89P8L2-1	1000000	AKTP	AFB	1000-1700	800 min		grey	o-ring/27200-3	38-34 M	818	Zelclear	ATF	P
89P8L2-2	1000000	AKTP	AFB	1000-1700	800 min		grey	o-ring/27200-3	38-34 M	818	Zelclear	ATF	MY98
89P8F3-1	2000000	Deotec	per city	200.0-400.0		112.0 min	black/white	o-ring/37101	M14x1.0 8g M	17 mm	Al	shorter = A.	P
89P8F3-2	2000000	Deotec	per city	200.0-400.0		112.0 min	black/white	o-ring/37101	M14x1.0 8g M	17 mm	Al	shorter = B.	NP
89P8L2-1	4000000	Chrysler (LH)	per city	300-400	170 min	50 min	black/white	o-ring/37101	M14x1.0 8g M	17 mm	brass		o (S&W)
89P8L2-1	8000-3M24-AB	Ford	per city	430-530	300 min	50 min	black/white	o-ring/27200-3	M12x1.75 8g M	19 mm	brass	green cap	P

T-AMTSA 016936

CONFIDENTIAL

33PBL2-2	99AB-3N624-BA	Food	per pkg	290-380	240 min	60 min	blacktop	Orig/28017h	M12X1.75 Qg M	19 mm	Black	natural cap	MY99
33PBL2-3	99AB-3N624-CB	Food	per pkg	330-430	240 min	60 min	blacktop	Orig/28017h	M12X1.75 Qg M	19 mm	Black	orange cap	P
33PBL3-1	99AB-3N624-CA	Food	per pkg	280-380	120 min	60 min	blacktop	Orig/74801h	38-24 LMF-2A	19 mm	Black	no cap	MY99
33PBL3-2	99AB-3N624-CC	Food	per pkg	330-430	240 min	60 min	blacktop	Orig/74801h	38-24 LMF-2A	19 mm	Black	no cap	P
33PBL4-1	40842888	Dayco (Food)	per pkg	580-725		1:10-200	blacktop	Orig/74801h	38-24 LMF-2A	19 mm	Black	no cap	cap11/99
28072	108P8	TI Holland	spec	132.5-238.5	137.5-238.5		N/A	37x33	6019 x 1.0		Zn/yellow		688

TI-NHTSA 016837

CONFIDENTIAL

8-4-13
24-SEP-81

CPB AUG 1993

CONFIDENTIAL

CUSTOMER	DEVICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
FORD	CPB L2-3													
	MB	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
	LIGHT TRUCK	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	
	VEH	4	0	0	0	0	0	0	0	0	0	0	0	4
	ME	0	0	0	0	0	0	0	0	0	0	0	0	0
FORD	CPB L3-3													
	MB	35.3	41.7	34.4	44.1	38.3	45.1	38.4	25.4	31.4	31.0	41.0	34.0	344
	LIGHT TRUCK	2.35	2.34	2.35	2.35	2.34	2.35	2.35	2.35	2.35	2.35	2.35	2.35	
	F-BUSSES/ BUSES/PVRS	68	78	127	109	138	104	138	60	130	139	97	88	1283
	ME	127	189	138	104	138	60	130	120	97	83	99	99	1300
FORD	CPB L2-1													
	MB	20.5	19.2	28.4	22.1	17.1	24.2	21.7	21.4	22.4	22.4	21.2	22.2	247
	PASSENGER TRUCKS/PVRS/ BUSES	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	
	VEH	48	42	48	49	28	58	48	38	38	38	49	49	590
	ME	43	49	38	58	48	30	30	30	19	49	49	49	401
FORD	CPB L3-1													
	MB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	2.4	3.5	2.5	3.5	14
	PASSENGER TRUCKS	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	
	VEH	0	0	0	0	0	0	0	4	4	4	4	4	37
	ME	0	0	0	0	0	0	4	4	4	4	4	4	37
FORD	CPB L3-2													
	MB	1.4	2.1	3.3	1.7	1.4	0.7	0.0	1.8	1.8	1.5	1.5	1.5	20
	PASSENGER TRUCKS	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	
	VEH	4	9	19	5	7	2	0	4	4	4	4	4	38
	ME	18	3	7	2	0	4	4	4	4	4	4	4	54
FORD	CPB L4-1													
	AUSTRALIA PASSENGER TRUCKS	0.0	0.0	0.5	0.5	0.4	0.0	0.7	1.5	1.5	1.5	1.5	1.5	10
	CPBT	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	
	VEH	0	0	1	1	1	0	2	4	4	4	4	4	26
	ME	1	1	1	0	2	4	4	4	4	4	24	4	32
FORD	CPB L4-1													
	AUSTRALIA PASSENGER TRUCKS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
	FALCON	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	
	VEH	0	0	0	0	0	0	0	0	0	0	0	0	0
	ME	0	0	0	0	0	0	0	0	0	0	0	0	0
FORD	CPB L3-2													
	MB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5
	LIGHT TRUCK	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	
	VEH	0	0	0	0	0	0	0	0	0	0	0	0	12
	ME	0	0	0	0	0	0	0	0	0	12	4	4	23
TOTAL	CPB													
	MB	99.1	64.8	64.4	70.4	78.2	73.0	91.0	54.4	78.8	79.9	68.7	49.7	642.7
FORD	ME	137	138	201	164	183	144	188	126	184	186	110	112	2008
	ME	201	144	188	154	188	126	184	184	110	142	177		2094

TI-NHTSA 015938

8-4-93

2-10-94

COPS MAIS 1994

CONFIDENTIAL

CUSTOMER	DEVICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
FORD	COPS L2-3													
	MID	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
	LIGHT TRUCK	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	0
	W/ISS	0	0	0	0	0	0	0	0	0	0	0	0	0
FORD	COPS L3-1													
	MID	42.4	42.4	42.4	42.4	37.1	37.1	63.9	71.2	71.2	71.2	71.2	71.2	676
	LIGHT TRUCK	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	0
	F-SERIES/ BRIDGES/W/ISS	100	110	110	110	80	80	132	140	140	140	140	140	1395
FORD	COPS L2-1													
	MID	27.2	27.2	27.2	27.2	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	322
	PASSENGER CAR	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	0
	EXC/PRIO/ PICK	46	46	46	46	53	53	53	53	53	53	53	53	712
FORD	COPS L3-1													
	MID	2.9	2.2	2.2	2.2	2.6	2.6	2.6	2.9	2.9	2.9	2.9	2.9	34
	PASSENGER CAR	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	0
	EXC	7	7	7	7	6	6	6	7	7	7	7	7	81
FORD	COPS L3-2													
	MID	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	18
	PASSENGER CAR	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	0
	SUV	4	4	4	4	4	4	4	4	4	4	4	4	52
FORD	COPS L5-1													
	MID	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	18
	PASSENGER CAR	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	0
	CAPRI	4	4	4	4	4	4	4	4	4	4	4	4	45
FORD	COPS L4-1													
	MID	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	18
	PASSENGER CAR	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	0
	PAJERO	4	4	4	4	4	4	4	4	4	4	4	4	45
FORD	COPS L3-1													
	MID	2.0	9.8	9.8	9.8	10.5	10.5	10.5	12.4	12.4	12.4	12.4	12.4	124
	LIGHT TRUCK	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	0
	W/ISS	7	23	23	23	25	25	25	27	28	28	28	28	292
TOTAL	COPS													
	MID	71.9	93.6	93.6	93.6	73.6	73.6	103.4	117.3	117.3	117.3	117.3	117.3	1309.9
	W/ISS	184	218	218	218	183	183	244	274	274	274	274	274	2822
	W/ISS	218	218	183	183	244	274	274	274	274	274	274	274	3943

TI-NHTSA 015839

CONFIDENTIAL

02-JUN-84

CCPS RUGS 1992

CUSTOMER	DEVICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
FORD	CCPS L2-3													
	MUD	9.0	7.9	13.0	9.7	10.4	6.3	6.3	7.4	7.4	7.4	8.0	8.0	102
	LIGHT TRUCK	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	226
VW	MSB	12	17	30	21	23	14	14	16	16	16	16	16	226
	MSE	30	21	22	14	14	16	16	16	16	16	16	16	222
	FORD	CCPS L3-3												
LIGHT TRUCK	MUD	8.1	8.0	1.0	8.0	8.0	26.2	26.2	30.0	30.0	30.0	40.3	40.3	325
	ASP	2.26	2.26	7.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	509
	F-SERIES/ BRONCO	0	0	0	0	0	59	59	70	70	70	91	91	611
MSE	0	0	0	59	59	70	70	70	91	91	91	91	611	
	FORD	CCPS L2-1												
	PASS CAR	MUD	30.1	59.2	31.6	26.3	16.9	11.3	11.3	12.7	12.7	12.7	13.7	13.7
ASP		2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	567
ENS1/PW10/ PW16		84	122	70	59	37	25	25	28	28	28	30	30	421
MSE	70	59	17	25	25	28	28	28	30	30	30	30	421	
	FORD	CCPS L3-1												
	PASS CAR	MUD	8.0	8.0	8.0	13.1	10.5	12.0	12.0	15.3	15.3	15.3	15.3	15.3
ASP		2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	315
ENS3		0	0	0	37	44	30	30	36	36	36	36	36	308
MSE	0	31	44	36	30	36	36	36	36	36	36	36	36	308
	FORD	CCPS L3-2												
	PASS CAR	MUD	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
ASP		2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	35
ENS		0	0	0	0	0	6	6	6	6	6	6	6	46
MSE	0	0	0	0	6	6	6	6	6	6	6	6	6	46
	TOTAL	CCPS												
	MUD	47.9	63.1	45.6	40.3	45.0	56.5	50.5	60.2	60.2	60.2	79.2	79.2	729.0
FORD		MSB	166	139	181	121	106	120	134	150	150	181	181	1632
MSE		181	181	184	120	130	156	156	156	181	181	181	181	1769

FORD 2 1/2 TON 4x4
 2 1/2 TON 4x4 1992 1/1/84
 FORD TOWN CAR
 1992 2/1/84 10/1/84 10/1/84

27-May-91

CCPS MADE 1991

CONFIDENTIAL

CUSTOMER	DEVICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
FORD	CCPS													
	MINI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	2.4	9.9	9.5	9.9	34
	LIGHT TRUCK	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	2.21	2.21	2.21	
	MINI	0	0	0	0	0	0	0	0	0	21	21	21	79
	MINI	0	0	0	0	0	0	0	21	21	21	23	23	125
FORD	CCPS													
	PASSENGER CAR	0.0	0.0	0.0	0.0	0.0	0.0	9.0	9.0	9.0	24.4	24.4	24.4	101
	MINI	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	2.21	2.21	2.21	
	MINI	0	0	0	0	0	0	20	20	20	54	54	54	208
	MINI	0	0	0	0	20	20	20	54	54	54	54	54	337
<hr/>														
TOTAL	CCPS													
	MINI	0.0	0.0	0.0	0.0	0.0	0.0	9.0	11.4	11.4	34.1	34.1	34.1	134.4
	MINI	0	0	0	0	0	0	20	36	36	79	79	79	327
	MINI	0	0	0	0	0	36	36	79	79	79	77	78	432

TI-NHTSA 015941

CONFIDENTIAL

AME 1

Part number	MO DATE	02-93	03-93	04-93	3RD QTR	05-93	06-93	07-93	3RD QTR	08-93	09-93	10TH QTR	1994			11TH QTR	
		APR	MAY	JUN	TOTAL	JUL	AUG	SEP	TOTAL	OCT	NOV	DEC	TOTAL	JAN	FEB	MAR	TOTAL
2.21	779L2-3 MO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	DELTA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.26	779L2-3 MO	47.6	45.3	36.3	129.2	31.3	43.3	43.3	117.9	42.4	45.0	45.0	132.4	42.0	42.0	42.0	126.0
	999	46.1	50.3	45.1	141.5	36.1	43.3	43.3	122.7	42.4	45.0	45.0	132.4	42.0	42.0	42.0	126.0
	DELTA	1.5	-4.9	-8.8	-12.3	-24.8	0.0	0.0	-4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3.21	779L2-1 MO	21.4	19.6	21.5	62.5	21.5	24.2	34.0	80.7	25.0	25.0	25.0	75.0	25.0	25.0	25.0	75.0
	999	21.1	17.1	25.1	63.3	21.7	24.2	34.0	80.7	25.0	25.0	25.0	75.0	25.0	25.0	25.0	75.0
	DELTA	0.3	2.5	-3.6	-0.8	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.21	779L2-1 MO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	DELTA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.77	779L2-3 MO	1.3	2.2	1.3	4.8	1.3	1.3	1.3	4.9	1.5	1.5	1.5	4.5	1.5	1.5	1.5	4.5
	999	1.7	2.4	0.7	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	DELTA	-0.4	-0.2	0.6	0.0	1.3	1.3	1.3	4.9	1.5	1.5	1.5	4.5	1.5	1.5	1.5	4.5
2.77	779L2-1 MO	0.3	0.0	1.5	2.8	1.5	1.5	1.5	4.5	1.5	1.5	1.5	4.5	1.5	1.5	1.5	4.5
	999	2.1	1.2	0.0	3.3	0.7	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	DELTA	-1.8	-1.2	1.5	-0.5	0.8	1.5	1.5	4.8	1.5	1.5	1.5	4.5	1.5	1.5	1.5	4.5
779L2-1	MO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	DELTA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
779L2-0	MO	94.1	25.0	22.0	141.1	94.0	100.0	95.0	289.0	125.0	100.0	115.0	340.0	120.0	120.0	120.0	360.0
	999	22.9	25.2	22.3	70.4	70.4	70.4	70.4	213.4	70.4	70.4	70.4	211.2	70.4	70.4	70.4	211.2
	DELTA	71.2	-0.2	-0.3	70.7	23.6	29.6	24.6	215.6	54.6	29.6	44.6	268.8	49.6	49.6	49.6	248.8
779 707	MO	71.0	67.3	63.0	201.3	163.0	170.5	173.3	506.8	170.4	170.0	166.0	506.4	160.0	160.0	160.0	480.0
	999	72.0	71.0	72.0	215.0	132.0	132.0	132.0	379.0	132.0	132.0	132.0	396.0	132.0	132.0	132.0	396.0
	DELTA	-1.0	-3.7	-9.0	-13.7	31.0	38.5	41.3	127.8	38.4	38.0	34.0	110.4	28.0	28.0	28.0	84.0

JUNE 15, 1993
Zabrowski

CCPS NUM 1993

CONFIDENTIAL

CUSTOMER	DEVICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
FORD	CCPS L2-1													
	NLS	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
	LIGHT TRUCK	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	26
	WES	0	0	0	0	0	0	0	0	0	0	0	0	0
FORD	CCPS L3-3													
	NLS	35.3	41.7	54.4	46.1	39.3	38.7	34.7	43.9	43.9	43.4	42.1	42.1	529
	LIGHT TRUCK	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	28
	F-SERVICE	81	95	127	106	139	91	91	109	109	103	99	94	1347
WINDS/WES	127	104	132	91	91	103	102	109	99	99	99	94	1244	
FORD	CCPS L3-1													
	NLS	20.5	19.2	28.4	22.1	17.1	19.7	19.7	22.4	22.4	22.4	22.2	22.2	259
	PAGE CAR	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	27
	WES/PRIOR	47	42	43	44	39	44	44	50	50	50	49	47	571
WES	53	49	38	44	44	50	50	50	49	49	49	47	592	
FORD	CCPS L3-1													
	NLS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
	PAGE CAR	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	28
	WES	0	0	0	0	0	0	0	0	0	0	0	0	0
WES	0	0	0	0	0	0	0	0	0	0	14	14	29	
JED	CCPS L3-2													
	NLS	1.4	2.1	3.9	1.7	2.4	1.9	1.5	1.5	1.5	1.5	1.5	1.5	22
	PAGE CAR	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	36
	WES	4	9	10	5	7	4	4	4	4	4	4	4	65
WES	10	5	7	4	4	4	4	4	4	4	4	4	60	
FORD	CCPS L4-1													
	AUSTRALIA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
	PAGE CAR	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	30
	CARRI	0	0	1	1	1	4	4	4	4	4	4	4	30
WES	1	1	1	4	4	4	4	4	4	4	4	4	63	
FORD	CCPS L4-1													
	AUSTRALIA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
	PAGE CAR	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	30
	FALCON	0	0	0	0	0	0	0	0	0	0	0	0	0
WES	0	0	0	0	0	0	0	0	0	0	0	0	0	
FORD	CCPS L3-2													
	NLS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
	LIGHT TRUCK	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	28
	WINDS	0	0	0	0	0	0	0	0	0	0	0	0	0
WES	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL	CCPS													
FORD	NLS	59.1	64.6	86.4	76.1	78.2	61.4	61.4	69.2	69.2	69.2	67.4	67.4	843.3
	WES	137	150	291	144	183	143	143	181	181	181	197	204	1945
	WES	201	149	183	143	143	161	161	161	167	204	203	177	2059

TI-NHTSA 015943

CONFIDENTIAL

LIGHT TRUCK L2-3

ECONLINE	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57
F-SERIES	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70
INVOICD	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
ECONLINE			13.5	14.0	14.0	14.0	13.5	14.0	14.0	14.0	14.0	14.0
F-SERIES			43.1	50.7	50.8	50.8	41.1	41.1	41.1	44.3	44.3	44.3
INVOICD			2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.4	2.4	2.4
ECONLINE			4.4	9.4	9.4	7.4	7.7	8.0	8.0	9.1	9.1	9.1
F-SERIES			30.3	35.7	35.5	35.5	28.9	28.9	28.8	32.4	32.4	32.4
INVOICD			1.9	2.2	2.3	2.2	2.0	2.0	2.0	2.3	2.3	2.3
TOTAL			41.0	47.5	47.5	47.5	39.5	38.7	38.7	43.8	43.8	43.8

PASSENGER L2-1

EN3-F	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65
EN3-L/H	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65
EN3-F			6.0	9.2	9.5	9.5	7.5	7.5	7.5	8.5	8.5	8.5
EN3-L/H			6.5	10.5	10.5	10.5	8.5	8.5	8.5	9.5	9.5	9.5
EN3-F	0.0	0.0	3.9	4.2	4.2	4.2	4.9	4.9	4.9	5.5	5.5	5.5
EN3-L/H	0.0	0.0	4.2	4.0	4.0	4.0	5.5	5.5	5.5	6.2	6.2	6.2
TANK CAP			18.6	13.4	13.4	13.4	11.1	9.3	9.3	10.7	10.7	10.7
MARK VIII			2.4	3.0	3.0	3.0	3.0	2.4	2.4	2.7	2.7	2.7
TOTAL			18.7	25.4	26.4	26.4	21.5	19.7	19.7	22.4	22.4	22.4

PASSENGER L3-1

EN3-F	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
EN3-L/H	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
EN3-F			4.0	9.5	9.5	9.5	7.5	7.5	7.5	8.5	8.5	8.5
EN3-L/H			4.5	10.5	10.5	10.5	8.5	8.5	8.5	9.5	9.5	9.5
EN3-F			2.1	3.0	3.0	3.0	2.4	2.4	2.4	2.0	2.0	2.0
EN3-L/H			2.3	3.7	3.7	3.7	3.0	3.0	3.0	3.3	3.3	3.3
TOTAL			4.4	7.0	7.0	7.0	5.4	5.4	5.4	6.3	6.3	6.3
END L3-2			1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

SUBTOTALS L2-3

EN3-F	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65
EN3-L/H												
EN3-F			6.0	9.2	9.5	9.5	7.5	7.5	7.5	8.5	8.5	8.5
EN3-L/H			6.5	10.5	10.5	10.5	8.5	8.5	8.5	9.5	9.5	9.5
EN3-F			3.9	4.2	4.2	4.2	4.9	4.9	4.9	5.5	5.5	5.5
EN3-L/H			4.2	4.0	4.0	4.0	5.5	5.5	5.5	6.2	6.2	6.2
TANK CAP			18.6	13.4	13.4	13.4	11.1	9.3	9.3	10.7	10.7	10.7
MARK VIII			2.4	3.0	3.0	3.0	3.0	2.4	2.4	2.7	2.7	2.7
TOTAL			18.7	25.4	26.4	26.4	21.5	19.7	19.7	22.4	22.4	22.4

TI-NHTSA 015844

CONFIDENTIAL

14-Feb-75

CCPS AIDS (197)

CUSTOMER	DEVICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
FORD	CCPS L2-3													
	MID	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
	LIGHT TRUCK	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	
	VAN	4	0	0	0	0	0	0	0	0	0	0	0	4
		0	0	0	0	0	0	0	0	0	0	0	0	0
FORD	CCPS L3-3													
	MID	35.3	42.6	47.6	47.6	38.5	38.5	38.5	42.4	45.4	45.4	41.1	41.1	381
	LIGHT TRUCK	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	
	P-SERVICE/	83	104	112	112	91	91	91	102	102	102	97	97	1183
	BRONCO/VAN	112	112	91	91	91	102	102	102	97	97	97	97	1192
FORD	CCPS L3-1													
	MID	28.5	24.0	24.4	24.4	21.5	21.5	21.5	24.2	24.2	24.2	22.2	22.2	279
	PASS CAR	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	
	DIS3/PAL/	49	52	58	58	48	48	48	53	53	53	49	49	614
		38	38	42	48	48	53	53	49	49	49	49	616	
FORD	CCPS L3-1													
	MID	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
	PASS CAR	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	
	DIS	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	14	14	29	
FORD	CCPS L3-2													
	MID	1.4	2.9	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	19
	PASS CAR	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	
	DIS	4	4	4	4	4	4	4	4	4	4	4	4	34
		4	4	4	4	4	4	4	4	4	4	4	52	
FORD	CCPS L4-1													
	AUSTRALIA	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	11
	PASS CAR	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	
	CARRI	0	0	0	0	0	4	4	4	4	4	4	4	26
		0	0	0	4	4	4	4	4	4	26	4	56	
FORD	CCPS L4-1													
	AUSTRALIA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
	PASS CAR	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	
	FALCON	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0	
FORD	CCPS L3-2													
	MID	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20
	LIGHT TRUCK	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	
	4 DOOR	0	0	0	0	0	0	0	0	0	0	0	47	47
		0	0	0	0	0	0	0	0	47	44	44	190	
TOTAL	CCPS													
	MID	99.2	69.5	75.5	75.5	61.5	62.0	62.0	70.4	70.4	75.4	64.3	64.3	831.4
FORD	MID	137	162	175	175	143	146	146	164	164	164	154	291	1932
	MSE	175	175	145	145	146	144	144	164	154	201	237	225	2125

TI-NHTSA 016945

15A3
20-Nov-81

CONFIDENTIAL

CCPS VMS 1983

CUSTOMER	DEVICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
FORD	CCPS L2-1													
	MINI	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
	LIGHT TRUCK	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2
	WIND	0	0	0	0	0	0	0	0	0	0	0	0	0
FORD	CCPS L3-3													
	MINI	41.0	42.0	42.0	42.0	34.6	34.6	34.6	39.0	39.0	39.0	41.1	41.1	473
	LIGHT TRUCK	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	1116
	F-SERIES/ BRANCH/WIND	90	101	101	101	82	82	82	92	92	92	97	97	1111
FORD	CCPS L2-1													
	PASS CAR	21.4	25.0	25.0	25.0	20.0	20.0	20.0	23.4	23.4	23.4	23.1	23.1	272
	MINI	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	600
	WIND/WINDY	47	53	53	53	46	46	46	52	52	52	51	51	600
FORD	CCPS L3-1													
	PASS CAR	4.0	6.0	6.0	6.0	5.1	5.1	5.1	5.7	5.7	5.7	5.2	5.2	66
	MINI	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	193
	DIST	11	14	14	14	12	12	12	14	14	14	12	12	194
FORD	CCPS L5-2													
	PASS CAR	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	18
	MINI	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	52
	WIND	4	4	4	4	4	4	4	4	4	4	4	4	52
FORD	CCPS L4-1													
	AUSTRALIA	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	11
	PASS CAR	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	26
	CAPT	0	0	0	0	0	0	0	0	0	0	0	0	26
FORD	CCPS L4-1													
	AUSTRALIA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
	PASS CAR	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	0
	FALCON	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CCPS														
	MINI	71.2	75.3	75.3	75.3	62.0	63.5	63.5	71.1	71.1	71.1	72.4	72.4	844.0
FORD	MINI	165	175	175	175	144	140	140	165	165	165	168	168	1961
	WIND	175	175	144	140	140	165	165	165	160	160	193	160	1901
	WINDY													

CONFIDENTIAL

10-04c-02

CCPS ANNU 1999

CUSTOMER	DEVICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
FORD	CCPS L2-3													
	HUB	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2
	LIGHT TRUCK	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	
	W/SB	4	0	0	0	0	0	0	0	0	0	0	0	4
	WSE	1	0	0	0	0	0	0	0	0	0	0	0	1
FORD	CCPS L3-3													
	HUB	41.1	42.0	42.0	42.0	34.6	34.6	34.6	39.9	39.0	39.0	41.1	41.1	477
	LIGHT TRUCK	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	
	F-SERIES/ BRONCO/W/SB	90	101	101	101	82	82	82	92	92	92	97	97	1116
	WSE	101	101	82	82	82	82	92	92	97	97	97	97	1110
FORD	CCPS L2-1													
	HUB	12.5	14.0	14.0	14.0	11.9	11.9	11.9	12.9	12.9	12.9	13.6	13.6	155
	PASS CAR	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	
	ENV3/P/W/SB/ P/W/SB	20	31	31	31	25	25	25	20	20	20	30	30	342
	WSE	11	31	25	25	25	20	20	20	30	30	30	30	343
FORD	CCPS L3-1													
	HUB	13.7	17.0	17.0	17.0	14.5	14.5	14.5	16.2	16.2	16.2	14.7	14.7	186
	PASS CAR	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	
	ENV3	32	40	40	40	34	34	34	38	38	38	35	35	419
	WSE	40	40	34	34	34	38	38	38	35	35	35	35	410
FORD	CCPS L5-2													
	HUB	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	18
	PASS CAR	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	
	W/SB	4	4	4	4	4	4	4	4	4	4	4	4	52
	WSE	4	4	4	4	4	4	4	4	4	4	4	4	52
FORD	CCPS L6-1													
	AUSTRALIA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11
	PASS CAR	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	
	CAMBI	0	0	0	0	0	0	0	0	0	0	0	0	26
	WSE	0	0	0	0	0	0	0	0	0	0	26	0	26
FORD	CCPS L4-1													
	AUSTRALIA	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
	PASS CAR	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	
	W/SB	0	0	0	0	0	0	0	0	0	0	0	0	0
	WSE	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	CCPS													
	HUB	71.2	75.3	75.3	75.3	62.0	63.5	63.5	71.1	71.1	71.1	72.4	72.4	846.8
	W/SB	151	176	176	176	145	149	149	167	167	167	170	170	1979
	WSE	176	176	145	149	149	167	167	167	170	170	172	170	1999

TI-NHTSA 016847

CONFIDENTIAL

12-19-74

1973 WAGE 1973

CUSTOMER	SERVICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
FORD	CPG 12-1													
	WFO	8.9	8.9	8.9	8.9	7.2	7.2	7.2	8.1	8.1	8.1	8.9	8.9	97
	WFT	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	214
WARR	WFO	18	20	19	20	16	16	13	13	18	19	19	18	212
	WFT	20	20	15	16	15	18	12	15	18	19	19	18	
	WFE													
FORD	CPG 12-1													
	WFO	24.4	24.4	24.4	24.4	29.8	29.8	29.8	25.3	25.3	25.3	24.4	24.4	614
	WFT	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	214
WARR	WFO	74	83	87	83	77	87	70	74	73	74	77	77	957
	WFT	72	81	77	77	70	73	76	73	77	77	77	77	944
	WFE													
WARR	CPG 12-1													
	WFO	13.4	13.1	13.1	13.1	12.2	12.2	12.2	13.7	13.7	13.7	13.4	13.4	174
	WFT	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	214
WARR	WFO	19	23	22	22	17	17	17	17	17	19	19	18	212
	WFT	19	22	17	17	17	20	20	1	30	30	30	30	309
	WFE													
WARR	CPG 12-1													
	WFO	14.7	14.3	14.3	14.3	13.3	13.3	13.3	14.9	14.9	14.9	14.7	14.7	177
	WFT	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	214
WARR	WFO	23	29	29	29	21	21	21	21	28	28	28	28	419
	WFT	23	29	29	29	21	21	21	21	28	28	28	28	419
	WFE													
WARR	CPG 12-1													
	WFO	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	12
	WFT	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	12
WARR	WFO	1	1	1	1	1	1	1	1	1	1	1	1	12
	WFT	1	1	1	1	1	1	1	1	1	1	1	1	12
	WFE													
WARR	CPG 12-1													
	WFO	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	12
	WFT	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	12
WARR	WFO	1	1	1	1	1	1	1	1	1	1	1	1	12
	WFT	1	1	1	1	1	1	1	1	1	1	1	1	12
	WFE													
WARR	CPG 12-1													
	WFO	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	12
	WFT	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	12
WARR	WFO	1	1	1	1	1	1	1	1	1	1	1	1	12
	WFT	1	1	1	1	1	1	1	1	1	1	1	1	12
	WFE													

1973	70.2	70.8	70.4	70.4	69.7	69.8	69.8	70.1	70.5	70.5	70.2	70.4	70.4	70.4
1974	70.1	70.2	70.2	70.2	69.7	69.7	69.7	70.1	70.5	70.5	70.2	70.4	70.4	70.4
1975	70.1	70.2	70.2	70.2	69.7	69.7	69.7	70.1	70.5	70.5	70.2	70.4	70.4	70.4

CONFIDENTIAL

1970-1971		COST DATA 1970													
SYSTEM	DEVICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	
7000	7000 LS-2														
	400	9.0	9.9	4.9	6.9	7.2	7.2	7.2	9.1	9.1	9.1	9.0	9.0	97	
	1000 7000	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21		
7000	400	13	20	27	29	16	16	16	16	16	16	16	16	214	
	400	20	20	16	16	16	16	16	16	16	16	16	16	212	
	7000	22.0	29.4	26.4	33.4	19.8	19.8	19.8	33.3	33.2	33.2	31.1	31.1	416	
1000 7000	400	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25		
	400	14	13	12	12	17	17	17	17	17	17	17	17	957	
	400	20	13	17	17	16	16	16	16	16	16	16	16	998	
7000	7000 LS-1														
	400	19.9	20.9	15.1	13.1	12.2	12.2	12.2	13.7	13.7	13.7	13.4	13.4	195	
	400	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21		
1000 7000	400	16	14	13	17	17	17	17	17	17	17	17	17	390	
	400	13	17	17	17	10	10	10	10	10	10	10	10	326	
	7000	3.0	0.0	0.0	17.2	17.3	17.3	16.9	16.9	16.9	6.0	16.7	16.7	114	
1000 7000	400	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26	2.26		
	400	6	6	6	11	11	11	11	11	11	11	11	11	269	
	400	1	1	1	1	15	15	15	15	15	15	15	15	139	
7000	7000 LS-1														
	400	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	17	
	400	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79		
7000	400	4	4	4	4	4	4	4	4	4	4	4	4	49	
	400	4	4	4	4	4	4	4	4	4	4	4	4	49	
	7000	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	11	
1000 7000	400	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80		
	400	4	4	4	4	4	4	4	4	4	4	4	4	36	
	400	4	4	4	4	4	4	4	4	4	4	4	4	36	
7000	7000 LS-1														
	400	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0	
	400	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80		
7000	400	4	4	4	4	4	4	4	4	4	4	4	4	4	
	400	4	4	4	4	4	4	4	4	4	4	4	4	4	
	400	4	4	4	4	4	4	4	4	4	4	4	4	4	
-----														93	
7000	7000	70.4	70.4	61.1	70.4	64.2	64.2	64.2	77.0	77.0	77.0	70.4	70.4	551.2	
1000	1000	100	75	55	117	140	120	120	170	170	170	170	170	1912	
1000	1000	140	116	148	180	180	170	170	170	170	170	170	170	1572	

CONFIDENTIAL

COPR 1992

CUSTOMER	DEVICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
FORD	SED	2.0	7.9	11.6	11.8	1.6	8.4	79.1	40.8	40.4	40.7	78.2	31.2	289
	TRUCK	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	28
	WSE	22	17	29	19	19	19	78	99	98	99	75	76	626
	WSE	25	25	17	19	71	90	90	90	76	76	76	76	728
FORD	SED	28.1	28.2	28.2	28.2	28.4	28.4	28.4	27.4	27.4	27.4	27.4	27.4	378
	TRUCK	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	28
	WSE	24	22	25	21	28	29	29	21	21	21	21	21	256
	WSE	24	26	29	27	29	41	41	41	41	41	41	41	493
TOTAL	SED	47.9	63.1	49.4	49.6	56.8	56.8	56.8	54.8	54.8	54.8	54.8	54.8	667
	TRUCK	106	129	101	101	78	79	136	139	139	139	136	136	1462
	WSE	101	101	78	79	136	139	139	139	136	136	136	136	1490

LIGHT TRUCK APPLICATION MATRIX

CLUB WAGON/SCORPION	-	57%	M 192	START
F-SERIES	-	70%	M 103	START
BRONCO	-	95%	M 192	START

PASSENGER APPLICATION MATRIX

TOWN CAR	-	100%	M 192	TOP
CROWN VICTORIA	-	25%	M 103	TOP
GRAND MARQUEE	-	99%	M 192	TOP
MARQUEE	-	100%	M 192	TOP
SHO TAURUS	-	100%	M 192	TOP

CONFIDENTIAL

1st Nov 91

CCPS AIDS 1992

CUSTOMER	DEVICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
FORD	CCPS	6.7	10.2											
	MSD	8.0	9.1	9.1	9.1	8.0	9.0	33.4	36.3	36.5	36.8	36.2	36.2	263
	LIGHT TRUCK	ASD	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21
	MSB	18	20	20	20	18	18	74	81	81	81	76	76	581
	MSB	20	30	12	18	74	81	81	81	76	76	76	76	693
FORD	CCPS	35	60											
PASS CAR	MSD	28.4	30.4	30.4	30.4	23.7	23.7	23.7	25.6	25.6	25.6	25.6	25.6	319
	ASD	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	
	MSB	63	67	67	67	52	52	52	56	56	56	56	56	704
	MSB	67	67	52	52	52	56	56	56	56	56	56	56	687
TOTAL	CCPS													
	MSD	36.4	39.8	39.8	39.8	31.7	31.7	31.7	42.1	42.1	42.1	39.8	39.8	581.4
FORD	MSB	90	87	87	87	70	70	126	137	137	138	132	132	1386
	MSB	87	87	70	70	126	137	137	138	132	132	132	132	1382

Post-it[®] brand fax transmittal memo 7871 # of pages 1

TO: STAFF MATING

FROM: ERIC JONES

DATE: 11/1/91

TIME: 11:33

TAXI D

CONFIDENTIAL

19-Nov-81

CCPS MILES 1981

CUSTOMER	DEVICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
FORD	CCPS													
	MID	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2	13.1	10.9	8.1	44
	LIGHT TRUCK													
	REP	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	2.21	2.21	
	MSB	0	0	0	0	0	0	0	2	35	41	34	18	120
	MRE	0	0	0	0	0	2	0	41	24	18	28	33	135
FORD	CCPS													
	MID	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	15.3	8.6	27.1	73
	PASSE CAR													
	REP	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	2.21	
	MSB	0	0	0	0	0	0	0	0	7	87	27	60	142
	MRE	0	0	0	0	0	0	0	69	27	60	85	50	230
<hr/>														
TOTAL	CCPS													
	MID	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.3	28.4	19.5	35.2	97.1
FORD														
	MSB	0	0	0	0	0	0	0	2	42	48	61	78	262
	MRE	0	0	0	0	0	2	0	90	51	78	73	73	368

CONFIDENTIAL

29-629-21

CCPS NUD 1992

CUSTOMER	DEVICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
FORD	CCPS													
	NUD	8.6	8.6	8.6	8.6	8.6	8.6	30.3	30.3	30.3	31.7	31.7	31.7	237
	LIGHT TRUCK	ASP	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	
	MSB	19	19	19	19	19	19	67	67	67	70	70	70	525
	MSB	19	19	19	19	67	67	67	70	70	70	70	627	
FORD	CCPS													
	NUD	31.4	31.4	31.4	31.4	31.4	31.4	24.7	24.7	24.7	26.6	26.6	26.6	242
	PAGE CAR	ASP	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	
	MSB	69	69	69	69	69	69	33	33	33	39	39	39	756
	MSB	69	69	69	69	33	33	33	39	39	39	39	735	
TOTAL	CCPS													
	NUD	39.9	39.9	39.9	39.9	39.9	39.9	55.0	55.0	55.0	58.3	58.3	58.3	579.8
	FORD	MSB	88	88	88	88	88	122	122	122	129	129	129	1281
	MSB	88	88	88	88	122	122	122	129	129	129	129	1362	

TI-NHTSA 015963

CONFIDENTIAL

29-Aug-71

CCPS VOLUME 1971

CUSTOMER	DEVICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
FORD	CCPS													
	MINI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	4.7	11.2	10.2	8.5	37
	LIGHT TRUCK	2.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.21	2.21	2.21	69
	MSB	0	0	0	0	0	0	0	2	21	23	23	19	69
	MSE	0	0	0	0	0	2	0	23	23	19	23	23	135
FORD	CCPS													
	MINI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	20.2	24.6	24.6	76
	PAGE CAR	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	3.13	2.21	2.21	108
	MSB	0	0	0	0	0	0	0	0	7	43	39	39	108
	MSE	0	0	0	0	0	0	0	63	39	39	39	39	303
<hr/>														
TOTAL	CCPS													
	MINI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	5.8	31.4	34.8	33.1	112.7
FORD	MSB	0	0	0	0	0	0	0	2	28	30	61	78	274
	MSE	0	0	0	0	0	2	28	63	61	78	62	62	440

TI-NHTSA 015864

CONFIDENTIAL

27-May-91

CCPS NISS 1992

CATEGORY	DEVICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
FORD	CCPS													
	NIB	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	41.5	498
	ASP	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	
LIGHT TRUCK	NIB	92	92	92	92	92	92	92	92	92	92	92	92	1101
	NSE	92	92	92	92	92	92	92	92	92	92	92	92	1101
FORD	CCPS													
	NIB	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	35.1	421
	ASP	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	
PASSE CAR	NIB	78	78	78	78	78	78	78	78	78	78	78	78	936
	NSE	78	78	78	78	78	78	78	78	78	78	78	78	936
<hr/>														
TOTAL	CCPS													
	NIB	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	919.1
FORD	NIB	167	167	167	167	167	167	167	167	167	167	167	167	2031
	NSE	167	167	167	167	167	167	167	167	167	167	167	167	2031

CONFIDENTIAL

27-746-41

CCPS NUMB 10-1

CUSTOMER	DEVICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
FORD	CCPS													
	HLB	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.4	9.5	9.5	9.5	32
	LIGHT TRUCK													
	AMP	3.13	3.13	3.13	3.13	3.13	3.13	3.13	1.13	3.13	2.21	2.21	2.21	32
	MSB	0	0	0	0	0	0	7	7	0	21	21	21	46
	MSE	0	0	0	0	7	7	0	21	21	21	23	23	131
FORD	CCPS													
	HLB	0.0	0.0	0.0	0.0	0.0	0.0	25.4	26.5	26.3	24.4	24.4	24.4	159
	PASS CAR													
	AMP	3.13	3.13	3.13	3.13	3.13	3.13	1.43	3.13	3.13	3.21	2.21	2.21	400
	MSB	0	0	0	0	0	0	71	63	33	54	54	54	400
	MSE	0	0	0	0	71	63	63	54	54	54	54	54	519
TOTAL	CCPS													
	HLB	0.0	0.0	0.0	0.0	0.0	0.0	25.1	26.8	29.0	34.1	34.1	34.1	181.2
	AMP													
	MSB	0	0	0	0	0	0	79	90	91	75	75	75	484
	MSE	0	0	0	0	79	90	91	75	75	75	77	78	440

m/c TR465

CONFIDENTIAL

28-Nov-91

CCPS 1985 1991

CUSTOMER	VEHICLE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
FORD	CCPS													
	NWB	4.0	0.0	0.0	0.0	0.0	0.0	7.1	7.1	7.1	7.1	7.1	7.1	43
	LIGHT TRUCK	ASP	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.10	2.10	100
	NSE	0	0	0	0	0	0	21	21	21	15	15	15	130
FORD	CCPS													
	NWB	4.0	0.0	0.0	0.0	0.0	17.1	17.1	17.1	17.1	17.1	17.1	17.1	119
	PASS CAR	ASP	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.10	2.10	307
	NSE	0	0	0	0	0	51	51	51	51	35	35	35	377
<hr/>														
TOTAL	CCPS													
	NWB	0.0	0.0	0.0	0.0	0.0	17.1	24.2	24.2	24.2	24.2	24.2	24.2	162.1
FORD	NSE	0	0	0	0	0	51	72	72	72	50	50	50	416
	NSE	0	0	0	0	51	72	72	72	50	50	50	50	515

(-)

CONFIDENTIAL

PLATE 210

COPS WAYS 1991

CUSTOMER	DEVICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	
COPS	COPS	MO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
		ASP	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	36
		NSB	0	0	0	0	0	0	0	0	0	0	0	0	0
		NSE	0	0	0	0	0	0	0	0	0	0	0	0	0
COPS	COPS	MO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
		ASP	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	25
		NSB	0	0	0	0	0	0	0	0	0	0	0	0	0
		NSE	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	COPS	MO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	
NSB	0	0	0	0	0	0	0	0	0	0	0	0	0		
NSE	0	0	0	0	0	0	0	0	0	0	0	0	0		

NOV 9, 1990

CCPI NIDS 1991

CUSTOMER	DEVICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
FORD	CCPI													
	NLS	0.0	0.0	0.0	0.0	0.0	0.0	9.1	9.1	9.1	9.1	9.1	9.1	52
	LIGHT TRUCK													
	ASP	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.06	2.06	2.06	131
	NBS	0	0	0	0	0	0	27	27	27	19	19	19	131
	NBE	0	0	0	0	27	27	27	19	19	19	19	19	172
FORD	CCPI													
	PASSE CAR													
	NLS	0.0	0.0	0.0	0.0	0.0	18.3	18.3	18.3	18.3	18.3	18.3	18.3	126
	ASP	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.06	2.06	2.06	131
	NBS	0	0	0	0	0	54	54	54	34	34	34	34	308
	NBE	0	0	0	54	54	54	34	34	34	34	34	34	404
<hr/>														
TOTAL	CCPI													
	NLS	0.0	0.0	0.0	0.0	0.0	18.3	27.4	27.5	27.5	27.5	27.5	27.5	182.9
	ASP													
	NBS	0	0	0	0	0	54	61	62	62	54	54	54	448
	NBE	0	0	0	54	61	62	62	54	54	54	54	54	386

CONFIDENTIAL

APR 29, 1976

CCPS ROPS 1971

CUSTOMER	SERVICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
LTD	CCPS													
	AMB	0.0	0.0	0.0	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	56
	ASP	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	33
	YEB	0	0	0	19	19	19	19	19	19	19	19	19	133
LTD	CCPS													
	AMB	0	19	19	19	19	19	19	19	19	19	19	19	159
	ASP	3.0	0.0	0.0	0.0	19.0	19.0	19.0	19.7	19.7	19.7	19.7	19.7	128
	YEB	3.11	2.11	2.11	2.11	3.11	3.11	3.11	3.11	2.19	2.19	2.19	2.19	399
TOTAL	CCPS													
	AMB	0	0	0	0	31	31	31	43	43	43	43	43	392
	YEB	0	0	0	0	31	31	31	43	43	43	43	43	392
	YEB	0	0	0	0	31	31	31	43	43	43	43	43	392

CONFIDENTIAL

MAR 07, 1990

CCPS MUDS 1991

CUSTOMER	DEVICE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
FORD	CCPS													
	MUD	0.0	0.0	0.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	91
	LIGHT TRUCK	ASP	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	
	MSE	0	0	0	18	18	18	18	18	18	18	18	18	156
	MSE	9	18	18	18	18	18	18	18	18	18	18	18	203
FORD	CCPS													
	MUD	0.0	0.0	0.0	0.0	0.0	12.0	12.0	12.0	25.0	25.0	25.0	25.0	136
	PAGE CAR	ASP	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	
	MSE	0	0	0	0	0	26	26	26	53	53	53	53	298
	MSE	0	0	0	26	26	26	53	53	53	53	53	53	447
<hr/>														
TOTAL	CCPS													
	MUD	0.0	0.0	0.0	9.0	9.0	21.0	21.0	21.0	34.0	34.0	34.0	34.0	217.0
FORD	MSE	0	0	0	18	18	45	45	45	73	73	73	73	444
	MSE	0	18	18	45	45	45	73	73	73	73	73	73	499



NA Hydraulic Switch History

Time Period:	'83	'87	'90	'91	'98	'99
Application:	Power Steering	Power Steering Suspension	Power Steering Suspension Transmission	Power Steering Suspension Transmission Cruise	Power Steering Suspension Transmission Cruise Clutch	Power Steering Suspension Transmission Cruise Clutch
Fluid:						

CONFIDENTIAL

- TI has some 16 years and 130 million units accumulated experience in hydraulic applications using multiple fluids
- TI has some 12 years of brake system application experience working with brake fluids

C:\McOsk\99\presentation

TI-NHTBA 016902



LAST REVISED 02/79 by LM
Misc changes
II INTERNAL DATA

PRESSURE SWITCH CROSS-REFERENCE LIST TO BE USED FOR REFERENCE ONLY

TI PK	CUSTOMER PART NO.	CUSTOMER	func	Activation	Release	DMT	case color / Degradant	part fitting/neck details			OTHER	prod'n status	
				** 125C calibration (psig)	** 250 (psig)	** 500 (psig)		thread	size	finish			
52PSL7-1	1921878	GM	pur air	**430-000	**250 min	**100 min	gray	O-ring/27-280-3	28-34 M	Ø18	Zn/chrome	epoxy	P
52PSL8-1	0821358	GM	pur air	**430-000	**250 min	**100 min	brown	O-ring/27-280-1	M20x1.5 M	14 mm	Zn/chrome		S
52PSF3-2	9004178	GM	pur air	**430-000	**250 min	**100 min	black	O-ring/27-280-1	18-27 M	Ø16	Zn/chrome	sealant	S
52PSF7-1	9004178	GM	pur air	**430-000	**250 min	**100 min	black	O-ring/27-280-3	28-34 M	Ø18	Zn/chrome	epoxy	P
52PSL3-1	8007043	Hawkins	hvac	**410-000	**250-320		black/DMC	comp./2801-1	1/4"	1/4"	Zn/yellow	R12	S
52PSL6-1	8007041	Hawkins	hvac	**410-000	**250-320		black/DMC	comp./2801-1	1/4"	1/4"	Zn/yellow	R134	P
52PSL6-2	8008772	Hawkins	hvac	**410-000	**250-320		orange/DMC	comp./2801-1	1/4"	1/4"	Zn/yellow	R134	S
52PSF2-3	8001888	Hawkins	hvac	55 mm	45 min	3 min	black/DMC	comp./2825-1	1/4"	1/4"	Zn/yellow	R134	S
52PSF4-1	8007043	Hawkins	hvac	40-47	37 min	3 min	black/DMC	comp./2825-1	1/4"	1/4"	Zn/yellow	R134	S
52PSF5-2	8007043	Hawkins	hvac	391-395	210 min	**13.5 min	black/DMC	comp./2801-1	1/4"	1/4"	Zn/yellow	R12	S
52PSF6-1	8008008	Hawkins	hvac	281-303	230 min	**13.5 min	black/DMC	comp./2801-1	1/4"	1/4"	Zn/yellow	R134	S
52PSL2-1	4482678	CPC	hvac	**410-000	**170 min	**80 min	black/DMC	1 pc/2801-1	3/8-24 F	Ø8	cad/chrome	R12	S
52PSL2-2	4482678	CPC	hvac	**410-000	**170 min	**80 min	black/DMC	1 pc/2801-1	3/8-24 F	Ø8	cad/chrome	R12	S
52PSL4-1	14100318	CPC	hvac	**410-000	**170-220		black/DMC	1 pc/2801-1	3/8-24 F	Ø8	cad/chrome	R12	S
52PSL5-2	1000100	GM T&E	hvac	**410-000	**250-320		black/DMC	1 pc/2801-1	M18x1.25 F	14mm	Zn/chrome	R134	P
52PSL5-3	300023	Ford	hvac	**410-000	**270-330		black/DMC	1 pc/2801-1	M18x1.25 F	14mm	Zn/chrome	R134	S
52PSL5-4	1000100	CPC	hvac	**410-000	**170 min	**80 min	black/DMC	1 pc/2801-1	M18x1.25 F	14mm	Zn/chrome	R134	P
52PSL5-5	1000100	U sub	hvac	**410-000	**170 min	**80 min	black/DMC	1 pc/2801-1	M18x1.25 F	14mm	Zn/chrome	R134	S
52PSL5-6	9023482	GM Bosch	hvac	410-400	300-300		black/DMC	1 pc/2801-1	M18x1.25 F	14mm	Zn/chrome	R134	S
52PSL7-1		GM Truck	hvac	410-400	300-310		brown	1 pc/2801-1	M18x1.25 F	14mm	Zn/chrome	R134	S
52PSL7-1A	30071	Adco/merit	hvac	410-400	300-310		brown	1 pc/2801-1	M18x1.25 F	14mm	Zn/yellow	R134	S
52PSF4-1	1821814	GM T&E	hvac	280-300	220 min	20mm	black/DMC	1 pc/2801-1	M18x1.25 F	14mm	Zn/chrome	R134	S
52PSF6-2	3000007	GM Bosch	hvac	280-310	180 min		black/DMC	1 pc/2801-1	M18x1.25 F	14mm	Zn/chrome	R134	S
52PSF2-3	8073-3824-AA	Ford T&E	pur air	280-300	120 min	80 min	black/gray	Ø18-3	28-34 M	Ø18	Zn/chrome	o-ring	S
52PSL3-1	873C-3824-AA	AS	pur air	400-500	200 min	180 min	green	o-ring/27445-1	28-34 M	Ø18	Zn/chrome	o-ring	S
52PSL7-1	400045	Tron (Chrysler)	pur air	500-700	200 min	100 min	black	O-ring/27445-1	28-34 M	Ø18	Zn/chrome		S
52PSL1-1	824B-3824-AA	Ford Europe	pur air	470-625	200 min	100 min	green	O-ring/27445-1	28-34 M	Ø18	Zn/yellow		S
52PSL11-2	838B-3824-AA	Ford Europe	pur air	480-600	200 min	100 min	green	O-ring/27445-1	28-34 M	Ø18	Zn/yellow		P
52PSL11-3	F20C-3824-AA	Ford	pur air	670-725	200 min	100 min	brown	O-ring/27445-1	28-34 M	Ø18	Zn/chrome		S

TI-NHTSA 010063

DEPOSITION
EXHIBIT
9

CONFIDENTIAL

57P3L11-1	F8FF-3M24-AB	Ford	gear shif	575-725	350 min	100 min	Brown	orig/2725-3	34-34 M	978	2nd/year		e
57P3L12-1	98FF-3M24-BA	Ford-Europe	gear shif	548-682	225 min	125 min	black/bron	o-ring/2725-1	34-34 M	978	2nd/year		P
57P3F3-3	E75C-3M24-AA	Ford/Suzuki	brake	300-430	130 min	60 min	white	seal/2727-1	34-34 M	978	2nd/year	o-ring	e (91)
57P3F3-8	E85C-3C25-CA	Ford	brake	300-450	130 min	60 min	blue	seal/2727-1	34-34 M	978	2nd/year	o-ring	e
57P3F3-6	F3LC-3M24-AA	Ford P118	brake	700-800	120 min	60 min	white	o-ring/seal/2727-1	34-34 M	978	2nd/year		e
57P3F3-7	85K 100070	Land Rover	clutch	300-390	40 min		neutral	JB123880-1, o-ring	34-34 M	978	2nd/year	split	MY99
57P3F8-1	01AB-3M24-AB	Ford-Europe	gear shif	475-625	300 min	100 min	red	o-ring/seal/28017-1	34-34 M	978	2nd/year		e
57P3F8-2	LMA 162AA	Jaguar	gear shif	475-625	290 min	100 min	red	o-ring/seal/28017-1	34-34 M	978	2nd/year		e
57P3F8-3	4854150	Daewoo (Ford)	gear shif	585-725	115-200		red	o-ring/seal/28017-1	34-34 M	978	2nd/year		P
57P3F9-1	02AB-3M24-BA	Ford-Europe	gear shif	550-740	300 min	100 min	purple	o-ring/seal/28017-1	34-34 M	978	2nd/year		e
58P3F2-1	1001300	Cadillac	loc	6-23	7-21		black/BLC	27517-7	7716-20 F	50	white	R12	e
58P3F2-2	103000	Cad/Merced	loc	6-23	9-16		black/BLC	27517-7-2	7716-20 F	50	white	R12	e
58P3F3-1	10043000	CPC	help	48-47	37 min		black/BLC	1000000-3	34-34 F	50	black/white	R12	e
58P3F5-1	9322000	GM Buick	help	48-47	37 min	3 min	gray/BLC	1000000-4	34-34 F	14mm	black/white	R134	e
58P3L2-1	2102000	Sabre	help	21 min	27 min	1.5 min	black/BLC	1000000-1	34-34 F	50	white	R22	P
			help	300-420	200-300								
59P3F2-2	5242000	Hudson	loc		7-21	21.0-42.2	gray/BLC	27517-1	7716-20 F	50	white	R12	e
59P3F2-7	5245700	GM T88	oc	43-40	23-23	20-24	black/BLC	27517-1	7716-20 F	50	white	R12/ yellow band	e
59P3F2-4	52461430	GM T88	oc	43-40	24-28	19-23	black/BLC	27517-1	7716-20 F	50	white	R12/ white band	e
59P3F2-8	52451440	Hudson	oc	43-40	22-04	21-05	black/BLC	27517-1	7716-20 F	50	white	R12/ green band	e
59P3F2-5	5245700	GM T88	oc	43-40	25-27	19-23	black/BLC	27517-1	7716-20 F	50	white	R12	e
59P3F2-6A	732020 30004	Affair/whet	oc	43-40	24-28	19-23	black/BLC	27517-1	7716-20 F	50	white	R12	e
59P3F3-2	5245355	U win	oc	30-44	20-22	18-22	black/BLC	27517-1	7716-20 F	50	white	R134/ purple band	e
59P3F3-2	52461675	U win	oc	30-44	20-22	18-22	black/BLC	27517-1	342x1.5 F	10mm	black	R134/ purple band	e
59P3F3-3	52464575	BT back	oc	30-45	21-23	18-22	black/BLC	27517-1	342x1.5 F	10mm	black	R134/ paper band	P
59P3F3-4	52453482		oc	40-40	23-24	18-22	black/BLC	27517-1	342x1.5 F	10mm	black	R134/ green band	e
59P3F5-5	52453501	Hudson	oc	41-47	23-25	18-22	black/BLC	27517-1	342x1.5 F	10mm	black	R134/ yellow band	e
59P3F5-6	30000	Chrysler	oc	30-43	23-25	14-18	black/BLD	27517-1	342x1.5 F	10mm	neutral	R104	e
59P3F5-7	10242575	CK Truck	oc	22-32	2-0		gray/BLC	27517-1	342x1.5 F	10mm	black	R134	P

TI-NHTSA 018904

CONFIDENTIAL

81PSP3-8	300043	Chrysler	lcr	15-25	7-13		black/BLC	37000-8	M12x1.5F	16mm	green	R134	s
81PSP3-9	3240330	Chrysler	clb	26.5-45.5	20.5-23.5	10-20	black/BLC	37000-7	M12x1.5F	16mm	black	R134	P
81PSP3-9A	733820 30000	Alfa Romeo	clb	36.5-45.5	30.5-33.5	10-20	black/BLC	37000-7	M12x1.5F	16mm	black	R134	s
81PSP3-12	92334577	Chrysler	clb	44 max	20-22	10 min	black/BLC	37000-7	M12x1.5F	16mm	black	R134/Staryl	s
81PSP3-1	1487	Chrysler	clb	47.14-64.4	22.46-25.24	24.55-25.0	black/BLC	1 pc37262-1	7715-20 F	88	Zelblue	R134	s
* - GM part shown different in spec to 2nd party spec.													
76PSP2-3	40004	Volvo	lcr	490-490	275-300		black/BLC	1 pc37262-1	7715-20 F	88	Zelblue	R134	P
76PSP2-2	F304-10200-AA	Volvo	lcr	490-490	275-300	100 min	black/BLC	1 pc37262-1	7715-20 F	88	Zelblue	R12	s
76PSP3-1	054034	Volvo (P80)	lcr	413-457	247-334	110 min	purple/BLC	1 pc37262-1	M12x1.5F	16mm	Zelblue	R134/vented	vented
76PSP2-5	40003	Volvo	lcr	270-320	210-247	80 min	bl. grey/BLC	1 pc37262-2	7715-20 F	88	Zelblue	R134	P
76PSP2-6	054004	Volvo (P80)	lcr	283-340	181-174	80 min	bl. grey/BLC	1 pc37262-2	7715-20 F	88	Zelblue	R12	s
76PSP4-1	1343210	Volvo (P80)	clb	42.6-47.1	21.8-24.6		black/BLC	1 pc37262-2	M12x1.5F	16mm	Zelblue	R134/vented	P
76PSP4-2	1343215	Volvo (P80)	clb	42.6-47.1	21.2-20.1		black/BLC	1 pc37262-1	M12x1.5F	16mm	Zelblue	R134/vented	P
76PSP6-1	0540332	Volvo (P80)	in lcr	247-280	174-210	80 min	bl. grey/BLC	1 pc37262-1	M12x1.5F	16mm	Zelblue	R134/vented	P
76PSP6-2	0540331	Volvo (P80)	in lcr	246-303	246-280	80 min	bl. grey/BLC	1 pc37262-1	M12x1.5F	16mm	Zelblue	R134/vented	P
77PSP2-1	F2NC 8104 AB	Ford F100	lcr	80-100	20 min		black/BLC	1 pc37262-1	30-34 M	870	Zelblue	wrap, m-m	s
77PSP2-3	F2NC 8104 AA	Ford F100	lcr	80-100	20 min		black/BLC	1 pc37262-1	30-34 M	870	Zelblue	wrap, m-m	s
77PSP3-1	F2AC 8104 AA	Ford F100	lcr	80-100	20 min		black/BLC	1 pc37262-1	30-34 M	870	Zelblue	wrap, m-m	s (80)
77PSP3-2	F2BA 8104 AA	Ford F100	lcr	80-100	20 min		black/BLC	1 pc37262-1	30-34 M	870	Zelblue	wrap, m-m	P
77PSP3-3	F3TA 8104 CA	Ford F100	lcr	80-100	20 min		black/BLC	1 pc37262-1	30-34 M	870	Zelblue	wrap, m-m	P
77PSP3-4	MSK 10000	Ford F100	clb	280-300	40 min		black/BLC	1 pc37262-1, o-leg	30-34 M	870	Zelblue	wrap, m-m	P
77PSP4-1	8104 8104 AA	Ford F100	lcr	80-100	20 min		black/BLC	1 pc37262-1	M12x1.0 M	14mm	Zelblue	wrap	P
77PSP5-2	F2DC 8104 AA	Ford F100	lcr	80-100	20 min		black/BLC	1 pc37262-1	30-34 M	870	Zelblue	wrap	P (83)
77PSP5-1	8104 8104 AB	Ford F100	lcr	80-100	20 min		black/BLC	1 pc37262-1	30-34 M	870	Zelblue	wrap	s
78PSP2-1	F3AH 10004 AA	Ford F100	lcr	410-440	230-250		black/BLC	1 pc37262-1	M12x1.25 F	14mm	Zelblue	R134	P
78PSP2-2	F3AH 10004 BA	Ford F100	lcr	410-440	230-250		black/BLC	1 pc37262-1	M12x1.25 F	14mm	Zelblue	orange band	P
78PSP2-3	F4AH 10004 DA	Ford F100	lcr	410-440	230-250		black/BLC	1 pc37262-1	M12x1.25 F	14mm	Zelblue	R134	P
78PSP2-4	F3AH 10004 CA	Ford F100	lcr	410-440	230-250		black/BLC	1 pc37262-1	M12x1.25 F	14mm	Zelblue	yellow band	P
78PSP2-5	F5TH 10004 AA	Ford F100	lcr	410-440	230-250		black/BLC	1 pc37262-1	M12x1.25 F	14mm	Zelblue	R134	P
78PSP2-1	114 53.0	Caterpillar	lcr	40 min	10.5-22.7	4 min	red/BLC	1 pc37262-1	7715-20 F	88	Zelblue	R134	P
			lcr	300-420	221-275		black/BLC	1 pc37262-1					

TI-NET/SA 015985

CONFIDENTIAL

79P8D2-2	114-5334	Caterpillar	help	40 max	18.4-32.7	4 min	blackHC	1 pc37238-1	7750-25 F	5/8	Zachwa	R134	P
			hpcu	380-430	221-270		white non 27929-3						
79P8D3-1	1MR3550M	March	help	23-37	20-33	1.5 min	greyHC	1pc37125-1	M10x1.25 F	14mm	Zachwa	R134	P
			hpcu	315-365	215-275		white non 27934-1 (not polished)						
79P8D3-2	2-37920	Signal	help	23-37	20-33	1.5 min	greyHC	1pc37125-1	M10x1.25 F	14mm	Zachwa	R134	P
			hpcu	315-365	215-275		white non 28040-1 (not polished)						
79P8D4-1	K301-370	Newarth	help	40 max	26 min	1.5 min	brownHC	1pc37125-1	M10x1.25F	14mm	Zachwa	R134	P
			hpcu	380-430	208-300								
79P8D4-2	2-37251	Signal	help	40 max	26 min	1.5 min	brownHC	1pc37125-1	M10x1.25F	14mm	Zachwa	R134	P
			hpcu	380-430	308-380								
79P8D5-1	GD4161500	Mazda	help	28.4-36.3	27-35	1.4 min	redLC	1pc37125-1	M10x1.25F	14mm	Zachwa	R134	P
			hpcu	428-483	97-163								
79P8D6-1	BJDC61500	Mazda	help	28.4-36.3	27-35	1.4 min	purplePBLC	37400-2	M11x1.0M	24mm	Flumman	R134	P
			hpcu	428-483	87-163								
79P8F2-1	1300454	GM Truck	brn dr	328-388	240 min	30 min	dk greenPBLC	1pc30840-6	M10x1.25F	14mm	Zachwa	R134	P
79P8F2-2	PR3CAA-3808-01	Signal	brn	275-318	200 min	80 min	dk greyLC	1pc30840-6	M10x1.25F	14mm	Zachwa	R134	P
79P8F2-3	GD4W61503	Mazda	brn	182-236		43-85	blackPBLC	1pc30840-6	M10x1.25F	14mm	Zachwa	R134	P
79P8F3-1	PR3CAA-3804-01	Signal	cls	47 mm	23-28	17-23	blackHC	1 pc37008-1	M12x1.5 F	18mm	Zachwa	R134	P
79P8F5-1	52475833	in-wen	c/c	40-48	22-24	18-24	greenMRHC	37080-7	M12x1.5 F	18mm	black	R134(green B)	NP (now to 79P8F5-4)
79P8F5-2	GD7A81004	Mazda	c/c	40-48	21.5-24.5		blackPBLC	37080-7	M12x1.5 F	18mm	black	R134	P
79P8F5-3	F22-1802	Newarth	brn	28-34	10-18		dk greenLC	37080-7	M12x1.5 F	18mm	black	R134	P
79P8F5-4	52475833	Hartson	cls	40-48	22-24	18-22	blackMRHC	37080-7	M12x1.5 F	18mm	black	R134green band	P
79P8F5-5	52482805	Hartson	c/c	38-45	21-23	18-22	blackMRHC	37080-7	M12x1.5 F	18mm	black	R134brown band	P
79P8F5-6	1303884	GM Truck	c/c	41-47	23-25	18-22	blackMRHC	37080-7	M12x1.5 F	18mm	black	R134yellow band	
79P8L2-2	859808	GM Truck	hpcu	**410-438	**180-210		orangeLC	1pc37125-1	M10x1.25F	14mm	br/yellow	R134	e
79P8L2-3	PR3CAA-3805-01	Signal	hpcu	335-370	188-288		orangeLC	1pc30840-6	M10x1.25F	14mm	Zachwa	R134	P
79P8L2-4	2-37087	Signal	hpcu	380-430	228-280		dk blueLC	1pc30840-6	M10x1.25F	14mm	Zachwa	R134	P
79P8L2-5	GD7A81383	Mazda	hpcu	482-427		153-87	dk blueLC	1pc30840-6	M10x1.25F	14mm	Zachwa	R134	P
79P8L2-6	F27-1808	Newarth	hpcu	338-370	218-250		dk greenLC	1pc37125-1	M10x1.25F	14mm	br/yellow	R134	P
79P8L3-1	F27-1808	Newarth	brn	388-388	210-250		orangeLC	1pc30840-6	M10x1.25F	14mm	Zachwa	R134	P
79P8L3-2	18-84289	Signal	brn	275-318	288 min	88 min	dk greyLC	1pc30840-6	M10x1.25F	14mm	Zachwa	R134	MY8808
80P8L2-1	GD88-PC1-0009	Standa	pur slp	213-288	178 min	71 min	grey Santocor	6-48380-037010-1	M10x1.25M	17mm	br/yellow		P
80P8L2-2	8940-PC-4000-07	Standa	pur slp	243-327	114 min	87 min	white	6-48380-037010-1	M10x1.25M	17mm	br/yellow		P
82P8F2-1	28863	Chrye coast	brn	15-25	7-13		brownLC	37080-8	M12x1.5F	18mm	green	R134	P

CONFIDENTIAL

TI-NHTSA 018866

82PSF2-2	57772	Chrys coach	ck	28-31	23-28	14-18	black/CLC	3708-8	M12x1.5F	16mm	yellow	R134	P
82PSF2-3	57781	Chrys coach	ck	28-31	21.5-18.5		black/CLC	3708-7	M12x1.5F	16mm	black	R134	P
82PSD2-1	411180C	Chrys coach	huff	22-31	20-31	1.5 mls	gray/CLC	3697120-1	M16x1.25F	14mm	Zn/steel	R134	P
			huff	22-31	20-31	1.5 mls	gray/CLC	3697120-1	M16x1.25F	14mm	Zn/steel	R134	P
82PSL2-1	4773180	Chrys coach	huff	22-31	20-31	1.5 mls	black/CLC	3697120-6	M16x1.25F	14mm	Zn/steel	R134	P
84PSF2-1	84887812AA	Chrysler	huff	18-23	7-13		ck. gray/CLC	3708-8	M12 X 1.5 F	16mm	green	R134/plastic	MY98
84PSF2-2	8488813AA	Chrysler	ck	24-28	21-25		ck. gray/CLC	3708-7	M12 X 1.5 F	16mm	black	R134/brass	MY98
84PSF2-3	8488814AA	Chrysler	ck	34-38	25.5-22		ck. gray/CLC	3708-7	M12 X 1.5 F	16mm	black	R134/brass	MY98
84PSF2-4	84887815AA	Chrysler	ck	35-38	25.24		ck. gray/CLC	3708-7	M12 X 1.5 F	16mm	black	R134/yellow	MY98
84PSF2-5	8488773AA	Chrysler	ck	28-31	23-28		ck. gray/CLC	3708-7	M12 X 1.5 F	16mm	black	R134	MY98
84PSF2-6	84887816AA	Chrysler	huff	15-25	5-6.5		ck. gray/CLC	3708-8	M12 X 1.5 F	16mm	black	R134/plastic	P
84PSF3-7	84887818AA	Chrysler	huff	180-220	140 mls		black/CLC	3697120-8	M16 X 1.25F	14mm	Zn/steel	R134	MY98
84PSL2-1	84887817AA	Chrysler	huff	400-480	280-320		black/CLC	3697120-4	M16 X 1.25F	14mm	Zn/steel	R134	MY98
87PSL2-2	F37A-3M24-AA	ASPTG	per day	280-480	120 mls	50 mls	gray	27280-3	3/8-24 M	8/16	Zn/steel	o-ring	P
87PSL2-3	F37A-3M24-AA	ASPTG	per day	280-480	120 mls	50 mls	gray	27280-3	3/8-24 M	8/16	Zn/steel	o-ring	P
87PSL2-5	JW4D-3M24-AA	ASPTG	per day	280-480	120 mls	50 mls	brass	27280-3	3/8-24 M	8/16	Zn/steel	o-ring	sep 12/98
87PSL2-6	ASPTG	PTG	per day	280-480	120 mls	50 mls	white	27280-3	3/8-24 M	8/16	Zn/steel	o-ring	P
87PSL11-2	84887824-AA	Ford Europe	per day	400-600	280 mls	100 mls	black/brass 1	3697120-1	3/8-24 M	8/16	Zn/steel		P
87PSL11-4	TBD	Ford	per day	280-380	120 mls	50 mls	CSO	3697120-1	3/8-24 M	8/16	Zn/steel		
89PSF2-1	L88781-818	ZUA (brass)	per day	280.8-428.7		112.8 mls	gray	3697120-1	M14x1.5 Gg M	17 mm	brass	25' clamp	P
89PSF2-2	L88781-818	ZUA (brass)	per day	280.8-428.7		112.8 mls	gray	3697120-1	M14x1.5 Gg M	17 mm	brass		P
89PSF2-3	78422-488R	TJA (brass)	per day	280.8-428.7		112.8 mls	gray	3697120-1	M14x1.5 Gg M	17 mm	brass		s (88)
89PSF2-5	L88781-3C78	ZUA (brass)	per day	280.8-428.7		112.8 mls	gray	3697120-1	M14x1.5 Gg M	17 mm	brass	short piston 3'	P
89PSF2-6	L88781-8091	ZUA (brass)	per day	280.7-392.8		112.8 mls	gray	3697120-1	M14x1.5 Gg M	17 mm	brass	long bracket	P
89PSF2-7	L88781-8C38	ZUA (brass)	per day	812.8-812.8		112.8 mls	brass/CLC	3697120-1	M14x1.5 Gg M	17 mm	brass		s (88)
89PSF3-3	L88781-302N	ZUA (brass)	per day	280.8-428.7		112.8 mls	brass/CLC	3697120-1	M14x1.5 Gg M	17 mm	brass	25' clamp	P
89PSF3-3	L88781-818	ZUA (brass)	per day	812.8-812.8		112.8 mls	gray	3697120-1	M14x1.5 Gg M	17 mm	brass	short bracket	s (88)
89PSL2-1	84887818	huff	huff	240-380	200-240		brass	3697120-7	3/8-24 M	8/16	Zn/steel	AJF	P
89PSL2-2	84887818	huff	huff	140-180	80-120		brass	3697120-3	3/8-24 M	8/16	Zn/steel	AJF	MY98
91PSF2-1	28054324	Delco	per day	217.5-280.8		86.8-112.8	black/gray	3697120-1	3/8-24 M	17 mm	AI	bracket = A	P
91PSF2-2	28054448	Delco (brass)	per day	280.8-428.8		86.8-112.8	black/gray	3697120-1	3/8-24 M	17 mm	AI	bracket = B	MP
92PSL2-1	488888	Chrysler (L7)	per day	320-480	175 mls	80 mls	black/gray	3697120-1	M14x1.5 Gg M	17 mm	brass		s (88)
93PSL2-1	84887824-AA	Ford	per day	420-520	300 mls	50 mls	black/gray	3697120-1	M12x1.75 Gg M	16 mm	brass	green cap	P

CONFIDENTIAL

TI-NHTSA 016987

OSP2L2	OSAS-30234-2A	Food	part qty	200-300	240 min	50 min	blacktype	Clmg/20017m	342K1.75 Gg M	10 mm	Black	external cap	BYUFI
OSP2L3	OSAS-30234-2B	Food	part qty	200-300	240 min	50 min	blacktype	Clmg/20017m	342K1.75 Gg M	10 mm	Black	orange cap	I*
OSP2L3-1	OSAS-30234-2A	Food	part qty	200-300	120 min	50 min	blacktype	Clmg/20017m	342-24 L201-2A	10 mm	Black	no cap	24V23
OSP2L3-2	OSAS-30234-2C	Food	part qty	200-300	240 min	50 min	blacktype	Clmg/20017m	342-24 L201-2A	10 mm	Black	no cap	I*
OSP2L4-1	OSAS-30234-2D	Organ (FWS)	part qty	500-725		110-200	blacktype	Clmg/20017m	342-24 L201-2A	10 mm	Black	no cap	30P1100
OSP2	OSP2	TI Helium	connector	402.0-233.0	107.0-206.0		pink	32323	300 x 1.0		240/200		200

TI-NHTSA 016068

CONFIDENTIAL

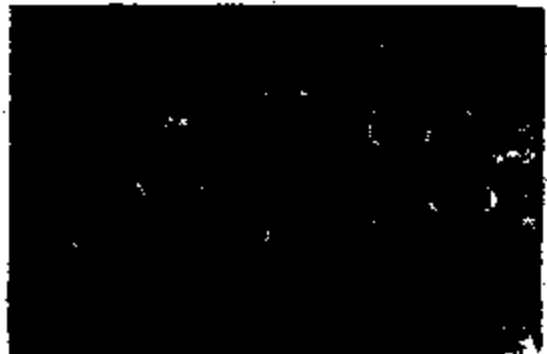


**TEXAS
INSTRUMENTS**

Materials & Controls Group
Automotive Business Unit

Low Cost Automotive Hydraulic Line Mount Pressure Switches

TI's pressure switches provide low cost, on/off controls for many automotive systems. The snap action disc reacts to changing pressure by reversing its curvature and activating electrical switch contacts.



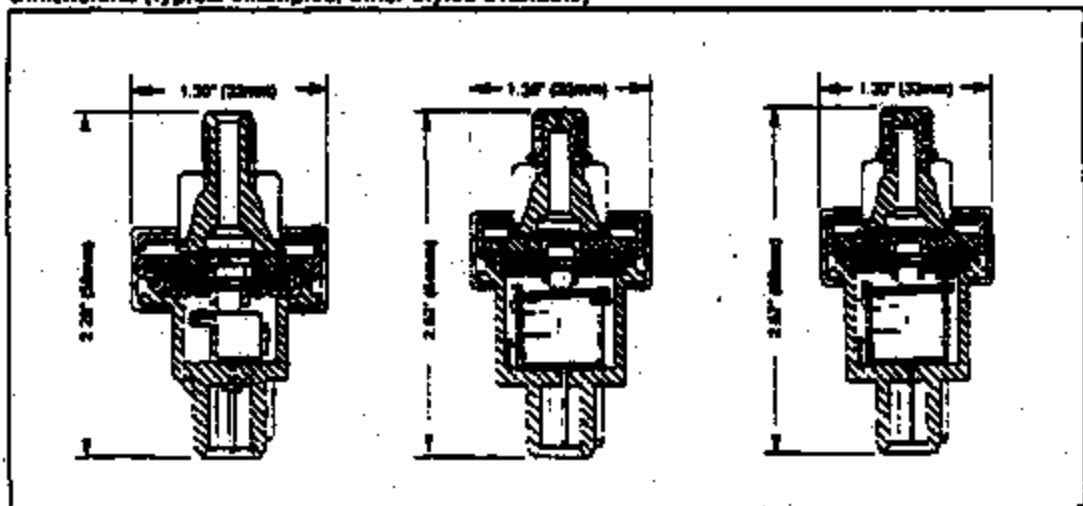
Key Features Include:

- Designed for underhood environment
- Low weight
- Custom packaging for specific application needs
- Automotive temperature range of -40 to 135°C
- Normally open and normally closed contact logic
- Industry proven since 1964

Typical Applications

- Power Steering Systems
- Cruise Control Systems
- Brake Systems
- Transmissions
- Suspension

Dimensions (typical examples, other styles available)



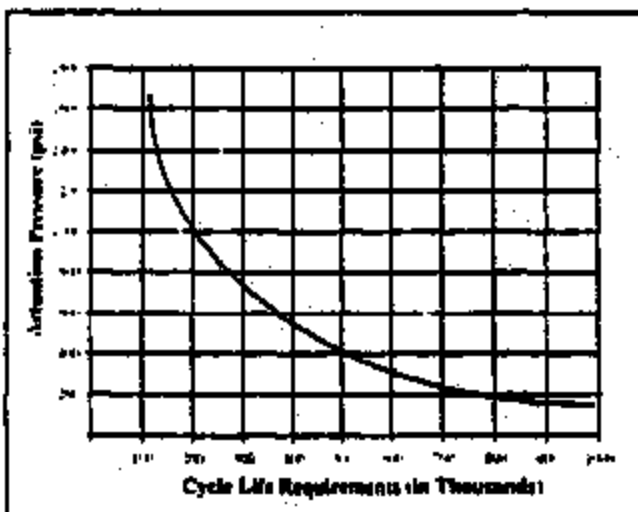
TI-NHTSA 016969



Technical Specifications

Electrical		Durability	
Supply Voltage	6 - 16 V	Cycle Life	
Supply Current	5 - 35 mA	Low/Mid Pressure Range	up to 1x10 ⁷ cycles
Response Time ¹	10 ms maximum	High Pressure Range	up to 1.5x10 ⁶ cycles
Environmental		Proof Pressure	1400 to 3000 psi
Operating Temperature	-40 to 125°C	Burst Pressure:	
Full Scale Pressure Range		Low Pressure Range	7000 psi
Low Pressure Range	0 to 300 psi	Mid Pressure Range	4000 psi
Mid Pressure Range	0 to 800 psi	High Pressure Range	2400 psi
High Pressure Range	0 to 1600 psi		
¹ Applicable to most devices			

Pressure Switch Characteristics



For further information please write or call

Texas Instruments Incorporated
 Pressure Switch Marketing MS 11-11
 P.O. Box 2464
 Dallas, TX 75201-2964
 Phone 409 246-4910
 Fax 409 246-1546

International Offices:

Japan
 Texas Instruments Japan Ltd.
 429 Takayama-1, Chiyoda-ku
 Saito-Joh, Shinjyuku-Ku, Kan 410-11
 Chiyoda, Japan
 Phone (81) 3-562-76-1211
 Fax (81) 3-562-76-0571

Europe
 Texas Instruments National B.V.
 Automotive Marketing
 P.O. Box 43
 NL-7160 AA Nieuw
 Weert
 Phone (31) 486-879442
 Fax (31) 486-868820

South America
 Texas Instruments S.p.A. (Sociedad por Acciones de Capital)
 Rua Marista de Melo, 444 - Capangue
 Campinas - SP - Brazil
 CEP 13060-000
 Phone (55) 19-2-621106
 Fax (55) 19-2-618021

Important Notice: Texas Instruments reserves the right to make changes to its products without notice or without obligation. It is the responsibility of the user to verify the latest version of the relevant information in order to avoid possible errors and the information being subject to change.

Texas Instruments assumes no liability for infringement of patents or rights of others based on Texas Instruments' applications, assistance or product specifications. It does not provide full advice concerning the use or application of its products. It does not assume any liability for any errors, omissions or design



Low Cost Automotive Pressure Switches

TI's pressure switches provide low cost, on/off controls for many automotive systems. The snap action disc reacts to changing pressure by reversing its curvature and activating electrical switch contacts.

Key Features Include:

- Designed for underhood environment
- Designed for line or pump mount applications
- Low weight
- Custom packaging for specific application needs
- Automotive temperature range of -30 to 125°C
- Normally open and normally closed contact logic
- Industry proven since 1984

25 Jan 99 BJK 85040157 HPSdesignppt



Typical Applications

- A/C systems
- Power Steering Systems
- Cruise Control Systems
- Brake Systems
- Transmissions
- Suspension

CONFIDENTIAL

TI-NHTSA 018971

1

D

Curry, Pat

From: Pawlowski, Robin [rpawlowski@comcast.com]
Sent: Monday, May 03, 1999 1:38 PM
To: McGuirk, Andy
Subject: ANDY.xls



<<ANDY.xls>> Andy the 570815-2 is the only Pressure switch that has a 06 suffix (F2VC 9F924 00) This was sold to Ficco in '91

The other is a Power Steering Switch 570815-1
95FF 3H024 BA -- I believe that this one does not apply to the situation



TI-NHTSA 015872

Category	Subcategory	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Comments
PETS SERVICES	SPFLS-3-KINC 30000 AN	0	0	0	0	0	0	0	102	0	0	0	0	0
	SPFLS-4-SPFLS 30000 AN	0 03	4 20	2 14	3 4	1 00	3 00	0 00	0 00	3 00	0 00	1 00	0	0 00
	SPFLS-5-SPFLS 30000 AN	0	0	0	0 254	0 000	0 000	0	0	0	2 04	0 01	7 00	0
	SPFLS-6-SPFLS 30000 AN	0	0	0	0	0	0	0	0	0	0	0 13	0	0 00
PETS SERVICES	SPFLS-1-720C SPFLS AN	0 00	0 00	0 00	0	0	0	0	0	0	0	0	0	0
	SPFLS-2-720C SPFLS AN	0	0	0	0	0	0	0	0	0	0	0	0	0
	SPFLS-3-720C SPFLS AN	0	0	0	0	0	0	0	0	0	0	0	0	0
PETS SERVICES	SPFLS-4-720C SPFLS AN	0 00	0 00	0 00	0	0	0	0	0	0	0	0	0	0
	SPFLS-5-720C SPFLS AN	0	0	0	0	0	0	0	0	0	0	0	0	0
PETS SERVICES	SPFLS-6-720C SPFLS AN	0 00	0 00	0 00	0	0	0	0	0	0	0	0	0	0
	SPFLS-7-720C SPFLS AN	0	0	0	0	0	0	0	0	0	0	0	0	0
PETS SERVICES	SPFLS-8-720C SPFLS AN	0 00	0 00	0 00	0	0	0	0	0	0	0	0	0	0
	SPFLS-9-720C SPFLS AN	0	0	0	0	0	0	0	0	0	0	0	0	0
PETS SERVICES	SPFLS-10-720C SPFLS AN	0 00	0 00	0 00	0	0	0	0	0	0	0	0	0	0
	SPFLS-11-720C SPFLS AN	0	0	0	0	0	0	0	0	0	0	0	0	0
PETS SERVICES	SPFLS-12-720C SPFLS AN	0 00	0 00	0 00	0	0	0	0	0	0	0	0	0	0
	SPFLS-13-720C SPFLS AN	0	0	0	0	0	0	0	0	0	0	0	0	0
PETS SERVICES	SPFLS-14-720C SPFLS AN	0 00	0 00	0 00	0	0	0	0	0	0	0	0	0	0
	SPFLS-15-720C SPFLS AN	0	0	0	0	0	0	0	0	0	0	0	0	0
PETS SERVICES	SPFLS-16-720C SPFLS AN	0 00	0 00	0 00	0	0	0	0	0	0	0	0	0	0
	SPFLS-17-720C SPFLS AN	0	0	0	0	0	0	0	0	0	0	0	0	0
PETS SERVICES	SPFLS-18-720C SPFLS AN	0 00	0 00	0 00	0	0	0	0	0	0	0	0	0	0
	SPFLS-19-720C SPFLS AN	0	0	0	0	0	0	0	0	0	0	0	0	0
PETS SERVICES	SPFLS-20-720C SPFLS AN	0 00	0 00	0 00	0	0	0	0	0	0	0	0	0	0
	SPFLS-21-720C SPFLS AN	0	0	0	0	0	0	0	0	0	0	0	0	0
PETS SERVICES	SPFLS-22-720C SPFLS AN	0 00	0 00	0 00	0	0	0	0	0	0	0	0	0	0
	SPFLS-23-720C SPFLS AN	0	0	0	0	0	0	0	0	0	0	0	0	0
PETS SERVICES	SPFLS-24-720C SPFLS AN	0 00	0 00	0 00	0	0	0	0	0	0	0	0	0	0
	SPFLS-25-720C SPFLS AN	0	0	0	0	0	0	0	0	0	0	0	0	0
PETS SERVICES	SPFLS-26-720C SPFLS AN	0 00	0 00	0 00	0	0	0	0	0	0	0	0	0	0
	SPFLS-27-720C SPFLS AN	0	0	0	0	0	0	0	0	0	0	0	0	0
PETS SERVICES	SPFLS-28-720C SPFLS AN	0 00	0 00	0 00	0	0	0	0	0	0	0	0	0	0
	SPFLS-29-720C SPFLS AN	0	0	0	0	0	0	0	0	0	0	0	0	0
PETS SERVICES	SPFLS-30-720C SPFLS AN	0 00	0 00	0 00	0	0	0	0	0	0	0	0	0	0
	SPFLS-31-720C SPFLS AN	0	0	0	0	0	0	0	0	0	0	0	0	0

71-NHTSA 016973

CONFIDENTIAL

Category	Item	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	Notes
Operating Expenses	Operating Expenses	14.70	18.70	20.40	22.00	23.00	24.00	25.00	26.00	27.00	28.00	29.00	30.00	31.00	Operating Expenses
	Operating Expenses	0	0.40	0	0	0	0	0	0	0	0	0	0	0	Operating Expenses
Maintenance	Maintenance	3.4	0.40	0.70	1.0	0.70	1.00	0.80	1.00	1.00	1.00	1.00	1.00	1.00	Maintenance
	Maintenance	0	0	0.70	0.30	0.00	0	0	0	0	0	0	0	0	Maintenance
Fuel	Fuel	10.30	17.30	19.70	21.00	22.30	23.00	24.00	25.00	26.00	27.00	28.00	29.00	30.00	Fuel
	Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	Fuel
Repairs	Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	Repairs
	Repairs	0	0	0	0	0	0	0	0	0	0	0	0	0	Repairs
Miscellaneous	Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	Miscellaneous
	Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	Miscellaneous
Total	Total	18.10	19.10	21.10	23.00	23.70	24.00	25.00	26.00	27.00	28.00	29.00	30.00	31.00	Total
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0	Total

TI-NHTSA 018976

CONFIDENTIAL