

DRILL HARNESS		
CON PIN No.S	WIRE DESCRIPTION	FUNCTION
1	RED - 16/0.2 (0.19M)	MODULE POWER
2	WHITE - 16/0.2 (0.44M)	FORWARD SPEED
3	YELLOW - 16/0.2 (0.44M)	CAN HI
4	GREEN - 16/0.2 (0.44M)	CAN LOW

LEVEL RIGHT		
CON PIN No.S	WIRE DESCRIPTION	FUNCTION
1	BLUE - 16/0.2 (0.19M)	OV
2	WHITE/BLACK - 16/0.2 (1.3M)	CONNECTED TO MCM THROUGH PIN 6
3	RED - 16/0.2 (0.19M)	+V SUPPLY

MCM		
CONNECTOR PIN No.S	WIRE DESCRIPTION	FUNCTION
1	YLW/RED - 16/0.2 (0.27M)	MOTOR ENCODER SIG
2	WHITE - 16/0.2 (0.44M)	FORWARD SPEED SIG
3	RED/BLUE - 16/0.2 (3.84M)	SHAFT CONFIRMATION
4	VIOLET - 16/0.2 (3.84M)	PRIME SWITCH
5	GREY - 16/0.2 (3.84M)	LEVEL LEFT
6	WHT/BLK - 16/0.2 (1.3M)	LEVEL RIGHT
9	GREEN - 16/0.2 (0.44M)	CAN LOW
10	YELLOW - 16/0.2 (0.44M)	CAN HI
11	WHT/RED - 16/0.2 (0.27M)	MOTOR ENCODER PHW
12	RED - 16/0.2 (0.28M)	+V SUPPLY

PRIME		
CON PIN No.S	WIRE DESCRIPTION	FUNCTION
1	BLUE - 16/0.2 (0.19M)	OV
2	VIOLET - 16/0.2 (3.84M)	CONNECTED TO MCM THROUGH PIN 4

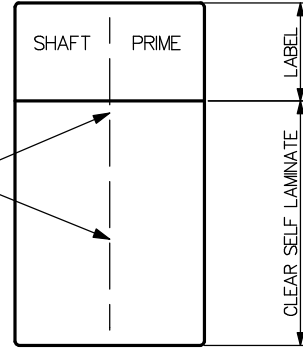
SHAFT		
CON PIN No.S	WIRE DESCRIPTION	FUNCTION
1	BLUE - 16/0.2 (0.19M)	OV
2	RED/BLUE - 16/0.2 (3.84M)	CONNECTED TO MCM THROUGH PIN 3

MOTOR ENCODER		
CON PIN No.S	WIRE DESCRIPTION	FUNCTION
1	BLUE - 16/0.2 (0.19M)	OV
2	YLW/RED - 16/0.2 (0.27M)	CONNECTED TO MCM THROUGH PIN 1
3	WHT/RED - 16/0.2 (0.27M)	CONNECTED TO MCM THROUGH PIN 1

LEVEL LEFT		
CON PIN No.S	WIRE DESCRIPTION	FUNCTION
1	BLUE - 16/0.2 (0.19M)	OV
2	GREY - 16/0.2 (3.84M)	CONNECTED TO MCM THROUGH PIN 5
3	RED - 16/0.2 (2.69M)	+V SUPPLY

- ASSEMBLY NOTES:-**
- START ASSEMBLING LOOM AT "DRILL HARNESS CONNECTOR" WORK LEFT AND RIGHT ENSURING THAT WIRING FLOWS IN THE CORRECT DIRECTION.
 - IN POSITIONS WHERE RUBBER SLEEVES (V670-002 = H20, ITEM #22) ARE USED IS AN INDICATION OF A JOINING OF WIRES. THESE JOINTS ARE USED FOR WHEN FUNCTIONS ARE COMMONED UP i.e. OV, +V etc. AT INTERSECTION WHERE THE WIRES SPLIT TO GO TO DIFFERENT CONNECTORS STRIP & TWIST CORES 5mm THEN SOLDER THE 3 COMBINING WIRES TOGETHER. COVER WITH RUBBER SLEEVE AS INDICATED. JOINT SHOULD LOOK AS BELOW :-
 - ON ALL AMP SUPERSEAL CONNECTORS (PLUGS & RECEPTACLES) SLIDE YELLOW WIRE SEAL OVER CORE FIRST. THEN STRIP AND TWIST CORE 3mm. SLIDE WIRE SEAL SO THAT END IS ALIGNED WITH END OF WIRE INSULATION. AS SHOWN BELOW :-
 - FOR THE DEUTSCH CONNECTOR SLIDE A 40mm PIECE OF 19/6 HEATSHRINK OVER CONDUIT AND LEAVE. STRIP AND TWIST CORES 6mm, THEN INSERT INTO SOCKET CONTACTS AND CRIMP. CONNECT CORES AS PER CONNECTION CHARTS. FIT LOCKING WEDGES TO CONNECTORS. ALL UNUSED POSITIONS SHOULD BE FITTED WITH A SEALING PLUG. SLIDE HEATSHRINK INTO POSITION AND SHRINK.
 - FOR THE RING CRIMP, STRIP BLUE CORE 6mm. CRIMP BLUE CORE WITH A RED RING CRIMP.
 - WIRE LENGTHS SHOWN ON DRAWING ARE AN APPROXIMATE GUIDE TO FOLLOW WHEN ASSEMBLING LOOM. THESE WIRE LENGTHS SHOULD BE FOLLOWED CLOSELY BUT IT IS ADVISABLE TO CUT WIRES LONGER THAN STATED, THEN THEY CAN BE CROPPED BACK DURING ASSEMBLY OF LOOM TO SUITABLE LENGTHS.
 - THIS SHOULD BE DONE AS PER YOUR DISCRETION, IF IN DOUBT ASK.

8. SELF LAMINATE LABELS (ITEMS #34, 35 & 36) ARE PRINTED "2UP". PRINTED LABELS ARE TO BE CUT DOWN THE CENTRE LINE AS INDICATED BELOW.



CONDUIT TOLERANCES	
LENGTH	TOLERANCE
< 100mm	+10mm -5mm
> 100mm	+50mm
> 1000mm	+100mm
> 5000mm	+200mm

36	V677-270	1	MOTOR ENCODER SELF LAMINATE LABEL
35	V677-255	1	LEVEL LEFT/LEVEL RIGHT SELF LAMINATE LABEL
34	V677-254	1	SHAFT/PRIME SELF LAMINATE LABEL
33	W683-072	0.27M	EQUIPMENT WIRE 16/0.2 WHITE/RED
32	W683-070	3.84M	EQUIPMENT WIRE 16/0.2 RED/BLUE
31	W683-028	0.45M	EQUIPMENT WIRE 16/0.2 YELLOW
30	W683-027	3.8M	EQUIPMENT WIRE 16/0.2 VIOLET
29	W683-025	0.27M	EQUIPMENT WIRE 16/0.2 YELLOW/RED
28	W683-022	1.3M	EQUIPMENT WIRE 16/0.2 WHITE/BLACK
27	W683-019	0.45M	EQUIPMENT WIRE 16/0.2 WHITE
26	W683-018	0.45M	EQUIPMENT WIRE 16/0.2 GREEN
25	W683-014	3.84M	EQUIPMENT WIRE 16/0.2 GREY
24	W683-013	4.55M	EQUIPMENT WIRE 16/0.2 BLUE
23	W683-012	4.2M	EQUIPMENT WIRE 16/0.2 RED
22	V670-002	6	RUBBER SLEEVE H20X20 BLACK
21	V671-004	40mm	HEATSHRINK 19/6 SELF ADHESIVE
20	T609-094	1	RED RING CRIMP M6
19	T610-097	2	DEUTSCH SIZE 12-16 SEALING PLUG
18	T608-217	10	DEUTSCH DT SERIES SOCKET CONTACT SIZE 16
17	T608-216	1	DEUTSCH DT SERIES SECONDARY LOCKING WEDGE
16	T608-214	1	DEUTSCH DT SERIES CONNECTOR 2WAY PLUG GREY
15	T608-167	17	AMP SUPERSEAL WIRE SEAL YELLOW
14	T610-106	13	AMP SUPERSEAL RECEPTACLE CONTACT
13	T610-089	4	AMP SUPERSEAL TAB CONTACT
12	T608-212	3	AMP SUPERSEAL 3WAY PLUG
11	T608-210	2	AMP SUPERSEAL 2WAY PLUG
10	T608-189	1	AMP SUPERSEAL 4WAY TAB HOUSING
9	T608-211	1	COUIT ADPT C12-AS4 NW10 AMP S/SEAL 4WAY
8	T608-209	2	COUIT ADPT C12-AS2 NW10 AMP S/SEAL 2WAY
7	T608-208	3	COUIT ADPT C12-AS3 NW10 AMP S/SEAL 3WAY
6	Z790-057	1	CONDUIT EXTERNAL 90° ELBOW 13-13
5	Z790-056	1	CONDUIT EXTERNAL Y-PIECE 10-10-10
4	Z790-055	3	CONDUIT EXTERNAL T-PIECE 13-10-13
3	Z790-054	1	CONDUIT EXTERNAL Y-PIECE 13-10-10
2	V676-007	0.55M	FLEXIBLE CONDUIT NW10 - 10mm D
1	Z790-038	3.46M	CORRUGATED PIPE NW13

DIMENSIONS IN mm

ISSUE	D.O.I.	SIGN	DATE	ISSUE	D.O.I.	SIGN	DATE	MATERIAL	TOLERANCES	SCALE	TITLE
01	6302	AS	5.5.05						SEE CHART UNLESS OTHERWISE STATED	1:1	BOX HARNESS
02	6333	AS	9.6.05							AS	
03	6389	AS	13.10.05								

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SCALE 1:1
DRAWN AS
CHECKED
APP'D
COMPUTER NO. S/CB/372-1-011
DRG. NO. CB372-1-011
SHEET 1 OF 2