

SIS-CA MRO
 SIS-CA HOIST & WINCH MRO
 2727 EAST IMPERIAL HWY
 BREA CA 92821-6713
 USA

STRIP REPORT



UTC Aerospace Systems

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 Repair Station #AO4R057M

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Sales Order / Item 5185327/1020		Date Recd 04/26/2017	Part Number 44316-12-101	Description RESCUE HOIST-POST MOUNT A	
SM Order 41594161	Serv Notif No 302271823	Qty 1.000	Quote date 05/23/2017	Accept Date 09/29/2017	Ship Date In Serial No 00077
Cust Nbr 24390	Cust Name SOLID PARTNERS SDN BHD		Cust PO 002249	Cust Part No	
Work Scope: REPAIR		Output part : 44316-12-101		Output Serial : 40077	
Removal Code: CRFR PN 44316-12-101 SN 00077			Status/Work: REPAIRED		
Aircraft	Engine Type	Tail Nbr	Customer Serial Nbr 40077	DOM	

Technical Documents :

- Incorporated: Service Bulletin 44301-10-22 Revision: 3 Rev. Date: 03/28/2016
- Service Bulletin 44301-10-24 Revision: 2 Rev. Date: 10/12/2016
- Service Bulletin 44316-12-101-01 Revision: 1 Rev. Date: 03/26/2008
- Service Bulletin 44316-600-4-01 Revision: 2 Rev. Date: 05/24/2012
- Service Bulletin 44316-781-01 Revision: 3 Rev. Date: 07/20/2013

CMM: 25-60-06-3 ATA #: 25-60-06-3 Revision: 2 Rev. Date: 05/24/2016
 25-60-06-3TR2 ATA #: 25-60-06-3TR2 Revision: 1 Rev. Date: 07/18/2016

Customer Reason for Return

Customer's Reason for Return

04/12/2017 15:10:49 Ryan Estrada (8087521)
 PN 44316-12-101 SN 00077 LAST SHIP DATES: MFG Date 05/07/2009 Repair
 Date: NONE. CUSTOMER REASON FOR RETURN: Clutch ASB 44301-10-18 Clutch
 Cycles Clutch Overhaul)Internal SB 44301-10-22 & SB 44301-10-24 as
 Required.

Evaluation Inspection

Initial Observations

04/26/2017 22:11:50 Roberto Silva (8090547)
 Received By: ROBERT SILVA
 Received On: Wednesday, April 26, 2017
 Inducted on: Wednesday, April 26, 2017
 Last shipped: 05/07/2009
 Warranty Consideration: No
 Log cards received: 2 AGUSTA

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Sales Order / Item	Date Recd	Part Number	Description
5185327/1020	04/26/2017	44316-12-101	RESCUE HOIST-POST MOUNT A

SM Order	Serv Notif No	Qty	Quote date	Accept Date	Ship Date	In Serial No
41594161	302271823	1.000	05/23/2017	09/29/2017		00077

ID Plate: 44316-12-101 SN 00077
Viboscribed: 44316-12-101 SN 00077
CPN: 3G2591V01531
CSN: N/A
Hook Received: 42315-488 SN 1381
Meter Reading: 050'3Hours
Fairings Received: 1. 44311-122-101
2. 42325-128
3. 44311-128
4. 44316-151
5. 44316-153
Customer owned material recieved: NONE
LRUs received: 1. 42315-488 SN 00012
FAR Required:
Cartridge received: No
Customer reference numbers: TBD
Customer Requirements: Clutch ASB 44301-10-18 Clutch Cycle Clutch
Overhaul) Internal SB 44301-10-22 & SB 44301-10-24 as
Required.
Members present at induction: JOE ROBISON
ROBERT SILVA
Notes: none

Evaluation Inspection

Test Evaluation

04/27/2017 11:19:24 Hector Marrufo (0062227)

Unit was tested IAW the Testing and Fault Isolation section of CMM
25-60-06-3

The customer's reason for return was Confirmed

Observation 1: unit very dirty

Observation 2: fan works

Observation 3: replace all cam screws (5)

Observation 4: replace drum set screws (2)

Observation 5: cable replacement as per AD?

Observation 6: cycles ran good up/down cable speeds and amps

Observation 7: corrosion/mold on gear box housing and emi filter

Observation 8:leak from under module/releif valve

Observation 9: oil drained and cable spooled

Clutch Slip: 1692

Meter Reading: 0503 - 0504

Bumper Measurement: 2.922

Other Notes: unit very dirty, leak under modul/releif valve. ready for
dis-assy

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Sales Order / Item	Date Recd	Part Number	Description
5185327/1020	04/26/2017	44316-12-101	RESCUE HOIST-POST MOUNT A

SM Order	Serv Notif No	Qty	Quote date	Accept Date	Ship Date	In Serial No
41594161	302271823	1.000	05/23/2017	09/29/2017		00077

Evaluation Inspection

Disassembly Evaluation

05/10/2017 12:03:11 Luis Iara (90068198)
Unit was disassembled and inspected in accordance with the Disassembly and Check sections of CMM 25-60-06-3 and/or per OEM specifications. The customer's reason for return was: Confirmed.
The following service bulletins will be applied: 44301-10-22, 44301-10-24, 44301-10-18, 44301-10-15.
The following sub-assemblies were disassembled to complete the repair: Cable hook assembly, Motor assembly, Level wind and storage drum assembly, Gearbox Assembly,
Technician Notes: bumper undersized. level wind screw damaged. drum has pitting damage
All accessible critical parts were inspected in accordance with the critical parts inspection criteria. Refer to the attached strip report for a list of replaced components.

Evaluation Inspection

Motor Test Evaluation

05/17/2017 10:13:17 Dan Puth (0057608)

Unit was tested IAW OEM Specifications and FAA approved data
The customer's reason for return was Confirmed
Observation 1: Logic board defective
Observation 2: Power Supply board defective
Other Notes: The logic board P/N: 44316-815 and power board P/N: 44316-712 is inoperable.

Evaluation Inspection

Motor Disassembly Evaluation

05/17/2017 12:02:03 Dan Puth (0057608)
Unit was disassembled and inspected in accordance with OEM specifications and FAA approved data. The customer's reason for return was: Confirmed.
The following service bulletins will be applied: 44316-600-4-01, .
Technician Notes: Serviec bulletin 44316-600-4-01 is applicable, resistor's screws R3 and R4 on voltage clamp are corroded.
All accessible critical parts were inspected in accordance with the

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SM Order 41594161	Serv Notif No 302271823	Quote date 05/23/2017	Accept Date 09/29/2017
	Qty 1.000		Ship Date 00077
			In Serial No 00077

critical parts inspection criteria. Refer to the attached strip report for a list of replaced components.

Evaluation Inspection
Major Repair

Service Bulletins - Outgoing
ZMT 44301-10-22 SIS 00

Service Bulletins - Outgoing
ZMT 44301-10-24 SIS 00

Service Bulletins - Outgoing
ZMT 44316-600-4-01 SIS 00

Components :

Order	Material	Description	Req Qty	Issued	Reason Code
41594161	42325-298	CABLE,RESCUE HOIST	1	1	SB 44301-10-24
41594161	44314-398-101	OVERLOAD CLUTCH ASSEMBLY	1	1	SB 44301-10-22
41594161	42305-290	CYLINDER, ENERGY ABS	1	1	Compressed
41594161	42315-72	CROWDER ASSY SHEAVE	1	1	Damaged
41594161	42315-165-1	BEARING, BALL	4	4	Damaged
41594161	42315-50	SCREW ASSY, LEVEL	1	1	Damaged
41594161	42315-52	SHOE-LEVEL WIND	1	1	Damaged
41594161	42325-213	CABLE DRUM ASSY	1	1	Damaged
41594161	42325-128-7	POLYCARBONATE, CLEAR	1	1	Damaged
41594161	42234-65	RING-LVL WD DR RETAINER	1	1	Damaged
41621914	44316-815-101	PCB DETAIL POWER SUPPLY	1	1	SB44316-600-4-01
41621914	E05KA22BH0JR-2R00	RESISTOR	4	4	Corrosion
41621914	44316-835	PCB ASSY, LOGIC BD	1	1	SB 44316-600-4-01

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COMPONENT MAINTENANCE MANUAL
PART NUMBER 44316-10 AND 44316-12

Figure 108. Test Datasheet (Sheet 1 of 8)

Goodrich P/N: 44316-12-1e1 Rev.: K SIN: 40077 Date: 06 OCT 2017
Customer Part Number: Work Order No.: 41594161
Motor/Controller P/N: 44316-602-106 SIN: 40012 Ambient Air Temp: 70 °F or °C
Test Stand No.: 1



PARA TEST	MEASUREMENT	LIMIT	ACCEPT	REJECT
1.A.(7) Overload Clutch Test	Test performed		✓	
1.A.(8) Automatic Brake Assembly Test	Test performed		N/A	
4.A Cable Foul Switch Test	Stops		✓	
4.A.(1) Cable Foul No Operation (for all hoists except 44316-12-102)	Hoist reeling operation		✓	
e) Pendant:			✓	
g) CBL indicator	ILLUMINATES		✓	
SLOW & TEMP indicators	BLINK ALTERNATELY		✓	
Pendant:			✓	
CBL indicator	REMAINS ILLUMINATED		✓	
SLOW & TEMP indicators	STOP BLINKING & NOT ILLUMINATED		✓	
h) Hoist	REMAINS ILLUMINATED		✓	
Pendant CBL indicator	NO OPERATION		✓	
Pendant CBL indicator	REMAINS ILLUMINATED		✓	
Hoist	NOT ILLUMINATED		✓	
Hoist reeling operation	OPERATES		✓	
Pendant:	STOPS		✓	
n) CBL indicator	ILLUMINATES		✓	
SLOW & TEMP indicators	BLINK ALTERNATELY		✓	
Pendant:			✓	
CBL indicator	REMAINS ILLUMINATED		✓	
SLOW & TEMP indicators	STOP BLINKING & NOT ILLUMINATED		✓	
o) Hoist	NO OPERATION		✓	
Pendant CBL indicator	REMAINS ILLUMINATED		✓	
Pendant CBL indicator	NOT ILLUMINATED		✓	
Hoist	OPERATES		✓	
4.A.(2) Cable Foul No Operation (for 44316-12-102)	Stops		✓	
e) Hoist reeling operation			✓	
Pendant:			✓	
CBL indicator	ILLUMINATES		✓	
SLOW & TEMP indicators	BLINK ALTERNATELY		✓	
g) Pendant:			✓	
CBL indicator	REMAINS ILLUMINATED		✓	
SLOW & TEMP indicators	STOP BLINKING & NOT ILLUMINATED		✓	
h) Hoist	OPERATES AT APPROX. 35 FT/MIN (11 M/MIN)		✓	
Pendant CBL indicator	REMAINS ILLUMINATED		✓	
Pendant CBL indicator	NOT ILLUMINATED		✓	
Hoist	OPERATES AT NORMAL SPEED		✓	
k) Hoist reeling operation	STOPS		✓	
Pendant:			✓	
CBL indicator	ILLUMINATED		✓	
SLOW & TEMP indicators	BLINK ALTERNATELY		✓	
Hoist	OPERATES AT APPROX. 35 FT/MIN (11 M/MIN)		✓	
m) Pendant CBL indicator	REMAINS ILLUMINATED		✓	

N/A

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COMPONENT MAINTENANCE MANUAL PART NUMBER 44316-10 AND 44316-12

Figure 108. Test Datasheet (Sheet 2 of 8)

Goodrich PIN: 44316-12-101

Rev.: K

S/N: 40017

Date: 06 OCT 2017

Work Order No.: 44594461



PARA TEST

n) Pendant CBL indicator
Hoist

MEASUREMENT

LIMIT

ACCEPT REJECT

Not illuminated
Operates at normal
speed

N/A

4.B DC Bonding Resistance Test

(3) Connector J1 to housing
Connector J2 to housing
Connector J3 to housing

0.98 mOhms
0.67 mOhms
1.30 mOhms

20.0 mOhms Max.
20.0 mOhms Max.
20.0 mOhms Max.

Y
Y
Y

4.C Observations/Tests

4.C.(3) Cable Install

(a) Traction System
Internal Cable Tension
Cable inspection
Cable Management

Wraps evenly
No fouling
No kinking
No bunching
No overlap

Maintains tension
Cable taut
No snags/broken wires

Y
Y
Y

(d) Hour Meter (Initial Reading) 050.9 hrs

(e) Cable Extremities Indication

Initial/final 20' of Cable
Cable Part Number 42325-298
Cable Serial Number 594-136

Color orange

Y

4.C.(4) Indicator Test

(a) Pendant
All indicators

Cable Payout Display:
All indicators

flash 3 times, then TEMP
continues flashing

flash 3 times, then TEMP
continues flashing

(b) Pendant TEMP indicator
Cable Payout Display TEMP indicator

stops flashing
stops flashing

(c) For all hoists except 44316-12-102
1) Pendant WTR indicator

2) Pendant WTR indicator

illuminated
Not illuminated

(d) For 44316-12-102 hoists
1) Pendant GEN indicator

2) Pendant GEN indicator
Return GENOUT switch to ON position

Not illuminated
illuminated



4.C.(5) Hoist Fan (for 44316-12-101 hoists only)

(b) Hoist Fan

Operating properly

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COMPONENT MAINTENANCE MANUAL PART NUMBER 44316-10 AND 44316-12

Figure 108. Test Datasheet (Sheet 3 of 8)

Goodrich P/N: 44316-12-101

Rev.: K

S/N: 40077 Date: 06 Oct 2017

Work Order No.: 44594661



LIMIT ACCEPT REJECT

PARAMETER TEST

MEASUREMENT

4.C.(6) Overtemperature Function

PARAMETER TEST	MEASUREMENT	LIMIT	ACCEPT	REJECT
(c) Pendant TEMP indicator	8V ft/min	Illuminated	✓	—
(g) Hoist Cable Speed		Approx. 125 ft/min (38 m/min)	✓	—
		Not illuminated	✓	—
		Increase to full speed	✓	—

4.C.(7) Cable Cut Harness Test

(a) SQUIB A lamp		Illuminated	✓	—
(b) SQUIB B lamp		Not Illuminated	✓	—
(b) SQUIB A lamp		Not Illuminated	✓	—
(b) SQUIB B lamp		Illuminated	✓	—

4.D Extended Limit Switch Adjustments

PARAMETER TEST	MEASUREMENT	LIMIT	ACCEPT	REJECT
4.D.(1) Adjust "DOWN-ALL-STOP" Limit Switches S1 and S2				
(a) Switches S11 and S12 ON (Reel out)		3 to 3 1/4 wraps	✓	—
(b) Cable on drum		S1 & S2 actuate	✓	—
(f) Rotate Cam of S1 and S2		Hoist stops rotating	✓	—
(f) Switch S12 ON (Reel out)		Minimum 2 1/2 cable wraps	✓	—
(g) S1 and S2 operate		Cable reels out	✓	—
(g) Switch S11 and S12 ON		Cable stops	✓	—
(h) Release S11			✓	—

4.D.(2) Adjust "FULL-OUT" Limit Switches S3 and S4

(a) Switch S11 ON		4 to 4 1/2 wraps	✓	—
(b) Cable on drum		S3 & S4 actuate	✓	—
(f) Rotate Cam of S3 and S4		Cable reel-out stops	✓	—
(f) Reel out, S3 and S4 operate		3 1/2 cable wraps Min.	✓	—
(g) Switch S12 ON		Cable reels out	✓	—
(g) Reel out at least 1/4 revolution		S1 and S2 actuate	✓	—
(g) Cable reel out		Stops	✓	—

4.D.(3) Adjust "UP/DOWN-SLOW" Intermediate Deceleration Limit Switches S5 and S6

(a) Switch S11 ON (Reel in)		7 - 7 1/4 wraps	✓	—
(b) Cable on drum		S5 & S6 actuate	✓	—
(d) Rotate Eyelid Cam of S5 and S6		S5 & S6 operate	✓	—
(d) Reel out at full speed		Illuminates	✓	—
(d) Pendant SLOW light		Decelerates	✓	—
(d) Hoist speed		Occurs before	✓	—
(d) Cable Speed Deceleration		S3 and S4 actuate	✓	—
(d) Pendant SLOW light		Not illuminated	✓	—

4.E Feet/Meters Display Check

(3) Pendant CABLE LENGTH display		285 to 290 feet	✓	—
(5) Cable Payout Display CABLE PAYOUT		285 to 290 feet	✓	—
(5) Pendant CABLE LENGTH display		86.8 to 88.4 meters	✓	—
(5) Cable Payout Display CABLE PAYOUT		86.8 to 88.4 meters	✓	—
(8) Pendant CABLE LENGTH display		98 to 102 feet	✓	—
(8) Cable Payout Display CABLE PAYOUT		98 to 102 feet	✓	—



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COMPONENT MAINTENANCE MANUAL PART NUMBER 44316-10 AND 44316-12



Goodrich P/N: 44316-12-101

Figure 108. Test Datasheet (Sheet 4 of 8)

Rev.: K S/N: 44077 Date: 06 OCT 2017
Work Order No.: 41594161

PARA	TEST	MEASUREMENT	LIMIT	ACCEPT	REJECT
(10)	Pendant CABLE LENGTH display		0 feet	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Cable Payout Display CABLE PAYOUT		0 feet	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(12)	Pendant CABLE LENGTH display		0.0 meters	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Cable Payout Display CABLE PAYOUT		0.0 meters	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(14)	Pendant CABLE LENGTH display		0 feet	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Cable Payout Display CABLE PAYOUT		0 feet	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.G Temporary Retracted Limit Switch Adjustments

(3)	S7 and S8 Hoist cable velocity	<u>34</u> ft/min	Actuate 35 ± 5 ft (10.7 ± 1.5 m)/min	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(6)	S5 and S6 Hoist cable velocity	<u>84</u> fpm	Actuate 75 ± 15ft (23 ± 4.6 m)/min	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.H Pilot and Operator Command Override Tests

(2)	Cable reeling direction		IN at 80 ft/min to "OUT" at 180 - 220 ft/min	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(4)	Hoist cable		Stops, then Reels in at 70 to 120 ft/min	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(6)	Hoist cable		Stops, then reels out	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4.I Operational Tests

(1)	Ambient air temperature	<u>70</u> °F or °C (circle)		<input checked="" type="checkbox"/>	<input type="checkbox"/>
(3)	Motor current	<u>44</u> Amps < 70 Amps		<input checked="" type="checkbox"/>	<input type="checkbox"/>
(4) (c)	Braking over travel distance in 1/8th revolution increments or cable length				
	50 lb. load (Cycle 1)	<u>4/8</u>			
	200 lb. load (Cycle 2)	<u>4/8</u>			
	300 lb. load (Cycle 3)	<u>4/8</u>			
	400 lb. load (Cycle 6)	<u>4/8</u>			
	500 lb. load (Cycle 7)	<u>3/8</u>			
	600 lb. load (Cycle 8)	<u>3/8</u>			

(4) (f) 1) 44316-12-102 Hoists only - Demonstrate Overtemperature/Generator Out function

Cable Velocity	<u>N/A</u> ft/min	85 ft (25.9 m)/min MIN	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Current	<u>N/A</u> Amps	80 Amps MAX	<input checked="" type="checkbox"/>	<input type="checkbox"/>

(4) (f) 2) All hoists except 44316-12-102 - Demonstrate Generator Out function

Cable Velocity (top layer)	<u>116</u> ft/min	100 ft (30.5 m)/min MIN	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Current (top layer)	<u>82</u> Amps	85 Amps MAX	<input checked="" type="checkbox"/>	<input type="checkbox"/>

(5) Pilot control (reel in direction) Pilot control (reel out direction)

Pilot control (reel in direction)		Overrides Pendant	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pilot control (reel out direction)		Overrides Pendant	<input checked="" type="checkbox"/>	<input type="checkbox"/>



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**COMPONENT MAINTENANCE MANUAL
PART NUMBER 44316-10 AND 44316-12**

Figure 108. Test Datasheet (Sheet 5 of 8)

Goodrich P/N: 44316-____ Rev.: _____ S/N: _____ Date: _____
Work Order No.: _____

(Use this data sheet for the 44316-12-102 hoist)

C o n t r o l M o d e	D i r e c t i o n	C o m m a n d C a b l e S p e e d	C a b l e L o a d (L b s.)	C a b l e S p e e d ^{1,2} (FPM)			M a x. C u r r e n t ⁴ (Amps)		O i l S l u p (°F) (220°F M a x)	M o t o r H o t S i n k (°F) (150°F M a x)
				T o p L a y e r R e q d	2 ^o L a y e r	A c t u a l	R e q d			
1	Down	Variable	50	250 min						
	Up			250 min						
2	Down	Variable	200	250 min						
	Up			250 min						
3	Down	Variable	300	250 min						
	Up			250 min						
4	Down	Fixed	300	180 - 220						
	Up			180 - 220						
5	Down	Fixed	300	85 - 115						
	Up			85 - 115						
6	Down	Variable	400	250 min						
	Up			200 min						
7	Down	Variable	500	250 min						
	Up			200 min						
8	Down	Variable	600	250 min						
	Up			200 min			150 max	80 max		
9	Down	Fixed	600	85 min						
	Up			180 - 220						
10	Down	Fixed	600	180 - 220						
	Up			180 - 220						

Notes: ¹ Cable speed measured on top layer.

² Cable speed measured on second layer – for reference only.

³ Maximum current measured on top layer.

⁴ Test required for 44316-12-102 Hoist only.

Accept _____ Reject _____

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COMPONENT MAINTENANCE MANUAL PART NUMBER 44316-10 AND 44316-12

Figure 108. Test Datasheet (Sheet 6 of 8)

Goodrich P/N: 44316-12-101

Rev.: K

SIN: 40077

Date: 06 Oct 2017

Work Order No.: 41594161



(Use this data sheet for the 44316-10-101, -104 and ~~44316-12-101~~ -104, -105 hoists)

C Y c i e	Control Mode	Direction	Command Cable Speed	Cable Load (lbs.)	Cable Speed (FPM)			Max. Current ¹ (Amps)		OH Sump (°F) (220°F Max)	Motor Heat Sink (°F) (150°F Max)
					Top Layer	Top Layer Req'd	2 nd Layer ²	Actual	Req'd ³		
1	Percan:	Down	Variable	50	302	250 min	242	33	---	111	80
		Up			306	250 min	244	41	---	114	81
2	Percan:	Down	Variable	200	304	250 min	242	43	---	126	83
		Up			294	250 min	239	71	---	128	84
3	Percan:	Down	Variable	300	302	250 min	240	51	---	134	85
		Up			289	250 min	234	92	---	146	89
4	Operator	Down	Fixed	300	191	180 - 220	152	33	---	148	89
		Up			191	180 - 220	152	64	---	151	89
5	Pilo:	Down	Fixed	300	96	85 - 115	76	16	---	142	89
		Up			96	85 - 115	76	35	---	135	91
6	Percan:	Down	Variable	400	300	250 min	240	38	---	152	92
		Up			282	200 min	228	116	---	160	90
7	Percan:	Down	Variable	500	292	250 min	240	62	---	144	91
		Up			276	200 min	224	134	---	160	91
8	Percan:	Down	Variable	600	296	250 min	238	68	---	170	90
		Up			232	200 min	218	146	150 max	172	91
9	Operator	Down	Fixed	600	116	100 min	118	82	85 max	184	98
		Up			191	180 - 220	152	64	---	194	100
10	Pilo:	Down	Fixed	600	96	85 - 115	76	25	---	200	104
		Up			96	85 - 115	76	71	---	198	101

Notes ¹ Cable speed measured on top layer.

² Cable speed measured on second layer -- for reference only.

³ Maximum current measured on top layer.

Accept Reject

25-60-06-3

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GOODRICH

COMPONENT MAINTENANCE MANUAL PART NUMBER 44316-10 AND 44316-12

Figure 108. Test Datasheet (Sheet 7 of 8)

Goodrich P/N: 44316-10-101 Rev.: K S/N: 40077 Date: 06 Oct 2017
 Work Order No.: 44594164



PARA TEST	MEASUREMENT	LIMIT	ACCEPT	REJECT
4.J.(2) Overload Clutch Test				
(h) Gearbox oil temperature	<u>89</u> °F or °C	85-90°F (29-32°C)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cable Drum		Does not rotate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(i) Gearbox oil temperature	<u>88</u> °F or °C	85-90°F (29-32°C)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Clutch slip average load	<u>1434</u> lbs	1275 to 1530 lbs. (578 to 694 kg)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.K Hoist Dead-Weight Load Test				
(6) Operate Hoist at 24 to 24.5 Volts:				
2 ft lift #1		Able to lift weight	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2 ft lift #2		Able to lift weight	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(7) Lower dead-weight using Pendant		Does not stall	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.L Final Retracted Limit Switch Adjustments and Operational Checks				
4.L.(1) Adjust "UP/DOWN-SLOW" Limit Switches S5 and S6				
(c) Pendant CABLE LENGTH display		> 280 ft. (85 m)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(d) Reel in with zero load		No cable defects	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(e) Rotate Basic Cam of S5 and S6		9 1/2-10% ft. extended	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(g) S5 and S6		S5 & S6 actuate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(h) Length between cable guide and cable end		Actuate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(i) Cable Speed		9-1/2 to 10-1/2 feet	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pendant SLOW light		Decelerates	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Illuminates	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.L.(2) Adjust "2-FT UP-DECEL" Limit Switches S7 and S8				
(c) S7 and S8		Actuate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(e) S7 and S8 actuate		Actuate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(f) Length between cable guide and cable end		21 to 26 inches	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(g) Cable Speed		Decelerates	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pendant SLOW light		Remains illuminated	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.L.(4) Inertial Limit/Homing Load & "UP LIMIT" Limit Switches S9 and S10 Adjustment				
(b) Uncompressed thickness (A)	<u>3.231</u> in.	"UP LIMIT" Limit Switches S9 and S10 Adjustment	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(c) UP LIMIT switches		Actuate	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hoist operation		Stops	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Activate S9 and S10 separately		Hoist stops each time	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(f) Compressed thickness (B)	<u>3.144</u> in.	(0.065-0.125 in.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(g) Energy Absorber compression 1 (A-B=C)	<u>0.087</u> lbs.		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Load = (C x 1600)	<u>139</u> lbs.		<input checked="" type="checkbox"/>	<input type="checkbox"/>
(h) Hook Energy Absorber		Maintains homing load	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		150±50 lbs.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(i) Uncompressed thickness (A)	<u>3.231</u> in.		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Compressed thickness (B)	<u>3.145</u> in.		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Energy Absorber compression 2 (A-B=C)	<u>0.086</u> lbs.	(0.065-0.125 in.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Load = (C x 1600)	<u>137</u> lbs.		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hook Energy Absorber		Maintains homing load	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		150±50 lbs.	<input checked="" type="checkbox"/>	<input type="checkbox"/>



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GOODRICH

COMPONENT MAINTENANCE MANUAL
PART NUMBER 44316-10 AND 44316-12

Figure 108. Test Datasheet (Sheet 8 of 8)

Goodrich P/N: 44316-12-101

Rev: K

S/N: 40017

Date: 06 OCT 2017

Work Order No.: 41594161



PARA TEST MEASUREMENT LIMIT ACCEPT REJECT

(i)	Uncompressed thickness (A)	3.231 in.		
	Compressed thickness (B)	3.142 in.		
	Energy Absorber compression 3(A-B=C)	0.089 in.	(0.065-0.125 in.)	✓
	Load = (C x 1600)	142 lbs.		
	Hook Energy Absorber		Maintains homing load 150±50 lbs.	✓
4.L.(5)	Torque Check All Cam Screws			
(a)	Recheck all Cams torque		17-20 in.-lbs.	✓
4.L.(6)	Final Potentiometer Adjustment			
(c)	Pendant CABLE LENGTH display		0 feet	✓
4.M	Post Check Procedures	051.8		
(3)	Hour Meter (Final Reading)	3781.444 hr	Operates mid to ¾ level	✓
(4)	Drain and fill with new Mobil Jet II oil conditioned			✓
(9)	Weight of Hoist Assy & gear case oil			
		104.3 Lbs. or N/A	For 44316-10:- 104.0 lb (47kg) max For 44316-12:- 106.0 lb (48kg) max	✓

FINAL RESULT: ✓

Remarks: N/A

Tested By: 840528 - [Stamp]



25-60-06-3

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WARNING-THIS INFORMATION CONTAINS TECHNICAL DATA SUBJECT TO EAR 2899 INITIALS JLC

PACKING LIST

Goodrich Corporation
 2727 East Imperial Hwy.
 Brea, CA 92821
 TEL: 714-984-1461 FAX: 714-984-1675



Sold To: 24390 SOLID PARTNERS SDN BHD OFF JALAN BALAKONG CHERAS NO. 31 JALAN KASTURI 3 43200 SELANGOR Malaysia	Ship To: 24390 SOLID PARTNERS SDN BHD OFF JALAN BALAKONG CHERAS NO. 31 JALAN KASTURI 3 43200 SELANGOR Malaysia	Freight Forwarder: AB2170 EXPEDITORS INTERNATIONAL 12200 WILKIE AVE HAWTHORNE CA 90250-1838 USA	Transportation Details Carrier: EXPLAX Waybill #: 4071600053 Incoterms: DAP SELANGOR, MALAYSIA Payment Terms: Payment In Advance
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Package ID # 1007432110 **Dimensions** 39 IN X 30 IN X 31 IN **Gross Weight** 210.0 LB(s). **Shipment #**
5313231

Shipment Text:

Item #	Material Number	Customer Material	Qty	Description	Batch	Delivery #
	P.O. / Item#	S.O. / Item #	UoM		Serial #	
1	44316-12-101		1	RESCUE HOIST-POST MOUNT	0016997422	32070348
				A		
	002249	5185327 / 1110	EA		Serial numbers:40077	

Export Control# 9A991.d **Export License#** NLR
 SHIP VIA EXPEDITORS ON GOODRICH ACCT # REQUIRED DOCS: -COFC -8130 -ATP / STRIP REPORT -COMMERCIAL INVOICE -LOG CARDS (2) - COMPLETE AS REQUIRED POC: AFFENDI A. KHAIMUDIN TEL: +603 9075 6101
 These items are controlled by the U.S. government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. government or as otherwise authorized by U.S. law and regulations.

Hazardous Material Warning: Before you work with any component, assembly or product referred to in this document, read, understand and obey all safety instructions and take all appropriate safety precautions. These instructions include instructions from the manufacturer, the material safety data sheet (MSDS), the component maintenance manual, service information letters, all operators letters, and government regulations. An MSDS gives instructions on how you must safely use, keep and discard chemicals. Get instructions from your employer on how you must safely use, keep and discard chemicals. Chemicals may cause injuries to you or make you sick. Personal injury or disease may result if safety instructions are not obeyed.

PACKING LIST

Goodrich Corporation

2727 East Imperial Hwy.

Brea, CA 92821

TEL: 714-984-1461 FAX: 714-984-1675

Shipment #



5313231

Package ID# 1 32110

Substance Declaration and Safe Use Instructions

REACH Article 33 - Regulation (EC) No. 1907/2006

Parts or assemblies may contain:

44316-12-101	RESCUE HOIST-POST MOUNT A
11103-86-9	POTASSIUM HYDROXYOCTAOXODIZINCATEDICHROM
127-19-5	N,N-DIMETHYLACETAMIDE
7440-43-9	CADMIUM
7789-06-2	STRONTIUM CHROMATE

in excess of 0.1% by weight.

Safe use instructions are available at <http://utcaerospacesystems.com/Company/Pages/sustainability.aspx>

1. Approving Civil Aviation Authority / Country: FAA / UNITED STATES		2. AUTHORIZED RELEASE CERTIFICATE FAA FORM 8130-3, AIRWORTHINESS APPROVAL TAG			3. Form Tracking Number: 00000000000005443470 32070348 Page 1 of 1	
4. Organization Name and Address: GOODRICH CORPORATION 2727 East Imperial Hwy. Brea, CA 92821 TEL: 714-984-1461 FAX: 714-984-1675 Repair Station # A04R057M				5. Work Order/Contract/Invoice Number: 002249		
6. Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status/Work:	
01	RESCUE HOIST-POST MOUNT A	44316-12-101	1	40077	REPAIRED	
12. Remarks: Purpose: Approval for Return to Service Batch no. / Lot ID:0016997422 Repaired on WO 41594161 IAW CMM 25-60-06-3. Complied with the following service bulletins: EASA AD 2015-0226R3, SB 44301-10-22, SB 44301-10-24, ASB 44301-10-15, ASB 44301-10-18, SB 44316-600-4-01. Installed Pop. 2 clutch PN 44314-398-101, SN: L80-113, clutch slip: 1434, TSN: 0000 hours. Installed rescue hoist cable PN 42325-298, SN: S94-136, TSN: 0000 hours. Hoist TSN: 051.8 Hours. Unit passed the acceptance testing requirements as defined by CMM 25-60-06-3. Refer to the attached strip report for the shop findings report. Hoist incoming SN: 00077; Hoist outgoing SN: (SOLID PARTNERS SDN BHD) Export airworthiness approval-this article meets the special requirements of MALAYSIA PMA 40077. CPN: 3G2591V01531 Certifies that the work specified in block 11/12 was carried out in accordance with EASA Part 145 and in respect to that work the [product/article] is considered ready for release to service under EASA Part 145 Approval No. EASA145.4649						
13a. Certifies the items identified above were manufactured in conformity to: <input type="checkbox"/> Approved design data and are in a condition for safe operation. <input type="checkbox"/> Non-approved design data specified in Block 12.			14a. <input checked="" type="checkbox"/> 14 CFR 43.9 Return to Service <input checked="" type="checkbox"/> Other regulation specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, Part 43 and in respect to that work, the items are approved for return to service.			
13b. Authorized Signature:		13c. Approval / Authorization No.:		14b. Authorized Signature: 		14c. Approval / Certificate No.: AO4R057M
13d. Name (Typed or Printed):		13e. Date (dd/mmm/yyyy):		14d. Name (Typed or Printed): AMIR SHAMAYELI		14e. Date (dd/mmm/yyyy): 12 OCT 2017
User / Installer Responsibilities						
It is important to understand that the existence of this document alone does not automatically constitute authority to install the aircraft engine/propeller/article. Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts aircraft engine(s)/propeller(s)/article(s) from the airworthiness authority of the country specified in Block 1. Statements in Blocks 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.						

CERTIFICATE OF CONFORMANCE

Goodrich Corporation
2727 East Imperial Hwy.
Brea, CA 92821



Date:	12-OCT-2017
Delivery No:	32070348
Customer PO/Item:	002249

Sold-to Address: 24390
SOLID PARTNERS SDN BHD
OFF JALAN BALAKONG
CHERAS
NO. 31 JALAN KASTURI 3
43200 SELANGOR
MALAYSIA

Ship-to Address: 24390
SOLID PARTNERS SDN BHD
OFF JALAN BALAKONG
CHERAS
NO. 31 JALAN KASTURI 3
43200 SELANGOR
MALAYSIA

Item	Material	Description	Total Qty	UOM	Batch Nbr	Country of Origin
Sub	Material	Description	Batch Qty	UOM	Batch Nbr	Country of Origin

10	44316-12-101	RESCUE HOIST-POST MOUNT A	1	EA	0016997422	US
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Serial number(s): 40077
Customer Part Number: 44316-12-101
Sales Order Number/Item: 5185327/001110
Certificate of Conformance:
THIS HOIST ASSY. CONTAINS: NEW POP 2 CLUTCH ASSY.
PART NUMBER: 44314-398-101
SERIAL NUMBER: L80-113

WE HEREBY CERTIFY THAT THE ITEMS OR MATERIAL COVERED BY THIS DOCUMENT HAVE BEEN INSPECTED AND TESTED AND CONFORM TO THE APPROVED SPECIFICATIONS RELATIVE HERETO. THIS IS SUBSTANTIATED EITHER BY OUR OWN INSPECTION AND TEST, OR BY SATISFACTORY DOCUMENTARY EVIDENCE FROM THE ORIGINAL SOURCE OF SUPPLY.



AUTHORIZED SIGNATURE

OCT 12 2017
DATE