



1
00:00:12,860 --> 00:00:10,850
TCM is a trajectory correction maneuver

2
00:00:14,660 --> 00:00:12,870
it's something we do to change the

3
00:00:16,550 --> 00:00:14,670
direction the spacecraft is moving

4
00:00:18,679 --> 00:00:16,560
through space we're not aiming for Mars

5
00:00:21,470 --> 00:00:18,689
where Amy for Mars the point where Mars

6
00:00:23,150 --> 00:00:21,480
will be in its orbit on August fifth so

7
00:00:26,600 --> 00:00:23,160
that Mars will be there when we get

8
00:00:28,790 --> 00:00:26,610
there we do about 45 of these as we get

9
00:00:31,880 --> 00:00:28,800
close to Mars and this is just the first

10
00:00:33,830 --> 00:00:31,890
and the biggest of all of them you make

11
00:00:35,810 --> 00:00:33,840
these TCMS into two pieces when is an

12
00:00:37,100 --> 00:00:35,820
axial component where we fire the

13
00:00:39,080 --> 00:00:37,110

Rockets the direction of the solar

14

00:00:40,670 --> 00:00:39,090

panels the other part which we're doing

15

00:00:42,170 --> 00:00:40,680

right now is called the lateral

16

00:00:44,690 --> 00:00:42,180

component which is where we actually

17

00:00:46,639 --> 00:00:44,700

fire our rockets going in sideways when

18

00:00:48,860 --> 00:00:46,649

the rent and the spaceship pushes itself

19

00:00:52,010 --> 00:00:48,870

laterally and that happens as a rotate

20

00:00:53,660 --> 00:00:52,020

it goes the fires a sorceress who come

21

00:00:55,369 --> 00:00:53,670

back around the pups again using the

22

00:00:57,380 --> 00:00:55,379

thrusters again as it rotates so it

23

00:00:59,150 --> 00:00:57,390

actually allows us to move sideways in

24

00:01:02,930 --> 00:00:59,160

this particular case we're doing about a

25

00:01:04,910 --> 00:01:02,940

5 meter per second change in speed of

26

00:01:05,960 --> 00:01:04,920

the vehicle so we can change so the time

27

00:01:09,200 --> 00:01:05,970

it gets tomorrow so we'll be in the

28

00:01:11,510 --> 00:01:09,210

right spot everything was good it's

29

00:01:13,130 --> 00:01:11,520

doing its job fine perfectly and soon

30

00:01:14,660 --> 00:01:13,140

doing everything you needed to do is

31

00:01:16,400 --> 00:01:14,670

measuring the temperature is controlling

32

00:01:18,350 --> 00:01:16,410

you the thermal conditions of the

33

00:01:20,270 --> 00:01:18,360

vehicle the computer is working fine

34

00:01:22,520 --> 00:01:20,280

everything is working does this we'd