# Storing Online FI Card





## Project Overview

(Background)

- Global Direct Pass (GDP) merupakan pengukuran kualitas proses dalam menciptakan suatu unit motor yang diukur mulai dari line assembly unit (AU) sampai final inspection (FI). Unit yang masuk dalam perhitungan GDP adalah unit yang mulai dari line AU sampai FI tanpa ada temuan atau not good (NG) poin yang menyebabkan unit harus di-repair.
- Latar belakang GDP ini adalah karena adanya Global Quality Control System of Honda untuk dapat meningkatkan kualitas dan untuk mengetahui posisi AHM secara Honda Global.
- Perhitungan GDP ini menggunakan FI Card yang proses pengisiannya dilakukan disetiap titik Q-Gate (quality gate) dan titik final inspection

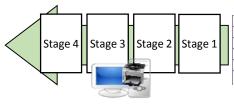


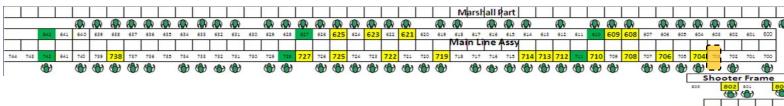


## Design of FI Card

### Final Inspection

### **Assy Unit**





M	ODEL	TANGGAL	FINA	L INS	PECTION	PT Astra I	tonda Mot
ngine N				31110		r i Adda i	TOTIGE INTO
ngine N	lumber						
	MH Frame Numbe	1KF112	21		1H02N1 <b>216</b>	4S2 A 231	GZ3
	TAGE 1	STAGE 2	_		3E 3	STA	GE 4
	TAGE 1	STAGE 2	+	STA	3E 3	814	GE 4
Stage	Main Item	Inspection Ite	m	Judge	Tepat, jolas, m	ubstance	
4	Spesification	Numbering Frame			Kesejajaran	dour dious	,
	Tightening ( Marking )	Nut/Bolt : Disk brake, Bolt Fr, Bolt Rear Cushion, Bo & Bolt Link Assy Engine	Caliper it Muffler		Marking warns		
,	Free Play	Fr & Rr Brake , Throttle G	rip		Jarak bebas s berfungsi Fr & Rr Brake Throttle grip =	= 10 - 20	
,	Start Ability	Kick Starter & Electrick S	tarter		Max 5x engine		nyala
		Side Stand Switch, ISS S & Rr Brake, Throttle Grip			Berfungsi den ngelock/ngem	gan baik, pos	
	Electrical & Mechanical Function	Speedometer Needle, IS: Indicator, Temperatur Ind Fuel Indicator, MIL	S icator,		Getaran jarum menyala, dispi	. lampu ind	likator a
		Start : km / Finish :	km		Catat Odomete	or awal & A	khir
	Running Ability (Engine, Power transmission & Emanate Of Exhaust)	Engine, V-Bell, Mission, F Muffler Loak	Radiator,		Putaran engin putaran idle	e, noise, g	etaran,
	Running Ability ( Frame & Absorption)	Fr/Rr Wheel, Fr/Rr Cushion,Steering Handle, Parts	Plastic		Putaran roda, berfungsi & sr	getaran, n nooth	oise,
2	Brake Function	Fr/Rr Brake, CBS System lever			Berfungsi den tidak normal, r	ngelock/nge	au yang empos
	Fuel Leak	Fuel Tank, Throttle body & Pump Area			Kebocoran ba HC = Max 300	ppm	
	( Switch & Indicator Function )	Winker, Horn, Stop Lamp Light, License Lamp ,Pos Lo & Hi Position, Back Lij speedometer	, Tail t Lamp, pht		Menyala dan t mudah di oper pasang, horn mati, H/L tidak	asikan, tid abnormal 8	ak salah
3	Mechanical Function	Pillion Step R/L, Steering R/L Lock & Un smooth Ro Main Switch, Side Stand & Stand, Cap Fuel Filler, Fr Wheel Rotation, Double & Lock, Brake Lever Parkir	& Main /Rr leat		Bisa dioperasi abnormal.		seret, nois
	Visual Inspection	Double Seat, Rear Grip, F Fender, Box Luggage, Fu & Fuel Tray, Label inform	) r		Tidak cacat, ti kesejajaran wi	dak salah p neel dengai	easang, n fender
4	Visual Inspection Motorcycle Assy Part	Front View:  bracket Plate number, fro front top cover, master cy front fander, stripe Right View: Cover body, cover front s muffler, cover muffler, se cover lower side, cover ci stripe.  Rear View: Comb light, cover fix cent Left View:	nt cover, finder, ide, ing arm, anter,		Kolengkapan p dan stripe, ke Boll, tidak cac	oart, kesesi kencangar at	uaian warn s Screw /
		Cover body, cover front s cover lower side, cover cover L, stripe				FI	F1 *
P	roblem	Detail Problem		Action Code	Repairman	FI Judge	Final
					-		

Konsen Item Final Inspection:

- ➤ 4 Field Kode Operator
- > 18 Field Judge Quality

				룡	VREA Q-GATE										
					7										2
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					13.Routhror cable AB					2.Bdf Hock Lugage					13 Rr Brk & Vsual B.J.
Ne Flor					14Rout Brit Cable					3.Or mens SF					14 RR Fend 15 TL & C
able Rr Brk					15_Loint B. Bik Arm & Nurl B					4.Or Fr Loose vs CU					15 Screaz Tapp ELG do
n Step					18.Spring A Side Stand					50x Unions SF					16 Sprear tapp CFL&C
kL(2pcs)					17.Camp VC Calger (UP)					8 Visual CB & Oblineal					17. Screaz Tapp Base Li
8					18 Camp VC Calger (UP)					7.Or Fr Lover vs SF					16.Streez Tapp OC dan
o Stay F.Or					18 Camp VC Calper (LOYV)					8.03 ts 0.0					19 Screaz Tapp CFTcp
pd Buzer Assy					20 Both Steering Handle					8 Both 8 Visual BLG					20 Screamage CFL ca
habel Hom					21 Visual Switch Side Stand					10 Bet & Say CU					21 Screen Pan CBS Le
*										11 Yesual & Bull RR Grip					22 Clip Trim pc/CB L k
	Г			_	72	ľ									R3
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96					13-Rout File Dain					2Vs CR: & F.Fandr					13 Lock Dis Seat
					14.Frae Play tradt Cable					3 Both & Visual BLG					M. Screen Tapp BLG da
					15 Corn coup ECU dar WH					4Or FR Lower to Cul					15 Screen app CFR & C
_					18 Com coupl ACS pokelati		П			SOr Incos					16 Screen Tapp Base L
50					17.Com coupl ACS (hizm)					8Wsual CB & Dbl seal					17. Screen Tapp OC can
e Fusi Feed					18Cip katel Subharn STH					7.03 ts 0.0					18 Screen Tapp CF Top
9					19.Stay Bot Massa					BOB VS RF					19 Scen Tap CR ca
					20.Stay SHE					Bivisual & Bott PR Grip					20 Screen Pan CBS Ric
d'RFR										10 Bot & Say Cover Und					21 Clp Trim CB R Ne R
98.88										11 Bot & Szy C.Fr					Z.S.Flooris F.Loe & L
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13 Block of the Book of the Bo

Konsen Item Q-Gate:

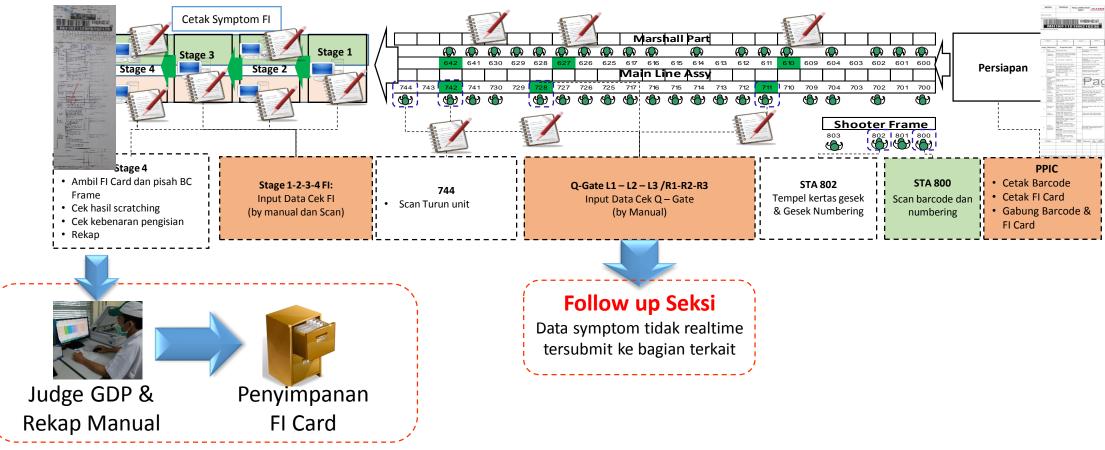
132 Field Judge Quality





## Flow Process AS IS

Deskripsi: FI Card ditempel barcode oleh PC dan digantung di unit motor, pengisisan dilakukan QG:Manual dan FI: System dan Manual, rekap FI Card secara manual

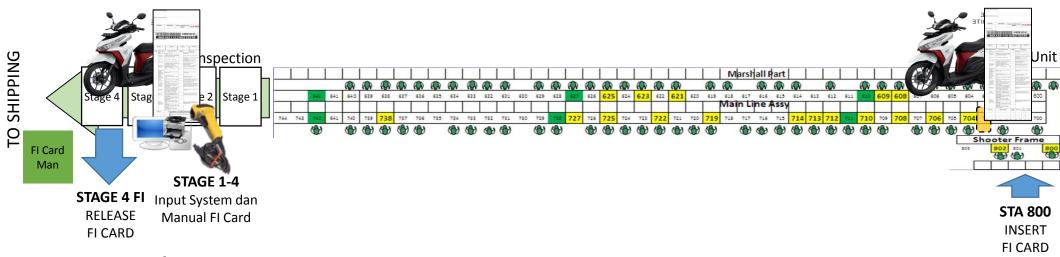


- Kondisi as-is ini menyebabkan beberapa permasalahan yaitu :
  - 1. Adanya proses rekap manual yang menyebabkan feedback temuan membutuhkan waktu H+1.
  - Adanya kebutuhan cost yang besar untuk menyimpan Check sheet FI Card secara manual selama 15 tahun.

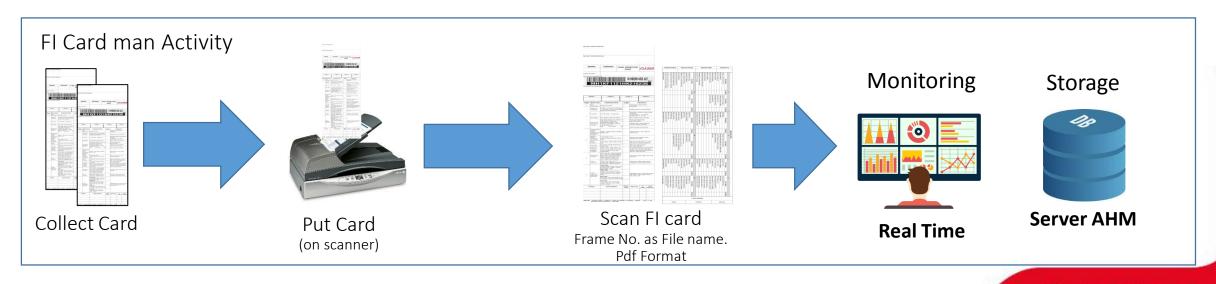




## Design of Infrastructure (Softfile Storage)



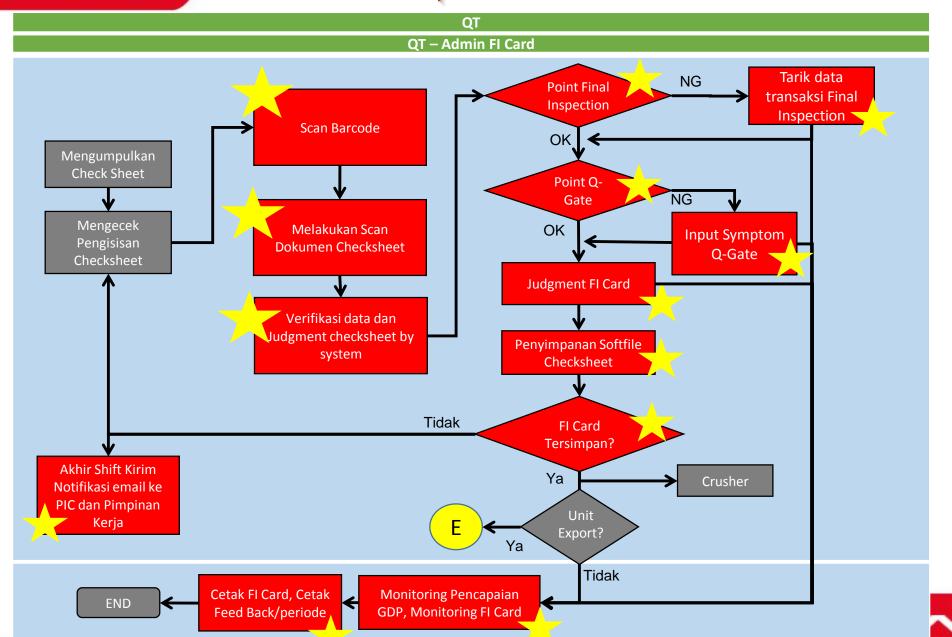
Unit motor → ke shipping
 FI Card → ke FI Card Man







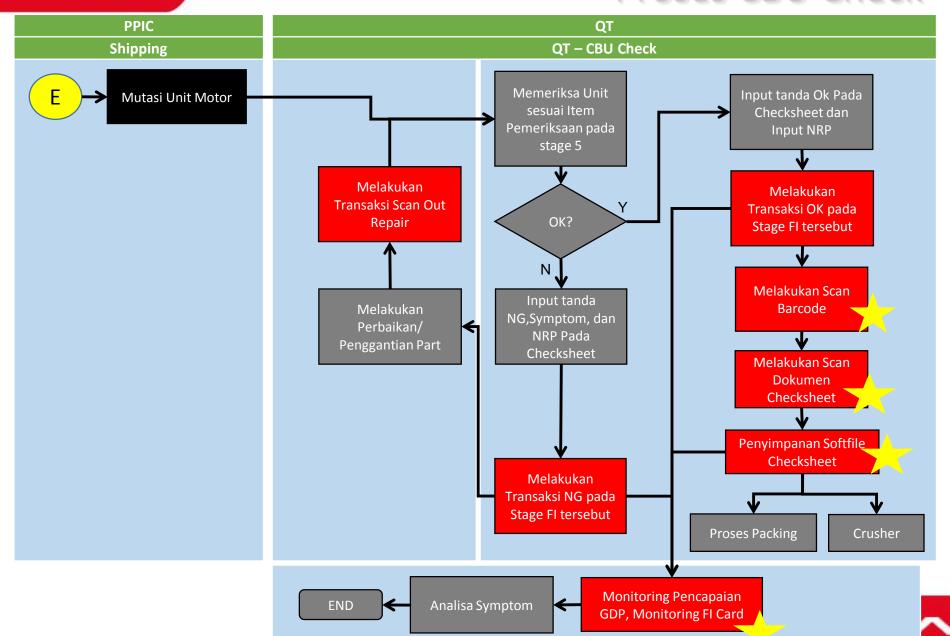
## Proses Rekap Data GDP





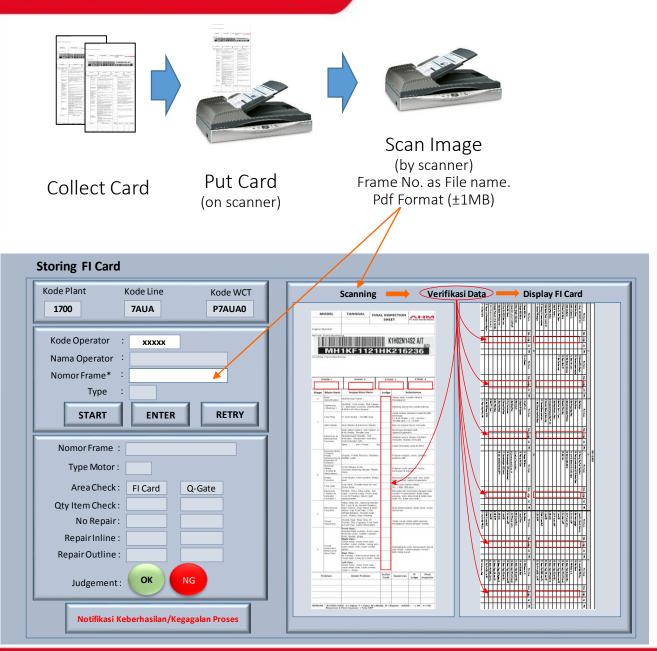
## Proses CBU Check

Astra Honda Motor





## Design of Aplication (Softfile Storage)



#### Proses kerja:

- Klik Start → Mentrigger scanner untuk menarik kertas FI Card
- 2. Scanner membaca barcode Frame untuk menjadi inputan kolom Nomor Frame
- 3. Proses scan FI Card
- 4. Verifikasi value FI Card (Final Inspection dan Q-Gate)
  - > Final Inspection : Kode Operator harus terisi
    - Kolom judgment (I/X)
  - > Q-Gate : Kolom Judgemnt (I/O/X)
- 5. Jika ada temuan repair inline maupun outline
  - > Final Inspection : Menarik data trx Final Inspection
  - > Q-Gate : Input Symptom Manual
- 6. Judgement GDP: OK: \*Tanpa ada temuan repair outline
  - NG: \*Ada temuan repair outline
- 7. Jika semua data sudah sesuai klik Enter untuk menyimpan data dan dokumen FI Card.Pdf dengan identitas No Frame
- 8. Muncul notifikasi keberhasilan proses
- 9. Jika ada data yang tidak sesuai maka klik Retry untuk memproses ulang sekaligus reset data.
- 10. Jika ada konten yang belum terisi muncul notifikasi dan menggagalkan proses verifikasi.





## Jika ditemukan NG Q-Gate



#### Proses kerja:

- 1. Pilih satu symptom yang sesuai (Pilihan lain langsung terlock)
- 2. Klik Submit untuk kembali ke halaman utama



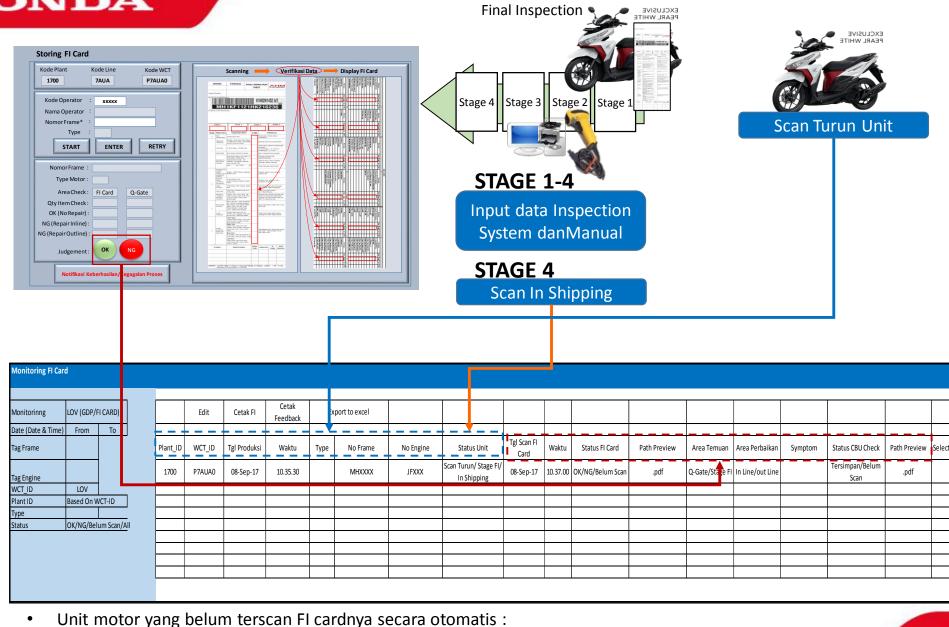


# Master Symptom GDP

										_		
Add	Edit	Upload	Export To Excel									
Plant_ID	WCT_ID	Туре	Area	Station	ID Point Check	Point Check	ID Deskripsi Masalah	Deskripsi Masalah	ID Symptom	Symptom	Begin Effective	End Effective
1700	P7AUB0	HK-4	Q-Gate	L1	L1.1	Stay Cover Under	LM	Las Minus	L1.1LM	LM. Stay Cover Under Las minus	01-Jan-18	31-Des-00
							ВК	Bengkok	L1.1BK	BK. Stay Cover Under Bengkok	01-Jan-18	31-Des-00
							Π	Tidak Terpasang	L1.1TT	TT. Stay Cover Under Tidak terpasang	01-Jan-18	31-Des-00
							PTH	Patah	L1.1PTH	PTH. Stay Cover Under Patah	01-Jan-18	31-Des-00
8												18







→ Data akan ternotifikasi ke PIC,Kasie,CC : Manager (By Email) → Akhir Shift

PT Astra Honda Motor



## Monitoring Progress FI Card

# Monitoring FI Card Monitorinng LOV (GDP/FI CARD) Date (Date & Time) From To Tag Frame Tag Engine WCT\_ID LOV Plant ID Based On WCT-ID Type Status OK/NG/Belum Scan/All

	Edit	Cetak FI	Cetak Feedback	Ex	port to excel												
																ĺ	
Plant_ID	WCT_ID	Tgl Produksi	Waktu	Туре	No Frame	No Engine	Status Unit	Tgl Scan Fl Card	Waktu	Status FI Card	Path Preview	Area Temuan	Area Perbaikan	Symptom	Status CBU Check	Path Preview	Select
1700	P7AUA0	08-Sep-17	10.35.30		MHXXXX	JFXXX	Scan Turun/ Stage FI/ In Shipping	08-Sep-17	10.37.00	OK/NG/Belum Scan	.pdf	Q-Gate/Stage FI	In Line/out Line		Tersimpan/Belum Scan	.pdf	
	•	•							-			•			•	-	

- → GDP > Parameter search berdasarkan time storing FI Card Untuk cetak Feed Back dan FI Card,
- → FI Card > Parameter search berdasarkan time produksi unit Untuk monitoring progress storing FI Card.





## **Cetak Ulang FI Card**

M	ODEL										n W		!																		an At	
		TANGGAL FII		HEE	ECTION	PT Astra	Honda Motor		сра	ıımı	an W	etdi	ing		ep.	urma	n Pa	intin	18		н	tepai	rma	n En	gine		+		кера	iirma	in Al	_
ngine Nu								Bolt	Yes	Cim	Ye:S	Sen	Ver.S	9 3	2 2	2 5	le:S	Т		Sprii	Bolt	Scre	Fu b	ş	<u> </u>	Ę	E de S	Suis	Bolt	Т		
	Frame Number	1KF1121	IHI		1H02N1 <b>216</b>	482 A <b>23</b>	GZ3	t Socket RR Einder Inner	WHA, B, C RR Fender	rp Oli ACS & Seat Lock	Clip Harness Engine	NOT ECT	Bolt Messa	JK,LM,N,O,P,Q,R	Countage & CG Atras	pier ECL Adas	Clip di Fran: Cover	Part Name	R1	ring Rear Brake	t Rear Fencer L	rew C Seat Catch	bber Main 5:end	Noise	t Kick Starter	th Air Classon	Side State	ude A, S,C,D,E,F,G,H,I	Stay Cover Front	Part Name	E	
							GE 4											Problem												Problem		
STA	AGE 1	STAGE 2	ST	AGE	3	SIA	GE 4	Bolt FT (3 pcs)	BerFillio	Stay Fuel Feed	Connect	Clip Main	Bolt Step	Bolt Ground	Coupler SHS	Coupler	Gip 5" H (2)						Bolt Fear	Bolt Fuel	Bracket		OUIL FIGH	Stay Suzzer	Bolt Caliper			ı
Stage	Main Item	Inspection Item	Jud	ge		ubstand	e	3pcs)	Pillion Step	Feed	Fuel Fee p	Jip Main Harness	Step Floor	und	uplar SH Spanne	spier key set	(2)	P					olt Fear Fender	oolt Fuel Tank L   2 pcs	racket Pillion Step	Tammar Cable Be	Januar Theorie	er	Per			ı
	No.	Numbering Frame		1	Tepat, jelas, r Kosojajaran	nudah dibe	nce,				0				1			PartName					r. (Rear)	2pcs	8	E C	1000			Part Name		ı
	Tightoning	Nut/Bolt : Disk brake, Bolt Calipe Fr, Bolt Rear Cushion, Bolt Muff & Bolt Link Assy Engine	er ler		Marking wern																				ľ							
,	Free Play	Fr & Rr Brake , Throttle Grip		F	Jarak bebas : berfungsi Fr & Rr Brake grip 2 = 6 r	= 10 ~ 20	mm / Throttle		İ	T	İ				İ	Ť	İ	Problem							Ť	İ	Ť	Ť		Problem		
		Kick Starter & Electrick Starter	F-	_	Max 5x engin		enyala		L	L	L		Ш	Ц	P 6	C No.	Bot	1	22	H		_			_	1	1	_		ļ-	2	ı
	Electrical &	Side Stand Switch, ISS Switch, & Rr Brake, Throllle Grip Speedometer Needle, ISS Indicator, Temperatur Indicator, Fuel Indicator, MIL	F F		Berfungsi der ngelock/ngen Getaran jarun menyala, disp	ipos i, lampu in	dikator								Bouring had Desi	Country St Canni	Bolt RR Ferrder R FR	2														
ľ		Start : km			Calal Odomol	erawal&	Akhir									2	12	Part Name														3
	transmission & Emanate Of Exhaust )	Engine, V-Bellt, Mission, Radiato Muffler Leak	ır,	F	Putaran engir pularan idle	e, noise, ç	getaran,											L														ANEM C'OMIE
	Ability	Fr/Rr Wheel, Fr/Rr Cushion,Steering Handle, Plastic Parts		E	Putaran roda berfungsi & s	getaran, r mooth	noise,											Problem														
-	Brake	Fr/Rr Brake, CBS System, Brak lever	0	6	Berfungsi der lidak normal,	igan baik, ngelock/ng	bau yang jempos	CRU	CFR Lor	SS SA D	0 % 0	MS Pos	C Front vs CI	CFront	Vicual	Mont State	Free Pla	Γ		CFrLow	Visual CB	CUnde	CFrLov	Cimer	Cimer	Bolt Ho	CHOIL	Visual	Visual F	Γ		1
ļ	Fuel Leak	Fuel Tank, Throffle body & Fuel Pump Area		ŀ	Kebocoran ba	shan bakar Oppm		R Lower vs C Under	Lower vs SF		vs C FR Lower		vs Cl	ront vs C Front Top	South From	a south	see Play T Grip	L		Fr Lower vs St	bi	Undervs Si	Fr Lower vs CU	mervs S:	merys C Fr Lower	Hank I man	Contract Character	ual C Front	sual F Fercer	L		ı
	( Switch & Indicator	Winker, Horn, Stop Lamp, Tail Light, License Lamp, Post Lamp Lo & Hi Position, Back Light speedomoker			Menyala dan mudah di ope pasang, suan	nyala dan berfungsi dengan baik, dah di operasikan, tidak salah sang, suara abnormal, horn tidak a mali, IM lidak bisa mali								rtTop	ľ	1	ľ	Part Name							OWER	1	op Incoop			Part Name		
3	Mechanical Function	Pillion Step R/L, Steering Handle R/L Lock & Un smooth Rotation, Main Switch, Side Stand & Main Stand, Cap Fuel Filler, Fr/lkr Wr Rotation, Double Seat Lock, Bn Lever Parking	neel	Į.		a mali, II/I lidak bisa mali a dioperasikan, tidak seret, noise												Froblem	R3											Froblem	13	
	m.q.c.c.mm	Double Seat, Rear Grip, Rr Fen Box Luggage, Fuel Tank & Fuel Tray, Label information	der,	1	Tidak cacat, t kesejajaran w	idak salah heel denga	pasang, an fender	Lock	Vist	11 SA E E	Vist	Viig.	Vist	Care	Camer	STATES OF THE PERSON	C C	lem	-	L	83.5	Soar	32	Vist.	Cawsas	and the	Vicual Bill	CSWCC	CBWSF	1	- "	
4	Visual Inspection	Front View: bracket Plate number, front cover front top cover, master cylinder, front tender, right View: Cover body, cover front side, muffler, cover muffler, swing am cover lower side, cover center, slight.  Rear View: Re-Fender, cover license lamp, I	n,		Kelengkapan dan dripe, k Boll, lidak car	skencanga	suaian warna in Screw /	odk Double Sea:	fistal Base License	1	Fisual RR Grip	visual BLG	risual Double Seat	C3 vs RR Fender	C. S.	St.	C Under ws SF	Part Name			RRender vs TL	Pear Brake	ase license	discal RR Grip	SRF	30 N	Also at Bill C	6	SF	Part Name		
		Comb light, cover Rr center  Left View: Cover body, cover front side, co lower side, cover center, cover l	n/ar							T	r				†	T	t	Froblem							1	†	†		T	Froblem		
Pro	oblem	stripe, label, emblem  Detall Problem	Acti		Repairman	FI	Final	H	_	_	_	_	Н	Ш	_	+	_	1	roul	olest	100	ting	_	_	_	_	_	_	_	_		_
FR		Deten Flobletti	Co	de	epairman	Judge	Inspector					Dig	anti						P	erba	ika	in						Dipa	asan	ng		
				+																												
			-	$\dashv$																												

## **Cetak Feed Back**

NA	L INSPE	ECTION T	ROUBLE REPOR	T ( STRAIGHT										
ate :			Type :		Time		-							
	Total In	spection	Total NG (FI)	Total OK (FI	(R	SP)%OK	_	PROBLEM	Qty					
								UNIT NG (#FI )						
			Total NG (FI + AF)	Total OK (FI+	) (G	DP)%OK		UNIT NG (ASSY UNIT)						
								TOTAL PROBLEM						
		PROBLE	M OF FINAL INSPECT	TION			PROBLE	M OF ASSEMBLY UNIT				NO	OTE	
т	NO		Symptom	Q.	,	GATE	NO	PROBLEM	QTY					
	1						1							
-	2					R1	2							
1	3						3							
-	4						1							
F	5				-	L1	2							
	1				-		3							
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2	3				-	R2	2							
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3	3				_		1							
-	4				-	R3	2							
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-	4									l				
-	5													
	NO		PROBLEM	AREA			COUN	TERMEASURE		PIC	DD			
-	1											QCL		ANALYST
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reeubach	3													
	4													
ŀ	5													
	<u> </u>													



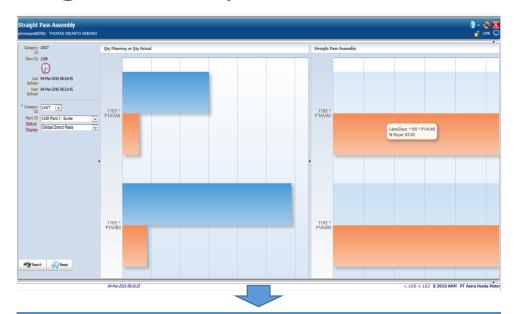


WCT P7AUA0 ID

## Monitoring Pencapaian GDP





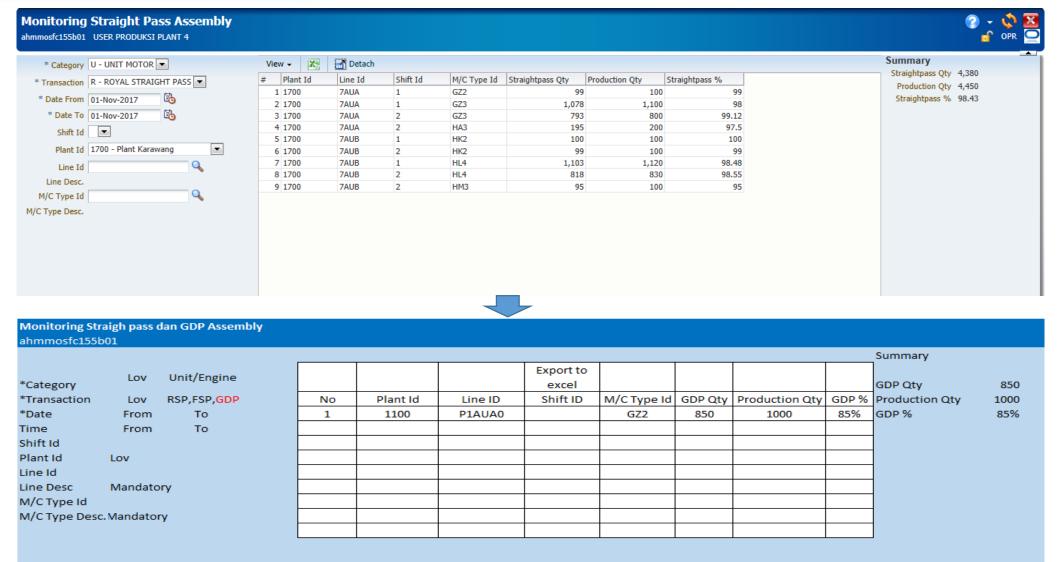








# Monitoring Pencapaian GDP







# Storing CBU Check (Export)

## **Storing FI Card**

Kode Plant 1700	Kode Line 7AUA	Kode WCT P7AUA0
ID Operator Nomor Frame* Type Type Dokumen  START	: xxxxx	RETRY
Nomor Frame: Type Motor: Type Dokumen:		
	Keberhasilan/Keg Penyimpanan Soft	

1   0,0011   0,0011   1   0,0011   1   0,0011   1   0,0011   1   0,0011   1   0,0011   1   0,0011   1   0,0011   1   0,0011   1   0,0011   1   0,0011   1   0,0011   1   0,0011   1   0,0011   1   0,0011   1   0,0011   1   0,0011   1   0,0011   1   0,0011   1   0,0011   0,0011   1   0,0011   1   0,0011   1   0,0011   1   0,0011   0,0011   1
PROCESS INSPECTION    See   COUNTY   CO





# Requirement Project

- >CT Proses normal max 15 Detik
- ➤ CT Proses + Input symptom max 20 Detik
- ➤ Membutuhkan 1 Unit Highspeed Scanner
- **≻** Duplex
- ➤ Produksi unit /Line: min: 2200, max: 3000/day
- ➤ Membaca Barcode 2D





## Schecule Project Storing FI Card Online

			2017	,												20	18											
NO	Control Item	Oct	Nov	Doc		Ja	n			Fe	eb			M	ar			A	or			M	ay			Ju	n	
		OCI	INOV	Dec	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	Detil Konsep																											
2	Multisourching																											
	Anwizjing																											
	Propose and Solution																											
	Kontrak																											
	MHRM																											
	PR dan PO																											
3	Aplication Development																											
4	Testing Aplication																											
5	Preparation dan sosialisasi P4																											
6	Operational																											
7	Post Go Live																											





# THANK YOU

