



ISSPRO 3 3/8" Diameter Programmable Speedometer
 Microprocessor Aircore Version

General Information:

Operating Voltage: 11 – 32 VDC. Note: Instrument comes equipped with a 12V lamp. Replace with one of proper voltage when installing instrument on 24V systems. 24V Lamp Part number is 656.

Input: Magnetic sensor or AC generator

Transient Protection: +100 V, -400 V

Reverse Voltage Protected

Calibration:

The ISSPRO Programmable Speedometer is calibrated (programmed) by setting a combination of ten switches found in the rear of the instrument. The odometer and pointer are electronically linked together and both are calibrated when the switches are properly set. Program before installing.

Note: the switch setting must be done with power "off". If power is left "on", changing the switch will have no effect on calibration until power is interrupted.

Calibration Procedure:

Calculate the "calibration number" from the appropriate formula below. (A minimum calibration number of 10080 is required to be within calibration range). Refer to the "CALIBRATION SWITCH SETTING" table with this number. Locate the row in which the calibration number is between the limits, then set the switches marked with a "0" to the "on" position (up).

Example: Calibration number = 29644: From the table 29644 lies between 29581 and 29700, therefore, switches 4, 9, and 10 will be set to "on".

Note: "0" means switch is on, "1" means switch is off.

(1) Front wheel mounted tone wheel:

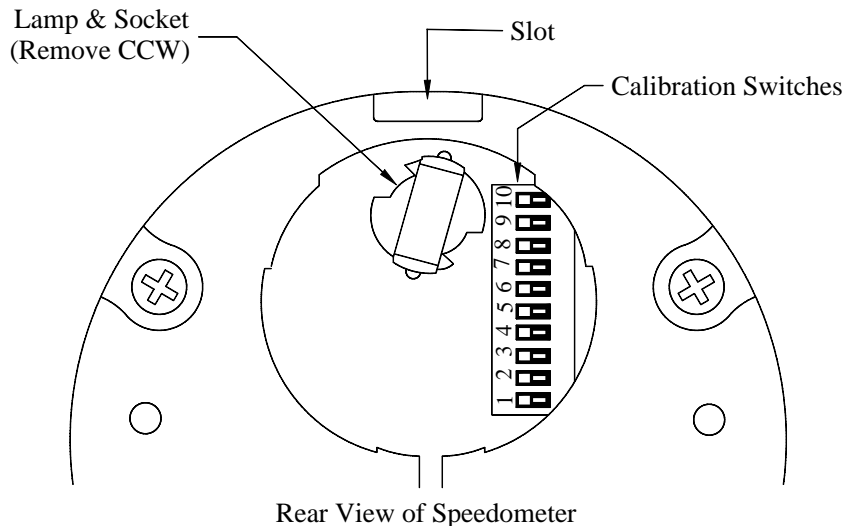
Calibration Number = Number of Slots in Tone Wheel X Tire Revs per Mile

(2) Tail Shaft mounted magnetic sensor:

Calibration Number = Tire Revs per Mile X Differential Ratio X 16

(3) Sender driven from transmission cable drive:

Calibration Number = Cable Turns Per Mile X Number of Pulses per Sender Turn



Note: For metric versions, substitute kilometers for miles in the above formulas. Multiply the resulting value by 1.621 to obtain final calibration number.

If the number of cable turns per mile (or kilometer) is not known, follow this procedure: Obtain a ratio tester and correct drive tang for your transmission. With a steel tape measure, mark off 1/10th mile (528 ft.) (or kilometer [1000 meters]) in as straight of a line as possible. Mark start and stop lines with chalk or paint. Position the vehicle so that one of the wheels aligns with the start mark. Disconnect the speedometer cable at the transmission and install the ratio tester in its place. Secure the cables and reset the ratio tester. Drive the vehicle to the stop point positioning the selected wheel on the stop mark. The reading displayed on the ratio tester is the number of cable turns per mile (or kilometer) if using an Engler "SAC-10". If using an SS White ratio tester (P/N 312-12175Y), multiply the reading by 10 to obtain the cable turns per mile (or kilometer).

Frequently Used Senders

#Pulses Per Turn

DATCON 4-D-C 71267	8 *
DIXSON SG201A, SG201A1, SG202	2 *
ENGLER 870-0588	15
ISSPRO R8970, R8940	30
KIENZLE-ARGO 8-161-237008	8 *
MOTOROLA 4-100 (7SG100), 4-111 (7SG100B)	30
ROCKWELL 240R02-001	30
SUN Model CP7643	6 *
SYNCHRO-START Minigen	30
TELEFLEX 9604276	8 *
VDO (Old Style Engler) ISSPRO 300092	4 *
ZEMCO 4710	8 *
ZEMCO 6314	5 *

*Note: These senders do not produce the minimum required number of pulses to be in calibration range when driven at 1000 turns per mile (or kilometer). It may be necessary to change your sender to one that generates more pulses per rev such as an ISSPRO R8970.

Installation: Mount the speedo in the dash panel and connect the wires as described below:

- RED – Connect to ignition switched power source.
- BLACK – Connect to ground and sensor wire (-)
- WHITE – Connect to sensor wire. (+)
- GREEN – Connect to dash lamp power.
- VIOLET – 2 speed axle (no connection if not used)
(Connection to positive gives correct MPH (or KPH) reading with 0.733 axle ratio change.
A 0.680 ratio available on special factory orders.)

Installation Hints:

- 1.) When power is applied, the needle should go to mid scale then to the zero position. If it does not, there may be a bad connection in the “Hot” (red wire) or ground wire circuit. Check power to the meter by measuring with a voltmeter at the plug (meter leads on the pins that attach to the red and black wires). If there is power at the plug, the problem is in the gauge.
- 2.) Low voltage can cause inaccurate reading. If inaccuracy is suspected, measure voltage with vehicle operating and meter connected. This can be done by connecting a voltmeter to power source (i.e. fuse block, etc.) and/or piercing the red and black wire insulation with the meter leads.
- 3.) If speedo reads zero, then “jumps” to normal reading after a certain speed, adjust the sensor in closer to gear. (generators cannot be adjusted)

Note that "X" is Switch ON

Calibration #		Calibration Switch Setting										Freq at 60MPH	Calibration #		Calibration Switch Setting										Freq at 60MPH	Calibration #		Calibration Switch Setting										Freq at 60MPH		
From	To	1	2	3	4	5	6	7	8	9	10		From	To	1	2	3	4	5	6	7	8	9	10		From	To	1	2	3	4	5	6	7	8	9	10			
10080	10140	X	X		X		X	X	X		168	17701	17820	X	X		X	X	X	X		296	25381	25500	X	X		X		X		X	X		424					
10141	10260		X		X		X	X	X		170	17821	17940		X		X	X	X	X		298	25501	25620		X		X		X		X	X		426					
10261	10380	X			X		X	X	X		172	17941	18060	X			X	X	X	X		300	25621	25740	X			X		X		X	X		428					
10381	10500				X		X	X	X		174	18061	18180				X	X	X	X		302	25741	25860				X		X		X	X		430					
10501	10620	X	X	X			X		X	X	176	18181	18300	X	X	X		X	X	X		304	25861	25980	X	X	X		X		X		X	X		432				
10621	10740		X	X			X		X	X	178	18301	18420	X	X			X	X	X		306	25981	26100	X	X		X		X		X	X		434					
10741	10860	X		X			X	X	X	X	180	18421	18540	X		X		X	X	X		308	26101	26220	X		X		X		X		X	X		436				
10861	10980		X				X	X	X	X	182	18541	18660		X			X	X	X		310	26221	26340		X		X		X		X	X		438					
10981	11100	X	X				X		X	X	184	18661	18780	X	X			X	X	X		312	26341	26460	X	X		X		X		X	X		440					
11101	11220		X				X	X	X	X	186	18781	18900		X			X	X	X		314	26461	26580		X		X		X		X	X		442					
11221	11340	X					X	X	X	X	188	18901	19020	X				X	X	X		316	26581	26700	X			X		X		X	X		444					
11341	11460						X		X	X	190	19021	19140					X	X	X		318	26701	26820				X		X		X	X		446					
11461	11580	X	X	X	X			X	X	X	192	19141	19260	X	X	X	X		X	X	X		320	26821	26940	X	X	X	X		X		X	X		448				
11581	11700	X	X	X	X			X	X	X	194	19261	19380	X	X	X	X		X	X	X		322	26941	27060	X	X	X	X		X		X	X		450				
11701	11820	X		X	X	X		X	X	X	196	19381	19500	X		X	X	X		X	X	X		324	27061	27180	X		X	X	X		X	X		452				
11821	11940		X	X	X			X	X	X	198	19501	19620		X	X	X		X	X	X		326	27181	27300		X	X	X		X		X	X		454				
11941	12060	X	X		X	X		X	X	X	200	19621	19740	X	X		X	X	X		328	27301	27420	X	X		X	X		X		X	X		456					
12061	12180		X		X	X		X	X	X	202	19741	19860	X		X	X	X		X	X	X		330	27421	27540	X		X	X		X		X	X		458			
12181	12300	X			X	X		X	X	X	204	19861	19980	X		X	X	X		X	X	X		332	27541	27660	X		X	X		X		X	X		460			
12301	12420				X	X		X	X	X	206	19981	20100				X	X	X		X	X	X		334	27661	27780			X	X		X		X	X		462		
12421	12540	X	X	X			X	X	X	X	208	20101	20220	X	X	X		X	X	X		336	27781	27900	X	X	X	X		X		X		X	X		464			
12541	12660	X	X		X		X	X	X	X	210	20221	20340	X	X		X	X	X		X	X	X		338	27901	28020	X	X	X		X		X		X	X		466	
12661	12780	X		X	X		X	X	X	X	212	20341	20460	X		X	X	X		X	X	X		340	28021	28140	X		X	X		X		X	X		468			
12781	12900		X		X		X	X	X	X	214	20461	20580		X	X	X		X	X	X		342	28141	28260		X	X	X		X		X	X		470				
12901	13020	X	X		X		X	X	X	X	216	20581	20700	X	X		X	X	X		X	X	X		344	28261	28380	X	X		X		X		X	X		472		
13021	13140		X		X		X	X	X	X	218	20701	20820		X		X	X	X		X	X	X		346	28381	28500		X		X		X		X	X		474		
13141	13260	X			X		X	X	X	X	220	20821	20940	X			X	X	X		X	X	X		348	28501	28620	X		X		X		X		X	X		476	
13261	13380				X		X	X	X	X	222	20941	21060				X	X	X		X	X	X		350	28621	28740			X		X		X		X	X		478	
13381	13500	X	X	X	X			X	X	X	224	21061	21180	X	X	X	X		X	X	X		352	28741	28860	X	X	X	X		X		X		X	X		480		
13501	13620	X	X	X			X	X	X	X	226	21181	21300	X	X	X		X	X	X		354	28861	28980	X	X	X		X		X		X	X		482				
13621	13740	X		X	X		X	X	X	X	228	21301	21420	X		X	X	X		X	X	X		356	28981	29100	X		X	X		X		X	X		484			
13741	13860		X	X			X	X	X	X	230	21421	21540		X	X		X	X	X		358	29101	29220		X	X		X		X		X	X		486				
13861	13980	X	X		X		X	X	X	X	232	21541	21660	X	X		X	X	X		X	X	X		360	29221	29340	X	X	X		X		X		X	X		488	
13981	14100		X		X		X	X	X	X	234	21661	21780	X		X		X	X	X		362	29341	29460	X		X		X		X		X		X	X		490		
14101	14220	X			X		X	X	X	X	236	21781	21900	X		X		X	X	X		364	29461	29580	X		X		X		X		X		X	X		492		
14221	14340				X		X	X	X	X	238	21901	22020				X	X	X		X	X	X		366	29581	29700			X		X		X		X	X		494	
14341	14460	X	X	X			X	X	X	X	240	22021	22140	X	X	X		X	X	X		368	29701	29820	X	X	X		X		X		X		X	X		496		
14461	14580	X	X		X		X	X	X	X	242	22141	22260	X	X		X	X	X		X	X	X		370	29821	29940	X	X		X		X		X		X	X		498
14581	14700	X		X	X		X	X	X	X	244	22261	22380	X		X	X	X		X	X	X		372	29941	30060	X	X	X		X		X		X	X		500		
14701	14820		X		X		X	X	X	X	246	22381	22500		X		X	X	X		X	X	X		374	30061	30180		X		X		X		X	X		502		
14821	14940	X	X				X	X	X	X	248	22501	22620	X	X		X	X	X		X	X	X		376	30181	30300	X	X		X		X		X	X		504		
14941	15060		X		X		X	X	X	X	250	22621	22740		X		X	X	X		X	X	X		378	30301	30420		X		X		X		X	X		506		
15061	15180	X			X		X	X	X	X	252	22741	22860	X			X	X	X		X	X	X		380	30421	30540	X			X		X		X	X		508		
15181	15300				X		X	X	X	X	254	22861	22980				X	X	X		X	X	X		382	30541	30660			X		X		X		X	X		510	
15301	15420	X	X	X	X	X	X	X	X	X	256	22981	23100	X	X	X	X	X		X	X	X		384	30661	30780	X	X	X	X	X	X	X	X	X	X		512		
15421	15540	X	X	X	X	X	X	X	X	X	258	23101	23220	X	X	X	X	X		X	X	X		386	30781	30900	X	X	X	X	X	X	X	X	X	X		514		
15541	15660	X		X	X	X	X	X	X	X	260	23221	23340	X		X	X	X	X		X	X	X		388	30901	31020	X		X	X	X	X	X	X	X	X		516	
15661	15780		X	X	X	X	X	X	X	X	262	23341	23460		X	X	X	X		X	X	X		390	31021	31140		X	X	X	X	X	X	X	X	X		518		
15781	15900	X	X		X	X	X	X	X	X	264	23461	23580	X	X		X	X	X		X	X	X		392	31141	31260	X	X		X	X	X	X	X	X	X		520	
15901	16020		X		X	X	X	X	X	X	266	23581	23700	X		X	X	X		X	X	X		394	31261	31380	X		X	X	X	X	X	X	X	X		522		
16021	16140	X			X	X	X	X	X	X	268	23701	23820	X		X	X	X		X	X	X		396	31381	31500	X		X	X	X	X	X	X	X	X		524		
16141	16260				X	X	X	X	X	X	270	23821	23940				X	X	X		X	X	X		398	31501	31620			X	X	X	X	X	X	X		526		
16261	16380	X	X	X			X	X	X	X	272	23941	24060	X	X	X		X	X	X		400	31621	31740	X	X	X		X		X		X		X	X		528		

Note that "X" is Switch ON

Calibration #		Calibration Switch Setting										Freq at 60MPH	Calibration #		Calibration Switch Setting										Freq at 60MPH	Calibration #		Calibration Switch Setting										Freq at 60MPH	
From	To	1	2	3	4	5	6	7	8	9	10		From	To	1	2	3	4	5	6	7	8	9	10		From	To	1	2	3	4	5	6	7	8	9	10		
33061	33180	X	X		X	X	X	X				552	40741	40860	X	X	X	X	X	X	X				680	48421	48540	X	X	X	X	X	X				808		
33181	33300		X	X	X	X	X	X				554	40861	40980		X	X	X	X	X	X				682	48541	48660		X	X	X	X	X	X				810	
33301	33420	X		X	X	X	X	X				556	40981	41100	X		X	X	X	X	X				684	48661	48780	X		X	X	X	X	X				812	
33421	33540			X	X	X	X	X				558	41101	41220			X	X	X	X	X				686	48781	48900			X	X	X	X	X	X				814
33541	33660	X	X	X		X	X	X	X			560	41221	41340	X	X	X		X	X	X				688	48901	49020	X	X	X		X	X	X	X				816
33661	33780	X	X		X	X	X	X				562	41341	41460	X	X		X	X	X	X				690	49021	49140	X	X		X	X	X	X	X				818
33781	33900	X	X		X	X	X	X				564	41461	41580	X	X		X	X	X	X				692	49141	49260	X	X		X	X	X	X	X				820
33901	34020		X		X	X	X	X				566	41581	41700		X		X	X	X	X				694	49261	49380		X		X	X	X	X	X				822
34021	34140	X	X		X	X	X	X				568	41701	41820	X	X		X	X	X	X				696	49381	49500	X	X		X	X	X	X	X				824
34141	34260		X		X	X	X	X				570	41821	41940	X		X	X	X	X	X				698	49501	49620		X		X	X	X	X	X				826
34261	34380	X			X	X	X	X				572	41941	42060	X		X	X	X	X	X				700	49621	49740	X			X	X	X	X	X				828
34381	34500			X	X	X	X	X				574	42061	42180			X	X	X	X	X				702	49741	49860				X	X	X	X	X				830
34501	34620	X	X	X	X	X	X	X				576	42181	42300	X	X	X	X	X	X	X				704	49861	49980	X	X	X	X	X	X	X	X				832
34621	34740	X	X	X	X	X	X	X				578	42301	42420	X	X	X	X	X	X	X				706	49981	50100	X	X	X	X	X	X	X	X				834
34741	34860	X	X	X	X	X	X	X				580	42421	42540	X	X	X	X	X	X	X				708	50101	50220	X	X	X	X	X	X	X	X				836
34861	34980		X	X	X	X	X	X				582	42541	42660		X	X	X	X	X	X				710	50221	50340		X	X	X	X	X	X	X				838
34981	35100	X	X	X	X	X	X	X				584	42661	42780	X	X	X	X	X	X	X				712	50341	50460	X	X	X	X	X	X	X	X				840
35101	35220		X	X	X	X	X	X				586	42781	42900	X	X	X	X	X	X	X				714	50461	50580	X	X	X	X	X	X	X	X				842
35221	35340	X		X	X	X	X	X				588	42901	43020	X		X	X	X	X	X				716	50581	50700	X		X	X	X	X	X	X				844
35341	35460		X	X	X	X	X	X				590	43021	43140			X	X	X	X	X				718	50701	50820		X	X	X	X	X	X	X				846
35461	35580	X	X	X	X	X	X	X				592	43141	43260	X	X	X	X	X	X	X				720	50821	50940	X	X	X	X	X	X	X	X				848
35581	35700	X	X	X	X	X	X	X				594	43261	43380	X	X	X	X	X	X	X				722	50941	51060	X	X	X	X	X	X	X	X				850
35701	35820	X	X	X	X	X	X	X				596	43381	43500	X	X	X	X	X	X	X				724	51061	51180	X	X	X	X	X	X	X	X				852
35821	35940		X	X	X	X	X	X				598	43501	43620		X	X	X	X	X	X				726	51181	51300		X	X	X	X	X	X	X				854
35941	36060	X	X		X	X	X	X				600	43621	43740	X	X		X	X	X	X				728	51301	51420	X	X		X	X	X	X	X				856
36061	36180		X		X	X	X	X				602	43741	43860	X		X	X	X	X	X				730	51421	51540		X		X	X	X	X	X				858
36181	36300	X		X	X	X	X	X				604	43861	43980	X		X	X	X	X	X				732	51541	51660	X		X	X	X	X	X	X				860
36301	36420			X	X	X	X	X				606	43981	44100			X	X	X	X	X				734	51661	51780				X	X	X	X	X				862
36421	36540	X	X	X	X	X	X	X				608	44101	44220	X	X	X	X	X	X	X				736	51781	51900	X	X	X	X	X	X	X	X				864
36541	36660	X	X	X	X	X	X	X				610	44221	44340	X	X	X	X	X	X	X				738	51901	52020	X	X	X	X	X	X	X	X				866
36661	36780	X	X	X	X	X	X	X				612	44341	44460	X	X	X	X	X	X	X				740	52021	52140	X	X	X	X	X	X	X	X				868
36781	36900		X	X	X	X	X	X				614	44461	44580		X	X	X	X	X	X				742	52141	52260		X	X	X	X	X	X	X				870
36901	37020	X	X	X	X	X	X	X				616	44581	44700	X	X	X	X	X	X	X				744	52261	52380	X	X	X	X	X	X	X	X				872
37021	37140		X	X	X	X	X	X				618	44701	44820	X	X	X	X	X	X	X				746	52381	52500	X	X	X	X	X	X	X	X				874
37141	37260	X		X	X	X	X	X				620	44821	44940	X		X	X	X	X	X				748	52501	52620	X	X	X	X	X	X	X	X				876
37261	37380			X	X	X	X	X				622	44941	45060			X	X	X	X	X				750	52621	52740		X		X	X	X	X	X				878
37381	37500	X	X	X	X	X	X	X				624	45061	45180	X	X	X	X	X	X	X				752	52741	52860	X	X	X	X	X	X	X	X				880
37501	37620	X	X		X	X	X	X				626	45181	45300	X	X	X	X	X	X	X				754	52861	52980	X	X	X	X	X	X	X	X				882
37621	37740	X	X	X	X	X	X	X				628	45301	45420	X	X	X	X	X	X	X				756	52981	53100	X	X	X	X	X	X	X	X				884
37741	37860		X		X	X	X	X				630	45421	45540		X	X	X	X	X	X				758	53101	53220		X		X	X	X	X	X				886
37861	37980	X	X		X	X	X	X				632	45541	45660	X	X		X	X	X	X				760	53221	53340	X	X		X	X	X	X	X				888
37981	38100		X		X	X	X	X				634	45661	45780	X		X	X	X	X	X				762	53341	53460		X		X	X	X	X	X				890
38101	38220	X			X	X	X	X				636	45781	45900	X		X	X	X	X	X				764	53461	53580	X			X	X	X	X	X				892
38221	38340			X	X	X	X	X				638	45901	46020			X	X	X	X	X				766	53581	53700				X	X	X	X	X				894
38341	38460	X	X	X	X	X	X	X				640	46021	46140	X	X	X	X	X	X	X				768	53701	53820	X	X	X	X	X	X	X	X				896
38461	38580	X	X	X	X	X	X	X				642	46141	46260	X	X	X	X	X	X	X				770	53821	53940	X	X	X	X	X	X	X	X				898
38581	38700	X	X	X	X	X	X	X				644	46261	46380	X	X	X	X	X	X	X				772	53941	54060	X	X	X	X	X	X	X	X				900
38701	38820		X	X	X	X	X	X				646	46381	46500		X	X	X	X	X	X				774	54061	54180		X	X	X	X	X	X	X				902
38821	38940	X	X	X	X	X	X	X				648	46501	46620	X	X	X	X	X	X	X				776	54181	54300	X	X	X	X	X	X	X	X				904
38941	39060		X	X	X	X	X	X				650	46621	46740	X	X	X	X	X	X	X				778	54301	54420	X	X	X	X	X	X	X	X				906
39061	39180	X		X	X	X	X	X				652	46741	46860	X		X	X	X	X	X				780	54421	54540	X	X	X	X	X	X	X	X				908
39181	39300			X	X	X	X</																																

Note that "X" is Switch ON

Calibration #		Calibration Switch Setting										Freq at 60MPH	Calibration #		Calibration Switch Setting										Freq at 60MPH	Calibration #		Calibration Switch Setting										Freq at 60MPH
From	To	1	2	3	4	5	6	7	8	9	10		From	To	1	2	3	4	5	6	7	8	9	10		From	To	1	2	3	4	5	6	7	8	9	10	
56101	56220	X	X		X		X				X	936	63781	63900	X	X		X	X	X	X			1064	71461	71580	X	X		X	X	X	X	X			1192	
56221	56340		X	X	X						X	938	63901	64020		X	X	X	X	X	X			1066	71581	71700		X	X	X	X	X	X	X			1194	
56341	56460	X		X	X						X	940	64021	64140	X		X	X	X	X	X			1068	71701	71820	X		X	X	X	X	X			1196		
56461	56580			X							X	942	64141	64260			X	X	X	X	X			1070	71821	71940			X	X	X	X	X			1198		
56581	56700	X	X	X		X					X	944	64261	64380	X	X	X		X	X	X	X			1072	71941	72060	X	X	X		X	X	X			1200	
56701	56820		X	X		X					X	946	64381	64500	X	X		X	X	X	X			1074	72061	72180	X	X		X	X	X	X			1202		
56821	56940	X	X		X						X	948	64501	64620	X		X	X	X	X	X			1076	72181	72300	X		X	X	X	X	X			1204		
56941	57060		X			X					X	950	64621	64740		X		X	X	X	X			1078	72301	72420		X		X	X	X	X			1206		
57061	57180	X	X			X					X	952	64741	64860	X	X		X	X	X	X			1080	72421	72540	X	X		X	X	X	X			1208		
57181	57300		X			X					X	954	64861	64980		X		X	X	X	X			1082	72541	72660		X		X	X	X	X			1210		
57301	57420	X				X					X	956	64981	65100	X			X	X	X	X			1084	72661	72780	X			X	X	X	X			1212		
57421	57540					X					X	958	65101	65220				X	X	X	X			1086	72781	72900				X	X	X	X			1214		
57541	57660	X	X	X	X	X					X	960	65221	65340	X	X	X	X	X	X	X			1088	72901	73020	X	X	X	X	X	X	X			1216		
57661	57780		X	X	X	X					X	962	65341	65460	X	X	X	X	X	X	X			1090	73021	73140	X	X	X	X	X	X	X			1218		
57781	57900	X	X	X	X						X	964	65461	65580	X		X	X	X	X	X			1092	73141	73260	X	X	X	X	X	X	X			1220		
57901	58020		X	X	X						X	966	65581	65700		X	X	X	X	X	X			1094	73261	73380		X	X	X	X	X	X			1222		
58021	58140	X	X		X	X					X	968	65701	65820	X	X		X	X	X	X			1096	73381	73500	X	X		X	X	X	X			1224		
58141	58260		X	X	X						X	970	65821	65940		X	X	X	X	X	X			1098	73501	73620		X	X	X	X	X	X			1226		
58261	58380	X		X	X						X	972	65941	66060	X		X	X	X	X	X			1100	73621	73740	X		X	X	X	X	X			1228		
58381	58500			X	X						X	974	66061	66180			X	X	X	X	X			1102	73741	73860			X	X	X	X	X			1230		
58501	58620	X	X	X	X						X	976	66181	66300	X	X	X		X	X	X			1104	73861	73980	X	X	X	X	X	X	X			1232		
58621	58740		X	X	X						X	978	66301	66420	X	X		X	X	X	X			1106	73981	74100	X	X		X	X	X	X			1234		
58741	58860	X	X	X	X						X	980	66421	66540	X		X	X	X	X	X			1108	74101	74220	X		X	X	X	X	X			1236		
58861	58980		X	X	X						X	982	66541	66660		X	X	X	X	X	X			1110	74221	74340		X	X	X	X	X	X			1238		
58981	59100	X	X		X						X	984	66661	66780	X	X		X	X	X	X			1112	74341	74460	X	X		X	X	X	X			1240		
59101	59220		X		X						X	986	66781	66900		X		X	X	X	X			1114	74461	74580		X		X	X	X	X			1242		
59221	59340	X			X						X	988	66901	67020	X			X	X	X	X			1116	74581	74700	X			X	X	X	X			1244		
59341	59460				X						X	990	67021	67140				X	X	X	X			1118	74701	74820				X	X	X	X			1246		
59461	59580	X	X	X	X						X	992	67141	67260	X	X	X	X	X	X	X			1120	74821	74940	X	X	X	X	X	X	X			1248		
59581	59700		X	X	X						X	994	67261	67380	X	X	X		X	X	X			1122	74941	75060	X	X	X	X	X	X	X			1250		
59701	59820	X	X	X							X	996	67381	67500	X		X	X	X	X	X			1124	75061	75180	X	X	X	X	X	X	X			1252		
59821	59940		X	X							X	998	67501	67620		X	X		X	X	X			1126	75181	75300		X	X		X	X	X			1254		
59941	60060	X	X		X						X	1000	67621	67740	X	X		X	X	X	X			1128	75301	75420	X	X		X	X	X	X			1256		
60061	60180		X	X							X	1002	67741	67860		X	X		X	X	X			1130	75421	75540		X	X		X	X	X			1258		
60181	60300	X		X							X	1004	67861	67980	X		X		X	X	X			1132	75541	75660	X		X		X	X	X			1260		
60301	60420				X						X	1006	67981	68100			X		X	X	X			1134	75661	75780			X		X	X	X			1262		
60421	60540	X	X	X							X	1008	68101	68220	X	X	X		X	X	X			1136	75781	75900	X	X	X	X	X	X			1264			
60541	60660		X	X							X	1010	68221	68340	X	X		X	X	X	X			1138	75901	76020		X	X		X	X	X			1266		
60661	60780	X	X		X						X	1012	68341	68460	X		X	X	X	X	X			1140	76021	76140	X	X		X	X	X	X			1268		
60781	60900		X								X	1014	68461	68580		X		X	X	X	X			1142	76141	76260		X		X	X	X	X			1270		
60901	61020	X	X								X	1016	68581	68700	X	X		X	X	X	X			1144	76261	76380	X	X		X	X	X	X			1272		
61021	61140		X								X	1018	68701	68820		X		X	X	X	X			1146	76381	76500		X		X	X	X	X			1274		
61141	61260	X									X	1020	68821	68940	X			X	X	X	X			1148	76501	76620	X			X	X	X	X			1276		
61261	61380										X	1022	68941	69060				X	X	X	X			1150	76621	76740				X	X	X	X			1278		
61381	61500	X	X	X	X	X	X	X	X	X	X	1024	69061	69180	X	X	X	X	X	X	X			1152	76741	76860	X	X	X	X	X	X	X			1280		
61501	61620		X	X	X	X	X	X	X	X	X	1026	69181	69300	X	X	X	X	X	X	X			1154	76861	76980	X	X	X	X	X	X	X			1282		
61621	61740	X	X	X	X	X	X	X	X	X	X	1028	69301	69420	X		X	X	X	X	X			1156	76981	77100	X	X	X	X	X	X	X			1284		
61741	61860		X	X	X	X	X	X	X	X	X	1030	69421	69540		X	X	X	X	X	X			1158	77101	77220		X	X	X	X	X	X			1286		
61861	61980	X	X		X	X	X	X	X	X	X	1032	69541	69660	X	X		X	X	X	X			1160	77221	77340	X	X		X	X	X	X	X			1288	
61981	62100		X	X	X	X	X	X	X	X	X	1034	69661	69780		X	X	X	X	X	X			1162	77341	77460	X		X	X	X	X	X			1290		
62101	62220	X		X	X	X	X	X	X	X	X	1036	69781	69900	X		X	X	X	X	X			1164	77461	77580	X		X	X	X	X	X			1292		
62221	62340			X	X	X	X	X	X	X	X	1038	69901	70020			X	X	X	X	X			1166	77581	77700			X	X	X	X	X			1294		
62341	62460	X	X	X		X	X	X	X	X	X	1040	70021	70140	X	X	X		X	X	X			1168	77701	77820	X	X	X	X	X	X	X			1296		
62461	62580		X	X		X	X	X	X	X	X	1042	70141	70260	X	X		X	X	X	X			1170	77821	77940	X	X		X	X	X	X			1298		
62581	62700																																					

Note that "X" is Switch ON

Calibration #		Calibration Switch Setting										Freq at 60MPH	Calibration #		Calibration Switch Setting										Freq at 60MPH	Calibration #		Calibration Switch Setting										Freq at 60MPH
From	To	1	2	3	4	5	6	7	8	9	10		From	To	1	2	3	4	5	6	7	8	9	10		From	To	1	2	3	4	5	6	7	8	9	10	
79141	79260	X	X		X	X	X					1320	86821	86940	X	X		X	X					1448	94501	94620	X	X		X	X	X				1576		
79261	79380		X	X	X	X	X					1322	86941	87060		X	X	X						1450	94621	94740		X	X	X	X	X				1578		
79381	79500	X		X	X	X	X					1324	87061	87180	X		X	X						1452	94741	94860	X		X	X	X	X				1580		
79501	79620			X	X	X	X					1326	87181	87300			X	X	X					1454	94861	94980			X	X	X	X	X			1582		
79621	79740	X	X	X		X	X	X				1328	87301	87420	X	X	X		X					1456	94981	95100	X	X	X		X	X	X			1584		
79741	79860		X	X		X	X	X				1330	87421	87540		X	X		X					1458	95101	95220		X	X		X	X	X			1586		
79861	79980	X	X		X	X	X	X				1332	87541	87660	X		X	X		X				1460	95221	95340	X		X	X	X	X	X			1588		
79981	80100		X		X	X	X					1334	87661	87780			X	X		X				1462	95341	95460		X		X	X	X			1590			
80101	80220	X	X			X	X	X				1336	87781	87900	X	X			X					1464	95461	95580	X	X			X	X	X			1592		
80221	80340		X		X	X	X					1338	87901	88020		X		X		X				1466	95581	95700		X		X	X	X			1594			
80341	80460	X			X	X	X					1340	88021	88140	X			X		X				1468	95701	95820	X			X	X	X			1596			
80461	80580				X	X	X					1342	88141	88260				X		X				1470	95821	95940				X	X	X			1598			
80581	80700	X	X	X	X	X	X					1344	88261	88380	X	X	X	X		X				1472	95941	96060	X	X	X	X	X	X			1600			
80701	80820		X	X	X	X	X					1346	88381	88500		X	X	X		X				1474	96061	96180		X	X	X	X	X			1602			
80821	80940	X	X	X	X	X	X					1348	88501	88620	X		X	X	X		X			1476	96181	96300	X	X	X	X	X	X			1604			
80941	81060		X	X	X	X	X					1350	88621	88740		X	X	X		X				1478	96301	96420		X	X	X	X	X			1606			
81061	81180	X	X		X	X	X					1352	88741	88860	X	X		X	X		X			1480	96421	96540	X	X		X	X	X	X			1608		
81181	81300		X	X	X	X	X					1354	88861	88980		X	X	X		X				1482	96541	96660		X	X	X	X	X			1610			
81301	81420	X		X	X	X	X					1356	88981	89100	X		X	X		X				1484	96661	96780	X		X	X	X	X			1612			
81421	81540			X	X	X	X					1358	89101	89220			X	X		X				1486	96781	96900		X	X	X	X	X			1614			
81541	81660	X	X	X	X	X	X					1360	89221	89340	X	X	X	X		X				1488	96901	97020	X	X	X	X	X	X			1616			
81661	81780		X	X	X	X	X					1362	89341	89460		X	X	X		X				1490	97021	97140		X	X	X	X	X			1618			
81781	81900	X	X	X	X	X	X					1364	89461	89580	X		X	X		X				1492	97141	97260	X	X	X	X	X	X			1620			
81901	82020		X	X	X	X	X					1366	89581	89700		X	X	X		X				1494	97261	97380		X	X	X	X	X			1622			
82021	82140	X	X		X	X	X					1368	89701	89820	X	X		X		X				1496	97381	97500	X	X		X	X	X			1624			
82141	82260		X		X	X	X					1370	89821	89940		X	X		X					1498	97501	97620		X		X	X	X			1626			
82261	82380	X			X	X	X					1372	89941	90060	X		X		X					1500	97621	97740	X			X	X	X			1628			
82381	82500				X	X	X					1374	90061	90180				X		X				1502	97741	97860				X	X	X			1630			
82501	82620	X	X	X	X	X	X					1376	90181	90300	X	X	X	X		X				1504	97861	97980	X	X	X	X	X	X			1632			
82621	82740		X	X	X	X	X					1378	90301	90420		X	X	X		X				1506	97981	98100		X	X	X	X	X			1634			
82741	82860	X	X	X	X	X	X					1380	90421	90540	X		X	X		X				1508	98101	98220	X	X	X	X	X	X			1636			
82861	82980		X	X	X	X	X					1382	90541	90660		X	X		X					1510	98221	98340		X	X	X	X	X			1638			
82981	83100	X	X		X	X	X					1384	90661	90780	X	X		X		X				1512	98341	98460	X	X		X	X	X			1640			
83101	83220		X	X	X	X	X					1386	90781	90900		X	X		X					1514	98461	98580		X	X	X	X	X			1642			
83221	83340	X		X	X	X	X					1388	90901	91020	X		X		X					1516	98581	98700	X		X	X	X	X			1644			
83341	83460			X	X	X	X					1390	91021	91140		X	X		X					1518	98701	98820		X		X	X	X			1646			
83461	83580	X	X	X	X	X	X					1392	91141	91260	X	X	X		X					1520	98821	98940	X	X	X	X	X	X			1648			
83581	83700		X	X	X	X	X					1394	91261	91380		X	X		X					1522	98941	99060		X	X	X	X	X			1650			
83701	83820	X	X	X	X	X	X					1396	91381	91500	X		X	X		X				1524	99061	99180	X	X	X	X	X	X			1652			
83821	83940		X		X	X	X					1398	91501	91620		X	X		X					1526	99181	99300		X		X	X	X			1654			
83941	84060	X	X			X	X					1400	91621	91740	X	X			X					1528	99301	99420	X	X			X	X	X			1656		
84061	84180		X		X	X	X					1402	91741	91860		X		X		X				1530	99421	99540		X		X	X	X			1658			
84181	84300	X			X	X	X					1404	91861	91980	X			X		X				1532	99541	99660	X			X	X	X			1660			
84301	84420				X	X	X					1406	91981	92100				X		X				1534	99661	99780				X	X	X			1662			
84421	84540	X	X	X	X	X	X					1408	92101	92220	X	X	X	X	X	X				1536	99781	99900	X	X	X	X	X	X			1664			
84541	84660		X	X	X	X	X					1410	92221	92340		X	X	X	X	X				1538	99901	100020		X	X	X	X	X			1666			
84661	84780	X	X	X	X	X	X					1412	92341	92460	X		X	X	X	X				1540	100021	100140	X	X	X	X	X	X			1668			
84781	84900		X	X	X	X	X					1414	92461	92580		X	X	X	X	X				1542	100141	100260		X	X	X	X	X			1670			
84901	85020	X	X		X	X	X					1416	92581	92700	X	X		X	X	X	X			1544	100261	100380	X	X		X	X	X	X			1672		
85021	85140		X	X	X	X	X					1418	92701	92820		X	X	X	X	X				1546	100381	100500		X	X	X	X	X			1674			
85141	85260	X		X	X	X	X					1420	92821	92940	X		X	X	X	X				1548	100501	100620	X		X	X	X	X			1676			
85261	85380			X	X	X	X					1422	92941	93060			X	X	X	X				1550	100621	100740			X	X	X	X			1678			
85381	85500	X	X	X	X	X	X					1424	93061	93180	X	X	X	X	X	X				1552	100741	100860	X	X	X	X	X	X			1680			
85501	85620		X	X	X	X	X					1426	93181	93300		X	X	X	X	X				1554	100861	100980		X	X	X	X	X			1682			
85621	85740	X	X	X	X	X	X					1428	93301	93420	X		X	X	X	X				1556	100981	101100	X	X	X	X	X	X			1684			
85741	85860		X	X	X	X	X					1																										

Note that "X" is Switch ON

Calibration #		Calibration Switch Setting										Freq at 60MPH	Calibration #		Calibration Switch Setting										Freq at 60MPH	Calibration #		Calibration Switch Setting										Freq at 60MPH
From	To	1	2	3	4	5	6	7	8	9	10		From	To	1	2	3	4	5	6	7	8	9	10		From	To	1	2	3	4	5	6	7	8	9	10	
102181	102300	X	X		X	X		X				1704	109861	109980	X	X		X	X	X				1832	117541	117660	X	X		X	X				1960			
102301	102420		X	X	X	X		X				1706	109981	110100		X	X	X	X					1834	117661	117780		X	X	X					1962			
102421	102540	X		X	X	X		X				1708	110101	110220	X		X	X	X					1836	117781	117900	X		X	X					1964			
102541	102660			X	X	X		X				1710	110221	110340			X	X	X					1838	117901	118020			X	X					1966			
102661	102780	X	X	X		X	X		X			1712	110341	110460	X	X	X		X	X				1840	118021	118140	X	X	X		X				1968			
102781	102900		X	X		X	X		X			1714	110461	110580	X	X		X	X					1842	118141	118260	X	X		X					1970			
102901	103020	X	X		X	X		X				1716	110581	110700	X		X	X	X					1844	118261	118380	X	X		X					1972			
103021	103140		X		X	X		X				1718	110701	110820		X	X	X		X				1846	118381	118500		X	X		X				1974			
103141	103260	X	X			X	X		X			1720	110821	110940	X	X			X	X				1848	118501	118620	X	X			X				1976			
103261	103380		X	X	X		X		X			1722	110941	111060		X		X	X					1850	118621	118740		X	X		X				1978			
103381	103500	X				X	X		X			1724	111061	111180	X				X	X				1852	118741	118860	X			X					1980			
103501	103620					X	X		X			1726	111181	111300					X	X				1854	118861	118980				X					1982			
103621	103740	X	X	X	X	X		X				1728	111301	111420	X	X	X	X	X					1856	118981	119100	X	X	X	X		X			1984			
103741	103860	X	X	X	X	X		X				1730	111421	111540	X	X	X	X	X					1858	119101	119220	X	X	X	X		X			1986			
103861	103980	X	X	X	X	X		X				1732	111541	111660	X	X	X	X	X					1860	119221	119340	X	X	X	X		X			1988			
103981	104100		X	X	X		X		X			1734	111661	111780		X	X	X	X					1862	119341	119460		X	X	X		X			1990			
104101	104220	X	X		X	X		X				1736	111781	111900	X	X		X	X	X				1864	119461	119580	X	X		X	X		X		1992			
104221	104340	X	X	X		X		X				1738	111901	112020	X	X	X	X	X					1866	119581	119700	X	X	X		X				1994			
104341	104460	X		X	X	X		X				1740	112021	112140	X		X	X	X					1868	119701	119820	X		X	X		X			1996			
104461	104580			X	X	X		X				1742	112141	112260			X	X	X					1870	119821	119940			X	X		X			1998			
104581	104700	X	X	X	X	X		X				1744	112261	112380	X	X	X	X	X					1872	119941	120060	X	X	X	X		X			2000			
104701	104820	X	X	X	X	X		X				1746	112381	112500	X	X	X	X	X					1874	120061	120180	X	X	X		X				2002			
104821	104940	X	X	X	X	X		X				1748	112501	112620	X	X	X	X	X					1876	120181	120300	X	X	X		X				2004			
104941	105060		X	X	X	X		X				1750	112621	112740		X	X	X	X					1878	120301	120420		X	X		X				2006			
105061	105180	X	X		X	X		X				1752	112741	112860	X	X		X	X					1880	120421	120540	X	X		X		X			2008			
105181	105300		X		X	X		X				1754	112861	112980		X		X	X					1882	120541	120660		X	X		X				2010			
105301	105420	X			X	X		X				1756	112981	113100	X			X	X					1884	120661	120780	X			X					2012			
105421	105540				X			X				1758	113101	113220				X	X					1886	120781	120900				X					2014			
105541	105660	X	X	X	X	X		X				1760	113221	113340	X	X	X	X	X					1888	120901	121020	X	X	X	X		X			2016			
105661	105780	X	X	X	X	X		X				1762	113341	113460	X	X	X	X	X					1890	121021	121140	X	X	X		X				2018			
105781	105900	X	X	X	X	X		X				1764	113461	113580	X	X	X	X	X					1892	121141	121260	X	X	X		X				2020			
105901	106020		X	X		X		X				1766	113581	113700		X	X	X	X					1894	121261	121380		X	X		X				2022			
106021	106140	X	X		X		X		X			1768	113701	113820	X	X		X	X					1896	121381	121500	X	X		X		X			2024			
106141	106260	X	X		X		X		X			1770	113821	113940	X	X		X	X					1898	121501	121620	X	X		X		X			2026			
106261	106380	X		X	X	X		X				1772	113941	114060	X		X	X	X					1900	121621	121740	X		X		X				2028			
106381	106500			X		X		X				1774	114061	114180				X	X					1902	121741	121860			X		X				2030			
106501	106620	X	X	X		X		X				1776	114181	114300	X	X	X	X	X					1904	121861	121980	X	X	X		X				2032			
106621	106740	X	X		X	X		X				1778	114301	114420	X	X		X	X					1906	121981	122100	X	X		X		X			2034			
106741	106860	X	X		X	X		X				1780	114421	114540	X	X		X	X					1908	122101	122220	X	X		X		X			2036			
106861	106980		X		X	X		X				1782	114541	114660		X	X	X	X					1910	122221	122340		X		X		X			2038			
106981	107100	X	X		X	X		X				1784	114661	114780	X	X		X	X					1912	122341	122460	X	X		X		X			2040			
107101	107220		X		X	X		X				1786	114781	114900		X		X	X					1914	122461	122580		X		X		X			2042			
107221	107340	X			X	X		X				1788	114901	115020	X			X	X					1916	122581	122700	X			X		X			2044			
107341	107460				X	X		X				1790	115021	115140				X	X					1918	122701	122820				X		X			2046			
107461	107580	X	X	X	X	X	X	X				1792	115141	115260	X	X	X	X	X					1920														
107581	107700	X	X	X	X	X	X	X				1794	115261	115380	X	X	X	X	X					1922														
107701	107820	X	X	X	X	X	X	X				1796	115381	115500	X	X	X	X	X					1924														
107821	107940		X	X	X	X	X	X				1798	115501	115620		X	X	X	X					1926														
107941	108060	X	X		X	X	X	X				1800	115621	115740	X	X		X	X	X				1928														
108061	108180	X	X	X	X	X	X	X				1802	115741	115860	X		X	X	X					1930														
108181	108300	X		X	X	X	X	X				1804	115861	115980	X		X	X	X					1932														
108301	108420			X	X	X	X	X				1806	115981	116100				X	X	X				1934														
108421	108540	X	X	X	X	X	X	X				1808	116101	116220	X	X	X	X	X					1936														
108541	108660	X	X		X	X	X	X				1810	116221	116340	X	X		X	X					1938														
108661	108780	X	X	X	X	X	X	X				1812	116341	116460	X	X	X	X	X					1940														
108781	108900		X	X	X	X	X	X				1814	116461	1170																								



Odometer/Hourmeter Setting Instructions For Tachometers and Speedometers with Counter Access Slot

Access to the counter enables setting of mileage or engine hours in the field. **The user is responsible to insure that all laws and regulations are complied with when setting the odometer mileage.** Normally, mileage can only be legally set to actual vehicle mileage when replacing the speedometer or in Heavy Duty applications such as Class 8 trucks. ISSPRO is not responsible for any liabilities associated with the setting of mileage on this unit in the field. Damage caused to the speedometer or tachometer by setting the counter is NOT covered by the ISSPRO warranty.

****** Please read entire directions before starting. ******

The speedometer or tachometer is shipped with a yellow warning label covering the counter access slot. An additional label is supplied to re-cover the slot after the counter has been set. To set the counter:

1. Remove the warning label from the unit covering the slot.

For instruction purposes, setting the odometer is shown. An hourmeter should only need the numbered wheels changed.

2. Determine the mileage setting that you want to enter on the odometer. For this example, we will assume that the mileage on the speedometer that is being replaced as 45,567 miles.
3. Begin from the right side of the counter and set the 1-mile odometer wheel first. To do this, carefully slide idler gear #1 to the right (towards the tenth wheel) with a small flat blade screwdriver or similar tool. Be careful not to damage the idler or odometer wheel. Use only enough pressure to disengage the idler from the ODO wheel. When the gear has been moved far enough, it will disengage from the odometer wheel and allow you to turn the odometer wheel to the desired setting (Number 7 in this example), with another tool, such as a toothpick or a pencil. Do not allow the idler gear to turn on its shaft. Note: All of the idlers must have alternating long and short teeth lined up across the counter before and after the setting. Release the idler from the pressure applied by the screwdriver and allow it to reengage the odometer wheel teeth. Make sure that the digit that has been set is lined up correctly in the face dial window and that lower digits are aligned correctly.
4. Proceed to the left and set each odometer wheel in succession until all digits have been set. In this example, set the "7" and move to the "6", then "5", then "5", then "4". Double check to make sure that the correct mileage number is shown in the face dial window and correctly lined up. Also, check the large and small teeth of the idler gears to make sure that they have not shifted and are also lined up. You may now do a simple test to insure that the odometer will operate correctly. By viewing the unit from the front at a steep angle, a dull metal plate can be seen underneath the idler gears. If you carefully insert your small screwdriver through the slot and tap this plate several times in succession, the odometer should begin to count at each tap of the plate.
5. Make sure that no foreign objects have fallen into the unit then re-cover the access slot using the extra warning label provided.

